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# CAP 476 – MANDATORY AIRCRAFT MODIFICATIONS AND INSPECTIONS SUMMARY

## SEPTEMBER 2004 AMENDMENT – ISSUE 287

The following are enclosed:

Contents and Check List of Pages, Issue 287, replacing Issue 286

## PART ONE – AIRCRAFT

British Aerospace ATP Series Aircraft
Insert Airworthiness Directive G–2004–0020 after Airworthiness Directive G–2004–0001

British Aircraft Corporation/SNIAS Concorde Type 1, Variant 102
Remove and destroy pages 1 to 32 (Aircraft type removed from summary)

Short Brothers SD3–30 Series Aircraft
Insert Airworthiness Directive G–2004–0021 after page 14

Short Brothers SD3–Sherpa and SD3–60 Sherpa Series Aircraft
Insert Airworthiness Directive G–2004–0021 after page 6
Insert Airworthiness Directive G–2004–0022 after Airworthiness Directive G–2004–0021

Short Brothers SD3–60 Series Aircraft
Pages 7 and 8, Issue 18, replacing pages 7 and 8, Issue 17
Insert Airworthiness Directive G–2004–0021 after Airworthiness Directive G–2004–0005
Insert Airworthiness Directive G–2004–0022 after Airworthiness Directive G–2004–0021

## PART TWO – ENGINES AND PROPELLERS

Rolls-Royce/SNECMA Olympus 593 engines
Remove and destroy pages 1 to 8 (Aircraft type removed from Summary)

**File this amendment transmittal sheet in front of the Contents and Check List of Pages. Remove amendment transmittal sheet for August 2004 Issue 286.**

*Please note that this is the last amendment to CAP 476, future UK ADs will be published in CAP 747.*

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## CONTENTS AND CHECK LIST OF PAGES

Airworthiness Directives issued by the CAA.

| AD Number | Aircraft/Engine/Equipment Type |
|---|---|
| G–2004–0020 | British Aerospace ATP Series Aircraft |
| G–2004–0021 | Short Brothers SD3–30 Series Aircraft |
| | Short Brothers SD3–Sherpa and SD3–60 Sherpa Series Aircraft |
| | Short Brothers SD3–60 Series Aircraft |
| G–2004–0022 | Short Brothers SD3–Sherpa and SD3–60 Sherpa Series Aircraft |
| | Short Brothers SD3–60 Series Aircraft |

# FOREWORD

## 1 INTRODUCTION

1.1 The Mandatory Aircraft Modifications and Inspections Summary (CAP 476) hereinafter referred to as the 'Summary', is published by the Civil Aviation Authority. It summarises mandatory actions that are required to be complied with by United Kingdom Owners/Operators in respect of aircraft, engines, propellers and equipment of United Kingdom design (BCAR, Chapter A6–6 and CAA Airworthiness Notice No. 36 also refer).

NOTE: For similar information in respect of aircraft of foreign design, reference should be made to the CAA publication 'Foreign Airworthiness Directives' (for further details see CAA Airworthiness Notices No. 6 and No. 36). In certain instances, requirements for mandatory modifications and inspections are issued by a Foreign Aviation Authority in respect of engines and equipment of foreign design, fitted to United Kingdom designed aircraft. These requirements are published as Foreign Airworthiness Directives. Owners/Operators are reminded that for total accountability of a complete aircraft which has installed foreign designed engines and equipment, it is necessary to make reference to both Foreign Airworthiness Directives and to the Mandatory Aircraft Modifications and Inspections Summary.

1.2 For products of United Kingdom design, those Service Bulletins, Service News Letters or equivalent that are of mandatory status for aircraft on the United Kingdom Register of Civil Aircraft are agreed prior to publication by consultation between the CAA and the organisation responsible for the type design. The type design organisation's material contains a statement that the Modification/Inspection has been classified as mandatory by the CAA. Where the type design organisation's material (Service Bulletins, Service News Letters or equivalent) is revised by a raise of issue, the revision shall become applicable at the timescale prescribed by the revision.

1.3 In addition to the inspections and modifications listed in this Summary, the Mandatory Life Limitations published by the type design organisation (see BCAR Chapter A5–3 Paragraph 4) are mandatory for applicable aircraft on the United Kingdom Register of Civil Aircraft. The CAA is progressively publishing the source information of Mandatory Life Limitations for all aircraft, engines and equipment in this document.

Where reference is made in this document to Mandatory Life Limitations appearing in the 'Maintenance Schedule' this refers to the type design organisation's Recommended Maintenance Schedule.

1.4 It is the responsibility of the type design organisation to distribute mandatory information to all known Owners/Operators of the aircraft and to all National Aviation Authorities to whom those Owners/Operators are responsible. Owners/Operators of aircraft on the United Kingdom Register are expected to take action to comply with the mandatory instructions received from the type design organisation without waiting for their inclusion in this Summary. Owners/Operators of affected aircraft types on registers other than that of the United Kingdom, and the National Aviation Authorities to whom these Owners/Operators are responsible, are strongly advised to secure compliance with instructions that have been classified as mandatory by the CAA.

1.5 To assist the type design organisation in the distribution of mandatory information, Owners/Operators of United Kingdom designed aircraft and equipment should ensure that their names and addresses are known to the appropriate type design organisation, and that any change is notified promptly.

## 2 COMPLIANCE IN ACCORDANCE WITH ARTICLE 9(7) OF THE AIR NAVIGATION ORDER 2000, AS AMENDED

The modifications and inspections included in this Summary are modifications and inspections referred to in Article 9 (7) of the Air Navigation Order 2000, as amended, as those required by the CAA to be completed as a condition for the United Kingdom Certificate of Airworthiness to remain in force.

## 3 METHOD OF USE

The individual list for each specific type of aircraft contains only information relating to the airframe and its system. Thus, to establish the complete list for each aircraft, reference must also be made to the appropriate lists for engines, propellers and equipment.

NOTE: Because of its certification history the Douglas DC–3 (C47) is included in the CAA Mandatory Aircraft Modifications and Inspection Summary (CAP 476)

## 4 APPLICATIONS AND ENQUIRIES

4.1 Copies of CAA Mandatory Aircraft Modifications and Inspection Summary (CAP 476) may be obtained from Documedia Solutions (UK) Ltd, 37 Windsor Street, Cheltenham, Glos. GL52 2DG.
Telephone: +44 (0) 870 887 1410, Fax: +44 (0) 870 887 1411, E-mail: sales@documedia.co.uk

4.2 Enquiries regarding the technical content of the Summary should be addressed to the United Kingdom Civil Aviation Authority, Applications and Certification Section, Safety Regulation Group, Aviation House, Gatwick Airport South, West Sussex RH6 0YR.
Telephone: +44 (0) 1293 573149, Fax: +44 (0) 1293 573993, E-mail: ad.unit@srg.caa.co.uk

## 5 AIRWORTHINESS DIRECTIVES

CAA Airworthiness Directives can be viewed on a new area of our website which has been established to provide information about Proposed, New and Emergency Airworthiness Directives issued by the CAA.

New and emergency CAA Airworthiness Directives should appear on this area of the site, prior to their inclusion in the relevant publication. A link to CAP 473, CAP 474 and CAP 476 publications can also be found at this address.

The address of this new area is:

www.caa.co.uk/srg/airworthiness/ad/default.asp

# 1 AIRCRAFT

## ARV AVIATION ARV 1 SUPER 2 AIRCRAFT

CAA Type Certificate No BA22. Type Design Organisation – CAA holds responsibility for continuing airworthiness.

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 010–08–86 | Maintenance Manual | Mandatory Fatigue Lives | The fatigue lives listed in Chapter 4 of the Maintenance Manual are mandatory for aircraft on the United Kingdom Register. |
| 025–05–87 | ARV–SB–002 | Hewland AE75C Aero Engine – Loctiting carburettor bellmouth screws and wirelocking carburettor heat box retaining screws. | Applicable to aircraft as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. |
| 001–11–87 | ARV–SB–008 | Hewland AE75C Engine – Propeller shaft. | Applicable to all aircraft fitted with Hewland AE75C engine gearboxes. Compliance required as detailed in Service Bulletin. |
| 015–11–87 | ARV–SB–007 | Damage to rudder pedals. | Applicable to aircraft up to and including Constructors No 024. Compliance required as detailed in Service Bulletin. |
| 007–03–89 | ARV–SB–012 | Cracks under the bearing sleeve on noseleg downtube. | Applicable to aircraft Constructors Nos. 001, 004K, 005K, 006K, 007K, 009K, 011, 012, 013, 017, 019 and 021. Compliance required as detailed in Service Bulletin. |

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## AUSTER 3, 4 AND 5 VARIANTS 'J' AND 'D' SERIES AND TAYLORCRAFT PLUS 'C' AND 'D' AIRCRAFT

No CAA Type Certificate. Type Design Organisation – CAA holds responsibility for continuing airworthiness.

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 2463 PRE 80 | Mod No. 135 | To introduce strengthened flap shaft levers and flap torque tube levers. | Applicable to Marks 4, 5, 5C and 5D aircraft. |
| 2464 PRE 80 | Mod No. 142 | To change the specification of rear undercarriage and lift strut fittings from 3S3 to DTD–124A. | Applicable to the first sixty-one Mark 3 aircraft only. Constructors Nos. 233–248 inclusive, 251–264 inclusive and 266–296 inclusive. |
| 2465 PRE 80 | Mod No. 144 | Introduction of 5/8" diameter rudder mass balance arm. | Applicable to Marks 3, 4, 5, 5C and Taylorcraft Plus Model 'C' and 'D' only. Mod. 159 (Introduction of rudder mass balance weight to Part No. J4252) is an alternative to this modification. |
| 2466 PRE 80 | Mod No. 154 | Introduction of wing fabric covering to DTD 575, using specially woven tape of greater strength with 3" pitch stringing. | Applicable to Marks 3, 4, 5, 5C, 5D and Taylorcraft Plus Model 'C' and 'D' mainplanes only. Mod. 138 (Strengthened fabric attachments) and Mod. 167 (Fabric to DTD 540, superseded by BS 7F1) are alternatives. On all other variants, the modification is incorporated into the build standard, but if mainplanes and/or ailerons are to be re-covered, Mod 154 must be embodied in accordance with the relevant fabric covering drawings. (Use of DTD 540 fabric, now superseded by BS 7F1 is an alternative fabric to DTD 575). Beagle Service Bulletin No. 53 (Auster Series) and R F Saywell Ltd. Service Bulletin RFS/73/2 refer. |
| 2467 PRE 80 | Mod No. 164 | Introduction of redesigned engine mounting to Drawings Nos. DFF 18 Mark 3 and DFF 19 Mark 3. | Applicable to Marks 4 and 5. Mod. 118 (Mountings to Drawing Nos. DFF 18 and 19 Mark 2) is an alternative to this modification. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 2468 PRE 80 | Mod No. 1381 | To introduce stronger tailplane bracing wires of 1/4" diameter. | Applicable to Mark 5J1. Not applicable when Mod. 1934 is embodied. |
| 2469 PRE 80 | Mod No. 1670 | To introduce improved engine mounting to Drawing No. EJF 106 Issue 'K' by addition of wrapper plate at rear bearer foot attachment. | Applicable to Mark 5J1. |
| 2470 PRE 80 | Mod No. 1838 | Introduction of starter isolation switch. | Applicable to all Auster aircraft with electric starter motors. |
| 2471 PRE 80 | Mod No. 2555 | To introduce safety tube in tailplane attachment tube. | |
| 2472 PRE 80 | Mod No. 2601 | To introduce throttle lever in mild steel. | Applicable to Marks J5F, J5G and J5H. |
| 2473 PRE 80 | Mod No. 2737 | To introduce cap nut at engine fuel pipe banjo connection to facilitate locking. | Applicable to all Auster 5J2 aircraft and to Auster Mark 4 and 5 fitted with Pesco type Vacuum Pumps and Electric Starters. Auster Service Bulletin Issue No. 36 refers. |
| 2474 PRE 80 | Mod Nos. 2898, 2899 and 2902 | Introduction of flexible mounted whip aerial. | Only applicable to aircraft cleared for flight in icing conditions. |
| 2475 PRE 80 | Mod No. 3234 | Introduction of retaining pin for forward tailplane attachment safety tube. | Auster Service Bulletin No. 41 refers. |
| 2476 PRE 80 | Mod No. 3285 | Radius on trimmer guide tubes. | Applicable to Auster types 5J1, 5J1B, J1N, 5J2, 5J4, 5J5, J5B and J5P. Not applicable to aircraft fitted with belled mouth guide tubes at elevator trailing edge. Auster Service Bulletin No. 41 refers. |
| 2477 PRE 80 | Mod No. 3663 | Strengthened Actuator Lever Assemblies on Flap Control Torque Shaft. | Should have been embodied by 1 April 1961. Applicable to Auster types Mark 4, 5, 5C, 5D, 5J1, 5J1B, J1N, J1U, 5J5, J5F, J5K, J5L, J5B, J5G, J5H, J5P, J5Q, J5R, J5V. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 2478 PRE 80 | Mod No. 4069 | Introduction of additional stringing. | Applicable to Model C, Model D, Mark 3, 4, 5, 5C, 5D, 5J1, 5J1B, J1N, J1S, J1U, J2, J4, J5, J5B, J5F, J5G, J5H, J5K, J5L, J5P, J5Q, J5R, J5V, J8L, D4, D5, D6. This modification is applicable to all mainplanes of aircraft of the above types in which incorrect taping and/or stringing materials have been used during the last re-covering of the components.<br>NOTE: This modification is an acceptable alternative to Auster Mod. 138 referred to in connection with Mod. 154. Beagle Service Bulletin No. 53 (Auster Series) and RF Saywells Ltd. Service Bulletin RFS/73/2 refer. |
| 2479 PRE 80 | Mod No. 4073 | Introduction of Cockpit Placard and Loading Chart. | Applicable to mark 4, 5, 5C, 5D, J1, J1B, J1N, J1S, J1U, J5, J5B, J5F, J5G, J5H, J5K, J5L, J5P, J5Q, J5R, J5V, D5, D6. Beagle Service Bulletin No. 52 (Auster Series) refers. |
| 2480 PRE 80 | Mod No. 4179 | Replacement of toxic type fire extinguishers. | Applicable to Model 'D' Mark 3, J1, J1N, J2, J4, D6/160, D6/180 and 6A. Should have been embodied by 30 September 1965. |
| 2481 PRE 80 | Mod No. A182 | Fuel and Oil Vent Restriction for AC lightweight diaphragm Fuel Pumps. | Applicable to D5/160, D5/180, D6/160, D6/180, J1U and J5V. Compliance required by 1 September 1964. Beagle Service Bulletin (Auster Series) No. 55 refers. |
| 2482 PRE 80 | SB 32 | Inspection of the tailplane front attachments. | Applicable to all variants except Taylorcraft Plus C and Auster J1U. Inspect for signs of fracture of the leading edge tube in the vicinity of the saddle washers at periods not exceeding 300 flight hours.<br>NOTE: This inspection is not necessary if the saddle washers are welded to the tube (instead of brazed) or if the aircraft has Modifications No. 3252 or 3413 embodied. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 2483 PRE 80 | SB 30 | Inspection of the tailplane attachment stubs. | Applicable to all variants except Taylorcraft Plus C and Auster J1U. Inspect for signs of failure at periods not exceeding 100 flight hours (Auster J5F, J5L and J8L Aiglet Trainers) or 300 flight hours (Taylorcraft Plus D and all other variants other than J5F, J5L and J8L). This inspection need not be carried out if Modifications No. 3252 or 3413 together with 2555 and 3234 are embodied. |
| 2484 PRE 80 | – | Life limitation of rudder control cables. | Rudder cables Part Nos. JA 2393X and JA 2394X when installed over small ($1\frac{3}{4}$") diameter pulleys at the change of direction some 12" rearward from the rudder bar must be renewed at periods not exceeding 200 flight hours. In all other cases cables Part Nos. JA 2393X and JA 2394X may remain in service up to a maximum of 1200 flight hours.<br><br>NOTE: Reference should be made to Auster Service Bulletin No. 50. The inspections of rudder cables detailed in this bulletin are mandatory. |
| 2485 PRE 80 Revision 1 | Beagle SB 54 | Inspection of the engine mounting attachment bolts. | Applicable to Models as detailed in Service Bulletin. Compliance is required at intervals not exceeding 1000 flight hours. Inspect the engine mounting attachment bolts in accordance with the Service Bulletin.<br>NOTE: This AD revision removes the 5 year repeat requirement of the Service Bulletin. |
| 2486 PRE 80 | HS/Auster SB 1 | Propeller operating restriction placard. | Applicable to aircraft fitted with Propeller Models 2D36C14–X/78KM, 2D34C53–X/74E and B2D34C53–X/7. Compliance required as detailed in Service Bulletin. |

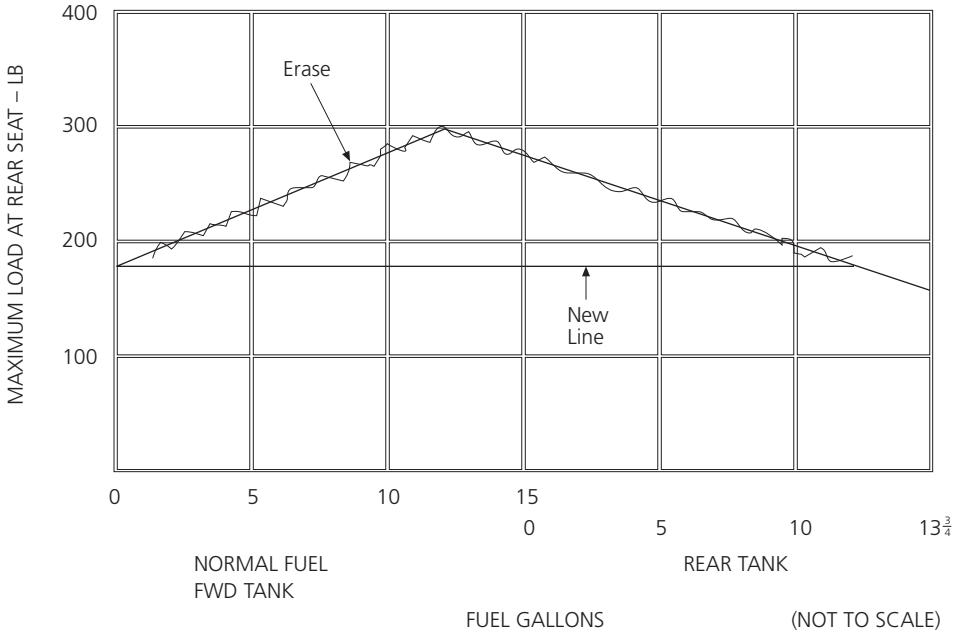
| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 2487 PRE 80 | – | Rear seat loading limitations amendment. | Applicable to Auster Models Mk4, Mk5, Mk5C, Mk5D, J1, J1B, J1N, J1S, J5, J5B, J5F, J5G, J5H, J5K, J5L, J5P, J5Q, J5R, J5V, D5 and D6 which are fitted with a forward fuselage fuel tank. Compliance is required prior to the next flight on which it is intended to carry passengers on the rear bench seat, but in any case not later than 30 September 1976. Amend the loading limitation chart which is displayed in a plastic holder on the rear cabin bulkhead, as follows:<br><br>(1) Draw a line, parallel to the base line of the chart, from the rear seat load at zero fuel, i.e. the intersection of the loading limitation line with the left-hand vertical axis of the chart, and continue this horizontal line to intersect with the right-hand slope of the loading limitation line.<br><br>(2) Erase all that part of the original loading limitation line which lies above the new line (drawn in accordance with 1).<br><br>NOTE: The following sketch illustrates an amended loading chart. If the existing loading chart should differ significantly from this illustration, advice must be obtained from the CAA prior to amendment. This Directive hereby authorises the Operator to make an entry in the aircraft Log Book, quoting the AD number, and this entry must be made when the loading chart has been amended in accordance with these instructions. |

*AD continued overleaf*

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|

2487 PRE 80 (continued)

**TYPICAL REAR SEAT LOADING CHART**
**FOR AUSTER AIRCRAFT WITH FORWARD FUSELAGE FUEL TANK**




NOTE: This requirement was previously issued under CAA Letter Reference 9/92/LTO/1 dated 16 August 1976.

| | | | |
|---|---|---|---|
| 015–11–80 | R F Saywell SB RFS/AUS/3 | Inspection of Bendix brake back plates. | Applicable to all aircraft fitted with Bendix mechanical brakes. INSPECT in accordance with Service Bulletin at next 50 hour inspection and thereafter at each 100 flight hour or Annual Inspection whichever is the sooner. |

## AUSTER 6A AND BEAGLE A.61 SERIES AIRCRAFT

No CAA Type Certificate. Type Design Organisation – CAA holds responsibility for continuing airworthiness.

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 2488 PRE 80 | – | Inspection of the tailplane front attachments. | Inspect for signs of fracture of the leading edge tube in the vicinity of the saddle washers at periods not exceeding 300 flight hours.<br>NOTE: This inspection is not necessary if the saddle washers are welded to the tube (instead of brazed) or if the aircraft has Modification No. 3252 or 3413 embodied. |
| 2489 PRE 80 | – | Inspection of the tailplane attachment stubs. | Inspect for signs of failure at periods not exceeding 300 flight hours. This inspection need not be carried out if Modification No. 3252 or 3413 together with 2555 and 3234 are embodied. |
| 2490 PRE 80 | – | Life limitation of rudder control cables. | Rudder cables Part Nos. JA 2393X and JA 2394X when installed over small ($1\frac{3}{4}$") diameter pulleys at the change of direction some 12" rearward from the rudder bar must be renewed at periods not exceeding 200 flight hours. In all other cases cables Part No. JA 2393X and JA 2349X may remain in service up to a maximum of 1200 flight hours.<br>NOTE: Reference should be made to Auster Service Bulletin No. 50. The inspection of rudder cables detailed in this bulletin are mandatory. |
| 2491 PRE 80 Revision 1 | Beagle SB Nos. A9 and 54 | Inspection of the engine mounting attachment bolts. | Applicable to Auster 6A and Beagle A.61 Series 1 and 2 aircraft. Compliance is required at intervals not exceeding 1000 flight hours. Inspect the engine mounting attachment bolts in accordance with the Service Bulletins.<br>NOTE: This AD revision removes the 5 year repeat requirement of the Service Bulletins. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 2492 PRE 80 | Beagle SB Nos. A14 and 58 | Replacement of toxic type fire extinguishers. | Applicable to models as detailed in Service Bulletin. Should have been complied with by 30 September 1965. |
| 015–11–80 | R F Saywell Ltd SB No. RFS/AUS/3 | Inspection of Bendix brake back plates. | Applicable to all aircraft fitted with Bendix mechanical brakes. INSPECT in accordance with Service Bulletin at next 50 hour inspection and thereafter at each 100 flight hour or Annual Inspection whichever is the sooner. |

## AVIATION TRADERS ATL98 CARVAIR

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 2603 PRE 80 | CSB/1 | Inspection of emergency air brake valve. | Applicable to all aircraft. Compliance required as detailed in Carvair Service Bulletin. |
| 2604 PRE 80 | CSB/2 | Inspection of nose door upper pivot support structure. | Applicable to aircraft S/N 10528/ATL 98/1, 10311/ATL 98/2, 18339/ATL 98/3, 10338/ATL 98/4, 10365/ATL 98/5, 7480/ATL 98/6, 10273/ATL 98/7. Compliance required at each Check 1 inspection until embodiment of Modification No. 98/5104. |
| 2605 PRE 80 | CSB/10 | Inspection of Bendix (Eclipse Pioneer) type 9054 fuel flow transmitters. | Applicable to all aircraft. Compliance required at next Check 1 as referred to in Carvair Service Bulletin. |
| 2606 PRE 80 | CSB/13 | Strengthening of upper boom – Fin spar frame (Station X953). | Applicable to aircraft detailed in Carvair Service Bulletin. Should have been embodied by 29 February 1964, Carvair Modification No. 98/5155 refers. |
| 2607 PRE 80 | CSB/20 | Operation of emergency brake system controls. | Applicable to all aircraft. Compliance required as detailed in Carvair Service Bulletin. Modification 98/5258 refers. |
| 2608 PRE 80 | CSB/22 | Flying Controls – Replacement of bolt attaching aileron operating rod assembly to bell crank at wing station 485. | Applicable to all aircraft. Compliance required as detailed in Carvair Service Bulletin. Modification 98/5301 refers. |
| 2609 PRE 80 | CSB/24 | Inspection of fin rear stub spar boom and fin rear shear saddle. | Compliance required by 7 March 1974 and then at intervals of one year. |

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## AVRO ANSON AND AVRO 19

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 1496 PRE 80 | 108 | Tailplane wire bracing. | Applicable to Anson Mark 1 only, with wooden tailplane. |
| 1497 PRE 80 | 121 | Guard for rudder bar torque tubes. | To prevent loose items falling into the spur gears and locking the rudder control. Applicable to Anson Mark 1 only. |
| 1498 PRE 80 | 122 | Introduction of petrol trap in boost gauge lines. | To prevent boost gauges being damaged by petrol. Applicable to Anson Mark 1 only. |
| 1499 PRE 80 | 173 | Strengthening of aileron hinge. | This changes the end hinge from steel to brass. Applicable to Anson Mark 1 only. |
| 1500 PRE 80 | 265 | Pilot's Emergency Exit. | To improve the 'rip-off' strip method of operating exits. Applicable to Anson Mark 1 only. |
| 1501 PRE 80 | 289 | Combined filter and non-return valve in flap hydraulic circuit. | Introduced to prevent dirt reaching the pump relief valve. Applicable to hand operated flaps only on Anson Marks 1, 10 and 11. |
| 1502 PRE 80 | 308 | To reposition oil tank cock and thermometer pocket. | Introduce brackets to support oil cock and thermometer pocket. Applicable to Anson Mark 1 only. |
| 1503 PRE 80 | 654 | Strengthened tailwheel rocker beam. | Mandatory only for aircraft with AUW of 9540 lb. Applicable to Anson Marks 1, 10 and 11. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 1504 PRE 80 | 661 | Strengthened wing (retrospective). | Introduces strengthened underside wing panels between spars (diagonal plywood). To be introduced in conjunction with Mod. No. 695. Applicable where Mod. No. 657 is not embodied. See Note 2. Applicable to Anson Marks 1, 10 and 11. |
| 1505 PRE 80 | 669 | To introduce engine fire warning. | To be embodied in conjunction with Mod No. 844. Switches to Mod. No. 855 are an approved alternative to those of Mod. No. 669. Applicable to Avro 19 Series I and II. |
| 1506 PRE 80 | 687 | To introduce strengthened wheels, tyres and brakes. | Applicable to Avro 19 Series I with wooden wing. Embody in conjunction with Mod. No. 637 Heywood compressor. |
| 1507 PRE 80 | 695 | To strengthen the glued joints of mainplane spars. | Introduces woodscrews in joints of plywood webs to top and bottom booms. To be embodied in conjunction with Mod. No. 661 when Mod. No. 657 is not incorporated. See Notes 1 and 2. Applicable to Anson Marks 1, 10 and 11. |
| 1508 PRE 80 | 709 | To strengthen rear seat attachment between spars. | Applicable to wooden wing aircraft only. Introduces internal block and stiffeners in floor between spars. Applicable to Anson Mark 11 and Avro 19 Series I. |
| 1509 PRE 80 | 716 | General improvements to drainage. | Applicable to Anson Marks 1, 10, 11 and Avro 19 Series I and II. |
| 1510 PRE 80 | 725 | To lower accumulators charging pressure from 200 lb/in$^2$ to 165–170 lb/in$^2$. | Mandatory to aircraft embodying Mod. No. 682 (direct flap linkage). Applicable to Avro 19 Series I only. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 1511 PRE 80 | 732 | Improvements to passenger seat locking. | Applicable to all seats having spring loaded vertical locking plungers. Applicable to Anson Marks 1, 10 and 11. |
| 1512 PRE 80 | 744 | To change position of 'Press to Speak' switch. | Changed from right to left. Applicable to Anson Mark 11 and Avro 19 Series I and II. |
| 1513 PRE 80 | 750 | To introduce wire locking of AGS couplings. | Applicable to Anson Marks 1, 10, 11 and Avro 19 Series I and II. |
| 1514 PRE 80 | 759 | To introduce strengthened oil cooler support clip. | To be embodied in conjunction with Mod. Nos. 825 and 899. Only applicable if Vickers Potts oil cooler is fitted. Applicable to Avro 19 Series I and II. |
| 1515 PRE 80 | 762 | Introduction of strengthened eye-bolts for main undercarriage. | Eyebolt in torque increased from $^{3}/_{8}$" to $^{7}/_{16}$". Applicable to Avro 19 Series I and II. |
| 1516 PRE 80 | 773 | To cancel Mod. No. 733 (improvements to Heywood compressor drainage). | This modification also makes provisions for Bristol Siddeley Engine Mod. Nos. E832 or E856 and is only mandatory if either of these engine modifications is embodied. Applicable to Avro 19 Series I and II. |
| 1517 PRE 80 | 775 | Improvements to safety device on undercarriage retraction control. | Applicable to Avro 19 Series I and II. |
| 1518 PRE 80 | 777 | To eliminate compass interference. | Mandatory only when wiper is fitted. Applicable to Avro 19 Series I and II. |
| 1519 PRE 80 | 782 | Marking of cowl fasteners to indicate locked position. | Applicable to Avro 19 Series I and II. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 1520 PRE 80 | 795 | To prevent chafing of feathering feed pipe. | Obviate chafing by wheel in nacelle. Applicable to Avro 19 Series I and II. |
| 1521 PRE 80 | 797 | To record correct main undercarriage pressure in main oleo leg. | This calls for pressure of 620 lb/in$^2$ instead of 485 lb/in$^2$. Applicable to Avro 19 Series I and II. |
| 1522 PRE 80 | 825 | To strengthen oil cooler support clip. | To be embodied in conjunction with Mod. Nos. 759 and 899. Only applicable if Vickers Potts oil cooler is fitted. Applicable to Avro 19 Series I and II. |
| 1523 PRE 80 | 844 | Re-routing of flame switch cable on port and starboard bulkheads to prevent chafing. | When embodied the flame switch cable is clipped to oil dilution valve attachment lug. Applicable to Avro 19 Series I and II. |
| 1524 PRE 80 | 873 | To change the material of the bolts securing the fork to the brake flange from mild steel to high tensile steel. | Applicable only if Mod. No. 687 is embodied. Applicable to Avro 19 Series I and II. |
| 1525 PRE 80 | 899 | To introduce a new oil cooler support bracket. | To be embodied in conjunction with Mod. Nos. 759 and 825. Applicable only if Vickers Potts oil cooler is fitted. Applicable to Avro 19 Series I and II. |
| 1526 PRE 80 | Civil Mod. 9 | To fit ashtrays. | Mandatory when smoking is permitted. Mod. No. 758 is an acceptable alternative. Applicable to Avro 19 Series I and II. |
| 1527 PRE 80 | Civil Mod. 32 | Labels to meet ARB Requirements. | Applicable to Avro 19 Series I and II. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 1528 PRE 80 | Civil Mod. 33 | To prevent aileron cable chafing voltage regulator leads. | Applicable to metal wing aircraft only. Mod. No. 774 is an acceptable alternative. Applicable to Avro 19 Series II only. |
| 1529 PRE 80 | Civil Mod. 49 | To introduce Marconi constant speed trailing aerial winch in lieu of AM type. | Applicable to Avro 19 Series I and II. |
| 1530 PRE 80 | Civil Mod. 53 | To introduce re-designed forward cabin escape hatch and to delete rear cabin escape hatch. | Applicable to Anson Mark 11 and Avro 19 Series I and II. |
| 1531 PRE 80 | Civil Mod. 56 | To introduce improved cabin escape hatch. | Certain operators have already modified their aircraft to their own schemes. These alternatives are still approved and acceptable. Applicable to Anson Mark 1 and 10. |
| 1532 PRE 80 | T.S.B. No. 76<br>No. 80<br>No. 88 | Inspection of spar boom joints, etc. | Compliance required as detailed in Service Bulletin. |
| 1533 PRE 80 | T.S.B. No. 84 | Inspection of Trailing Edge Ribs No. 20, Port and Starboard. | Compliance required as detailed in Technical Service Bulletin. |
| 1534 PRE 80 | T.S.B. No. 85 | Cracking of Top Support Brackets for Undercarriage Jack Channels, centre section front spar. | Compliance required as detailed in Technical Service Bulletin. |
| 1535 PRE 80 | T.S.B. No. 87 | Inspection of Aileron Operating Levers. | Compliance required as detailed in Technical Service Bulletin. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 1536 PRE 80 | T.S.B. No. 89<br>No. 90 | Inspection of Main Undercarriage Radius Rod Attachment at Rear Spar. | Should have been carried out by 1 September 1963. Re-inspection required at each check 5 or 600 hours. |
| 1537 PRE 80 | T.S.B. No. 91 | Locking Handle, 2nd Pilot's Control Column Fouling at Floorboard Cut Out. | Compliance required within the next 50 flying hours, and in any case not later than 28 days from receipt of this bulletin. |
| 1538 PRE 80 | T.S.B. No. 92 | Pilots' escape hatch – difficulty in removing. | Compliance required as detailed in Technical Service Bulletin. |

1539 PRE 80

NOTE 1: Mod. No. 657 embraces the design provisions of Mod. No. 695, but some wings to Mod. No. 657 standard do not incorporate the woodscrews referred to in the note against Mod. No. 695. It is essential that the woodscrews be fitted, and in cases where Mod. No. 657 is logged as embodied but no woodscrews are present, they must be fitted in accordance with Mod. No. 695. The presence of the woodscrews can be checked at any point on the spars.

NOTE 2: Certain Australian 'Anson' aircraft have been modified to RAAF Mod. No. 143 (Strengthening of spar booms) and RAAF Order No. 40 (Modification to wing covering under fuel tank base). These two modifications are acceptable in place of Mod. No. 661 and 695.

NOTE 3: If the aircraft is operated in the tropics, it may not be possible to keep within engine temperature limitations unless the following modifications are embodied.

Mod. No. 458 – Introduction of seven element oil cooler.
Mod. No. 621 – Introduction of Oxford Type cowling.

Bristol Siddeley Mod. No. E729 changes the cowling brackets to the cylinder head, and must be embodied in conjunction with Mod. No. 621.

**BEAGLE A.109 AIRCRAFT**

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 2422 PRE 80 | Mod A.105 | Introduction of cooling duct for starboard magneto. | Should have been embodied by 1 January 1964. Beagle Service Bulletin No. A.5 refers. |
| 2423 PRE 80 | Mod A.118 | Introduction of increased strength door hinge bearings. | Should have been embodied by 1 January 1964. Beagle Service Bulletin No. A.5 refers. |
| 2424 PRE 80 | Mod A.140 | Introduction of revised door catch. | Should have been embodied by 1 March 1964. Beagle Service Bulletin No. A.5 and Supplement refer. |
| 2425 PRE 80 | Mod A.182 | Fuel and Oil vent restriction requirement for A.C. lightweight diaphragm fuel pumps. | Should have been embodied by 1 September 1964. Beagle Service Bulletin No. A.10 refers. |
| 2426 PRE 80 | SB No. A14 | Replacement of toxic type fire extinguishers. | Should have been embodied by 30 September 1965. Modification No. 4179 refers. |

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**BEAGLE B.121 SERIES 1, 2 AND 3 AIRCRAFT**

CAA Type Certificate No. BA1. Type Design Organisation – De Havilland Support Ltd

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 2047 PRE 80 | BE 264 | *Fuel* – Fuel tanks and associated wing attachment – Modified tank support angle. | Applicable to all B.121 Series up to Serial No. 50. Should have been embodied by 1 September 1969. Service Bulletin B121/5 refers. |
| 2048 PRE 80 | BE 280 | *Landing Gear* – Main Wheel Hubs AH 52595 – Modification. | Applicable to all B.121 Series. Should have been embodied by 1 July 1969. Service Bulletin B121/6 refers. |
| 2049 PRE 80 | BE 318 | *Flight Controls* – Rudder Control Tube Assemblies – Modification. | Applicable to all B.121 Series up to and including Serial No. 092. Compliance required by 31 August 1969. In the interim Service Bulletin B121/8 must be complied with. |
| 2050 PRE 80 | BE 344 | *Placards* – No Smoking Placarding. | Applicable to all B.121 Series. Should have been embodied by 31 July 1969. Service Bulletin B121/9 refers. |
| 2051 PRE 80 | BE 347 | *Equipment/Furnishings* – Cabin fire extinguishers. | Applicable to all B.121 Series. Mod. BE 251 is an acceptable alternative. Service Bulletin B121/17 refers. |
| 2052 PRE 80 | BE 349 | *Power Plant* – Introduction of Modified Engine Bearers. | Applicable to all B.121 Series 2 and 3 aircraft prior to Serial No. B121/107. Compliance required not later than 300 flying hours. Service Bulletin B121/11 refers. |
| 2053 PRE 80 | BE 381 | *Equipment/Furnishings* – Baggage lashing ring fittings. | Applicable to B.121 Series Serial Nos. 005, 006, 007, 008 and 009. Compliance required before any baggage or freight is carried and in any case before 28 February 1970. Service Bulletin B121/18 refers. |
| 2054 PRE 80 | BE 382 | *Landing Gear* – Nose wheel assemblies AH 52594 – Modification. | Applicable to all B.121 Series. Should have been embodied by 31 December 1969. Service Bulletin B121/19 refers. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 2055 PRE 80 | B121/21 | *Fuel* – Fuel tank non-return valves. Inspection for, and removal of the non-return valve springs. | Applicable to B.121 Series 1, 2 and 3 aircraft Serial Nos. 005 to 032 inclusive and any subsequently constructed aircraft on which the fuel tanks have been changed since initial manufacture. Compliance required not later than 31 March 1970. |
| 2056 PRE 80 | B121/30 | *Power Plant* – Chafing of engine mounting tubes. | Applicable to all B.121 Pup aircraft. Compliance requires an immediate inspection upon receipt of this Service Bulletin. |
| 2057 PRE 80 | B121/49 | *Engine* – Teledyne Continental Engine Valve Guide Inspection. | Applicable to all B.121 Series 1 aircraft. Compliance required as detailed in Service Bulletin. |
| 2058 PRE 80 | B121/51 | *Engine* – Avco Lycoming Type 0–320 Engine – Replacement of magneto drive shaft bushing. | Applicable to B.121 Series 2 and 3 aircraft. Should have been complied with by 24 March 1975. Bendix Service Bulletin No. 556B refers. |
| 2059 PRE 80 | B121/61 | *Flight Controls* – Inspection of flap actuating lever assemblies. | Applicable to all B.121 Series 1, 2 and 3 aircraft. Compliance required as detailed in Service Bulletin. |
| 2060 PRE 80 | B121/65 | *Flight Controls* – Rudder torque tube assemblies – inspection. | Applicable to all B.121 Pup aircraft. Compliance required as detailed in Service Bulletin. |
| 2061 PRE 80 | B121/67 | *Engine* – Procedures to be carried out following reported engine overspeed. | Applicable to all B.121 Series 2 and 3 aircraft. Compliance required as detailed in Service Bulletin. Note: Reference should be made to Avco Lycoming Service Bulletin No. 369B. |
| 2062 PRE 80 | B121/69 | *Landing Gear* – Nosewheel steering head failure – Loss of nosewheel steering. | Applicable to all B.121 aircraft. Compliance as detailed in Service Bulletin. |
| 2063 PRE 80 | B121/71 | *Flight Controls* – Failure of Rudder Control Lever (Fuselage Station 217.75). | Applicable to all B.121 aircraft. Compliance as detailed in Service Bulletin. |
| 2064 PRE 80 | B121/72 | *Flight Controls* – Rudder Control Lever Part No. BE45.50.107. | Applicable to all B.121 aircraft (pre-Mod. BE 414). Compliance not later than 31 October 1977. |
| 2065 PRE 80 | B121/73 | *Flight Controls* – Rudder pedal anchorages – Failure of rivets. | Applicable to all B.121 aircraft. Compliance as detailed in Service Bulletin. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 2066 PRE 80 | B121/74 | *Engine Fuel and Control* – Failure of throttle cable assembly and introduction of Mandatory Modifications BE 424 and BE 425. | Applicable to all B.121 Series 2 and 3 aircraft. Compliance required as detailed in Service Bulletin. |
| 2067 PRE 80 | B121/75 | *Fuselage* – Mainplane attachments. | Applicable to all B.121 Series 1 aircraft. Compliance as detailed in Service Bulletin. |
| 2068 PRE 80 | B121/76 | *Fuselage* – Mainplane attachments – Port and Starboard Fuselage/Main-plane lower joint plate assemblies. | Applicable to all B.121 Series 2 and 3. Compliance required as detailed in Service Bulletin. |
| 2069 PRE 80 | B121/78 | *Engine* – Change in magneto to engine timing and baffle inspection. | Cancelled, mandatory requirement no longer required. |
| 2070 PRE 80 | B121/79 | *Wings* – Mainplanes – Repair Scheme No. BE.03.10169 Mandatory to mainplanes not having Mod. BE 214 embodied. | Applicable to all B.121 aircraft. Compliance required as detailed in Service Bulletin. To be accomplished on all aircraft which have exceeded 1300 flying hours by 31 March 1991 and on all other aircraft before they reach the 1300 flying hour threshold. |
| 2071 PRE 80 | B121/80 | *Engine* – Bendix Magnetos – Inspection of Impulse couplings and stop pins. | Applicable to B.121 Series 2 and 3 aircraft. Compliance required as detailed in Service Bulletin. |
| 2072 PRE 80 | B121/81 | *Power Plant* – Engine Mounting Structure – Inspection for cracks. | Applicable to all B.121 Series 1 and 2. Compliance required as detailed in Service Bulletin. |
| 009–06–84 | B121/86 | *Fuselage* – Cracking of angle diaphragm and flange at tailplane spar attachment. | Applicable to B.121 Series 1, 2 and 3 aircraft. Compliance required as detailed in Service Bulletin. |
| 008–04–87 | B121/91 | *Flight Controls* – Control rod end fittings – Security of attachment. | Applicable to all B.121 aircraft. Compliance required as detailed in Service Bulletin. |
| 003–07–88 | B121/94 | *Flight Controls* – Rudder controls – Incorrect assembly. | Applicable to all B.121 aircraft. Compliance required as detailed in Service Bulletin. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 010–05–90 | B121/95 | *Flight Controls* – Failure of handgrip fitting on control column. | Applicable to all B.121 aircraft. Compliance required as detailed in Service Bulletin. |
| 001–11–91 | B121/28 | *Flight Controls* – Corrosion of elevator torque tubes. | Applicable to all B.121 aircraft. Compliance required as detailed in Service Bulletin. |
| 007–01–95 | B121/100 | *Mainplanes* – To introduce an additional inspection at the left and right mainplane/ fuselage mainspar attachment fitting. | Applicable to B.121 Series 2 and 3 aircraft. Compliance required as detailed in Service Bulletin. |
| 014–03–95 | B121/101 | Notification of fatigue life limitation for aircraft. | Applicable to all B.121 aircraft. Compliance required as detailed in Service Bulletin. |
| 003–10–95 | B121/103 | *Landing Gear* – Brake system – Foot brake controls – To inspect the brake torque tube assemblies. | Applicable to all B.121 aircraft. Compliance required as detailed in Service Bulletin. |
| 005–10–96 | B121/102 | *Fuselage* – Introduction of inspections at the main-spar and at the wing to fuselage attachments. | Cancelled and superseded by AD 005–01–98 and AD 006–01–98. |
| 005–01–98 | B121/105 | *Fuselage* – To introduce inspections at the main-spar. | Applicable to all B.121 aircraft. Compliance required as detailed in Service Bulletin. |
| 006–01–98 | B121/106 | *Mainplanes* – To introduce new nuts at the wing to fuselage main-spar attachment fittings. | Applicable to all B.121 aircraft. Compliance required as detailed in Service Bulletin. |

**BEAGLE B.206 SERIES 1 AND 2 AIRCRAFT**

No CAA Type Certificate. Type Design Organisation – CAA holds responsibility for continuing airworthiness

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 2583 PRE 80 | B206–1 | *Flight Controls* – Inspection of rudder mass balance horn and replacement of rudder incorporating Mod. 440. | Applicable to Series 1 aircraft. Should have been embodied by 1 August 1966. |
| 2584 PRE 80 | B206–3 | *Propellers* – Inspection of end fitting at propeller governor and embodiment of Mod. 593. | Applicable to Series 1 aircraft. Should have been embodied by 1 December 1966. |
| 2585 PRE 80 | B206–27 | *Landing Gear* – Inspection of main and nose undercarriage legs and embodiment of Mod. 887. | Applicable to Series 1 and 2 aircraft. Compliance required within 200 flight hours. |
| 2586 PRE 80 | B206–28 | *Propellers* – Inspection of propeller attachments. | Applicable to Series 2 aircraft fitted with McCauley propellers Part No. 3AF34C86/90LF–0. Compliance required within 25 flight hours. |
| 2587 PRE 80 | B206–31 | *Fuel* – Replacement of voltage limiting resistors in fuel boost pump circuit. | Applicable to Series 2 aircraft incorporating Beagle Mod. 780. Compliance required within 50 flight hours. |
| 2588 PRE 80 | B206–42 | *Placards* – Replacement of electrical transfer switch label. | Applicable to Series 1 and 2 aircraft. Should have been embodied by 31 January 1973. |
| 2589 PRE 80 | B206–48 | *Ice and Rain* – Lifing of aerofoil de-icing air reservoir. | Applicable to Series 1 aircraft. Compliance required as detailed in Service Bulletin. |
| 2590 PRE 80 | B206–51 | *Placards* – Installation of engine operating limitation placards. | Applicable to Series 2 aircraft. Should have been embodied by 31 October 1974. |
| 2591 PRE 80 | B206–52 | *Propellers* – Improvement of propeller attachment. | Applicable to Series 2 aircraft fitted with McCauley propellers as listed in McCauley Service Bulletin No. 102–1. Compliance required at next propeller overhaul or during any major disassembly of the propeller. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 2592 PRE 80 | B206–54 | Mandatory Life Limitations. | The limitations listed in the Service Bulletin are mandatory for aircraft on the United Kingdom Register. |
| 2593 PRE 80 | B206–55 | *Exhaust* – Inspection of exhaust system bellow assemblies. | Applicable to Series 2 aircraft. Compliance required as detailed in Service Bulletin. |
| 2594 PRE 80 | CAA Airworthiness Notice No. 82 | *Electrical Generation System* – Warning of loss of generated electrical power. | Applicable to all Series aircraft. Compliance required as detailed in Airworthiness Notice. |

## BRISTOL 170 MARK 31

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| | | With effect from Issue 22 of this Mandatory Modifications & Inspections listing for Bristol 170 aircraft the requirements have been revised to recognise only the B170 Mk 31 aircraft. Other marks of B170 have been withdrawn from Service and this withdrawal has been confirmed by the Manufacturer. The withdrawn listings may be obtained, if required, from the Civil Aviation Authority. (See Foreword Para 5.1.) Issue 22 of this MM & I listing has been negotiated and agreed as correct with the Manufacturer. | |
| 2857 PRE 80 | 1033 | To stiffen the mass balance weight mounting in the rudder. | Applicable to Mk 31 aircraft. Should have been embodied by May 1952. |
| 2858 PRE 80 | 1087 | To introduce new cams to the throttle and propeller levers to ensure correct depression of the auto pitch coarsening micro switches. | Applicable to Mk 31 aircraft. Should have been embodied by May 1953. |
| 2859 PRE 80 | 1120 | To introduce an additional water trap in the port and starboard inboard pressure head pipe lines for auto pitch coarsening. | Applicable to Mk 31 aircraft. Should have been embodied by May 1953. |
| 2860 PRE 80 | 1075 | To introduce 19 amp cable in lieu of 7 amp in the battery circuit breaker circuit. | Applicable to Mk 31 aircraft. Should have been embodied by December 1953. |
| 2861 PRE 80 | 1097 | To introduce a strengthened end cap to the aileron, elevator and rudder trimmer screw jacks. | Applicable to Mk 31 aircraft. Should have been embodied by August 1953. |
| 2862 PRE 80 | 1119 | To delete the guard for accessory cooling ducts inlet. | Applicable to Mk 31 aircraft. This modification must be incorporated in aircraft requiring clearance for intentional flight in icing conditions. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 2863 PRE 80 | 1160 | To introduce anti-flutter mountings for whip type aerials. | Applicable to Mk 31 aircraft. Should have been embodied by 30 September 1954. |
| 2864 PRE 80 | 1169 | To introduce redesigned bottom end fittings and link fittings to the outer wing front spar. | Applicable to Mk 31 aircraft. To be embodied not later than the agreed life of each individual aircraft. |
| 2865 PRE 80 | 1172 | To introduce a new front spar with redesigned bottom boom, skin angle, and end fittings, on the centre plane. | Applicable to Mk 31 aircraft. To be embodied not later than the agreed life of each individual aircraft. |
| 2866 PRE 80 | 1192 | To introduce a redesigned bottom boom, skin angle and end fittings to the centre plane. | Applicable to Mk 31 aircraft. To be embodied not later than the agreed life of each individual aircraft. |
| 2867 PRE 80 | 1235 | To introduce cadmium plated close tolerance bolts. | Applicable to Mk 31 aircraft with Modifications 1054 and 1070 embodied. |
| 2868 PRE 80 | 1247 | To reinforce centre plane and outer wing spar web joints. | Applicable to Mk 31 aircraft. To be embodied at 4000 flight hours. |
| 2869 PRE 80 | 1246 | To introduce a modified aileron centre hinge support. | Applicable to Mk 31 aircraft. Should have been embodied by October 1955. |
| 2870 PRE 80 | 1278 | To provide emergency lighting in the passenger compartment. | Applicable to Mk 31 aircraft. Should have been embodied by 1 January 1955. |
| 2871 PRE 80 | 1276 | To make provision for the illumination of the port wing leading edge. | Applicable to Mk 31 aircraft. Should have been embodied by 1 January 1955. |
| 2872 PRE 80 | 1277 | To introduce electrical requirements for the illumination of the port wing leading edge. | Applicable to Mk 31 aircraft. Should have been embodied by 1 January 1955. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 2873 PRE 80 | 1294 | To introduce bolts in lieu of rivets for spar web to boom attachment in vicinity of centre plane and outer wing joints. | Applicable to Mk 31 aircraft. To be embodied at 3000 flight hours. |
| 2874 PRE 80 | 1295 | To introduce redesigned web doublers for the outer wing front and rear main spar webs. | Applicable to Mk 31 aircraft. To be embodied not later than the agreed life of each individual aircraft. |
| 2875 PRE 80 | 1297 | To introduce redesigned web doublers for the centre plane front and rear main spar webs. | Applicable to Mk 31 aircraft. To be embodied not later than the agreed life of each individual aircraft. |
| 2876 PRE 80 | 1281 | To improve the sealing of the centre section hinged nose portion. | Applicable to Mk 31 aircraft. Should have been embodied by July 1956. |
| 2877 PRE 80 | 1299 | To introduce revised 'Engine Speed' label. | Applicable to Mk 31 aircraft. Should have been embodied before next C of A after January 1956. |
| 2878 PRE 80 | 1300 | To replace the outer wing front spar bottom boom and skin angle. | Applicable to Mk 31 aircraft. To be embodied not later than the agreed life of each individual aircraft. |
| 2879 PRE 80 | 1304 | To modify the bottom inboard nacelle structure attachment bracket. | Applicable to Mk 31 aircraft. Should have been embodied by 1 March 1956.<br>NOTE: SMR No. 67 satisfies the requirements of this modification. |
| 2880 PRE 80 | 1305 | To redesign the aileron 'Follow Up' tab control rod. | Applicable to Mk 31 aircraft. Should have been embodied by 31 October 1970. |
| 2881 PRE 80 | 1309 | To introduce flashing navigation lights. | Applicable to Mk 31 aircraft. Should have been embodied by 1 June 1956. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 2882 PRE 80 | 1335 | To introduce an ice guard at all flexibly mounted whip aerial positions. | Applicable to Mk 31 aircraft. Should have been embodied by February 1957. |
| 2883 PRE 80 | 1374 | To replace the centre plane rear spar bottom boom, skin angle and end fittings. | Applicable to Mk 31 aircraft. To be embodied in accordance with Information Sheet 170/W/17. |
| 2884 PRE 80 | 1375 | To replace the outer wing rear spar bottom boom, skin angle, end fitting, link and pin. | Applicable to Mk 31 aircraft. To be embodied in accordance with Information Sheet 170/W/17. |
| 2885 PRE 80 | 1392 | To introduce a larger reinforcing plate for the outer wing front spar at the inboard end. | Applicable to Mk 31 aircraft. To be embodied in accordance with Information Sheet 170/W/17. NOTE: This modification is alternative to 461/1295. |
| 2886 PRE 80 | 1393 | To introduce a larger reinforcing plate for the outer wing rear spar at the inboard end. | Applicable to Mk 31 aircraft. To be embodied in accordance with Information Sheet 170/W/17. NOTE: This modification is alternative to 461/1295. |
| 2887 PRE 80 | 1394 | To introduce a larger reinforcing plate for the centre plane front spar at the outboard end. | Applicable to Mk 31 aircraft. To be embodied in accordance with Information Sheet 170/W/17. NOTE: This modification is alternative to 464/1297. |
| 2888 PRE 80 | 1395 | To introduce a larger reinforcing plate on the centre plane rear spar. | Applicable to Mk 31 aircraft. To be embodied in accordance with Information Sheet 170/W/17. NOTE: This modification is alternative to 464/1297. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 2889 PRE 80 | 1405 | Introduction of interlocking relays in the fuel and oil cut-off circuit. | Applicable to Mk 31 aircraft. Should have been embodied by 31 December 1959. |
| 2890 PRE 80 | 1412 | To replace the centre plane front spar bottom boom, skin angle and end fittings on aircraft with the production deep bottom boom. | Applicable to Mk 31 aircraft. To be embodied in accordance with Information Sheet 170/W/17. |
| 2891 PRE 80 | 1420 | To introduce bolts in lieu of rivets on fuselage to centre plane attachment. | Applicable to Mk 31 aircraft. To be embodied in accordance with Information Sheet 170/F/7. |
| 2892 PRE 80 | 1421 | To renew the centre plane to fuselage joints plates and to introduce additional reinforcing plates. | Applicable to Mk 31 aircraft. To be embodied in accordance with Information Sheet 170/F/7. |
| 2893 PRE 80 | 1422 | To delete the guard from the auto-coarsening switch. | Applicable to Mk 31 aircraft. Should have been embodied by April 1962. |
| 2894 PRE 80 | 1423 | To introduce fail-safe links at the attachment points of the side struts to the undercarriage lower fitting. | Applicable to Mk 31 aircraft. Should have been embodied by September 1964. |
| 2895 PRE 80 | 1434 | To introduce bolt Part No. 492917/4 in lieu of bolt Part No. 492917/1 at the base of the First Pilots control column. | Applicable to Mk 31 aircraft. Should have been embodied at the next Check 3 inspection after July 1970. |
| 2896 PRE 80 | 1435 | To introduce or reposition the generator power failure warning lights. | Applicable to Mk 31 aircraft. Should have been embodied by 31 December 1971. |
| 2897 PRE 80 | 1436 | To introduce fire extinguisher cartridge unit Type No. A716–3 in lieu of Type No. A216. | Applicable to Mk 31 aircraft. Should have been embodied by 1 May 1974. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 2898 PRE 80 | SRM No. 78 | Inspection of nacelle structure side, base and back frames. | Applicable to Mk 31 aircraft. Compliance required as detailed in Special Recommendation Maintenance. |
| 2899 PRE 80 | SRM No. 79 | Inspection of M.R.C. sliding rod end at constant speed unit. | Applicable to Mk 31 aircraft. Compliance required as detailed in Special Recommendation Maintenance. |
| 2900 PRE 80 | SRM No. 80 | Inspection of propeller automatic coarse pitch air pressure switch Part No. F.B. 186868. | Applicable to Mk 31 aircraft. Compliance required as detailed in Special Recommendation Maintenance. |
| 2901 PRE 80 | SRM No. 81 | Inspection of main undercarriage fittings. | Applicable to Mk 31 aircraft. Compliance required as detailed in Special Recommendation Maintenance. |
| 2902 PRE 80 | SRM No. 84 | Inspection of drain sumps Part No. 503402 for internal corrosion. | Applicable to Mk 31 aircraft. Compliance required as detailed in Special Recommendation Maintenance. |
| 2903 PRE 80 | SRM No. 85 | Inspection of aileron control cables situated beneath the pilots floor. | Applicable to Mk 31 aircraft. Compliance required as Special Recommendation Maintenance. |
| 2904 PRE 80 | PP 155 | Introduction of fire extinguisher cartridge unit Type No. A716–3 in lieu of Type No. A216. | Applicable to Mk 31 aircraft. Should have been embodied by 1 May 1974. |
| 2905 PRE 80 | – | Bristol Aircraft Information Sheets. | The following Information Sheets are regarded as Mandatory and the necessary inspections and replacements must be complied with within the periods laid down: 170/F/7, 170/F/9, 170/F/11, 170/W/17, 170/W/22, 170/W/26, 170/T/2 and 170/GEN/4. |

## BRITISH AEROSPACE BAe 146 SERIES AIRCRAFT AND AVRO 146 SERIES AIRCRAFT

CAA Type Certificate No. BA16. Type Certificate Holder – British Aerospace Operations

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 008–04–83 Revision 1 | Maintenance Manual | Mandatory Life Limitations. | The following parts of Chapter 5 of the Aircraft Maintenance Manual prescribe the Mandatory Life Limitations for aircraft on the United Kingdom Register:<br>Airframe Airworthiness Limitations – Life Limitation 05–10–01 – Maintenance Checks 05–20–01<br>Aircraft Equipment Airworthiness Limitations – Life Limitation 05–10–15 – Maintenance Checks 05–20–15<br>Power Plant Airworthiness Limitations – Life Limitation 05–10–17 – Maintenance Checks 05–20–17<br>Revision 1 becomes effective on 17 January 2003. |
| 010–11–83 | ASB 49–A1 | *Airborne Aux. Power* – Check Part No. of fitting installed at the outlet port of fuel solenoid valve. | Applicable to all Series 100 and 200 aircraft and to APU GTCP36–100(M) in stores or held as spares. Compliance required as detailed in Alert Service Bulletin. |
| 006–01–84 | SB 32–A4 | *Landing Gear* – Brake units – Inspection of brake wear indicator pins. | Applicable to BAe 146 Series 100 and 200 aircraft as detailed in SB. Compliance in accordance with SB. |
| 004–04–84 | SB 32–9 | *Landing Gear* – Main landing gear – Inspection of retraction jack pin. | Applicable to Series 100 and 100A Serial Nos. E1003 to E1011 inclusive and Series 200 and 200A Serial Nos. E2008, E2012, E2014 and E2018. Compliance as detailed in SB. Dowty Rotol Service Bulletin 146–32–3 also refers. |
| 008–06–84 | SB 21–10–70032A | *Air Conditioning* – To introduce BAe Dynamics Modification No. 83/09/020 to pressurization controller panel. | Applicable to Series 100, 100A and 200A aircraft, Serial Nos. as detailed in Service Bulletin. Compliance required by 31 December 1984 in accordance with Service Bulletin. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 002–07–84 | SB 52–A14 | *Doors* – Passenger/Service doors – incorrect assembly of girt bar stop. | Applicable to Series 100, 100A and 200A aircraft, Serial Numbers as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. |
| 005–08–84 | SB 22–A9 | *Autoflight – Autopilot* – Incorrect grease used in servo actuators Part Number 110 RAA/2. | Applicable to all Series aircraft, Serial Numbers as detailed in Service Bulletin. Compliance required as detailed in SB. |
| 001–09–84 | SB 27–A24 | *Flight Controls* – Airbrake/Lift spoilers – possibility of insufficient selector lever overtravel. | Applicable to all aircraft pre-mod 00321A. Compliance required as detailed in Service Bulletin. |
| 002–09–84 | SB 53–5 | *Fuselage* – Skin – possible chafing of wing to fuselage fairings. | Applicable to all aircraft post-mod HCM 00301 A and B and pre-mod HCM 00432 A and B. Compliance required as detailed in Service Bulletin. |
| 003–09–84 | SB 22–6–00150D | *Autoflight* – Autopilot – to introduce autopilot cut-out switch operated by control column deflection. | Applicable to Series 100 and 100A aircraft. Serial Numbers as detailed in SB. Compliance required as detailed in SB not later than 31 March 1985. |
| 001–10–84 | SB 32–18 | *Landing Gear* – Main gear – Possibility of surface defects in main fitting. | Applicable to all Series aircraft and main gear assemblies held as spare. Compliance required within 40 days of receipt of Bulletin as detailed in SB. Dowty Rotol Service Bulletin 146–32–21 also refers. |
| 004–01–85 | SB 53–13–00530A | *Fuselage* – Rear section – To introduce reinforcing strip to L.H. and R.H. outboard seat rail lower boom between frames 33B and 34. | Applicable to Series 200 and 200A aircraft. Serial Numbers as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. |
| 003–04–85 | SB 28–A3 | *Fuel* – Centre tank – Possibility of fuel leaking into passenger cabin. | Applicable to all aircraft pre-mod HCM 00650A. Compliance required as detailed in Service Bulletin. |
| 010–05–85 | SB 28–3–00650A | *Fuel* – Storage – Centre tank – To improve sealing and to introduce an extended fume and fuel proof enclose. | Applicable to all Series aircraft, Serial Numbers as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. Accomplishment of the AD cancels AD 003–04–85. |
| 005–09–85 | SB 27–42–00671A | *Flight Controls* – Elevator control system – To introduce lighter 'G' weight and delete balance spring. | Applicable to all Series aircraft, Serial Numbers as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin not later than 30 September 1985. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 006–09–85 | SB 22–29–00671B | *Autoflight* – Autopilot – To introduce extended pitch runaway protection for aircraft pre-mod HCM 45018A. | Applicable to Series 200 and 200A aircraft, Serial Numbers as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin not later than 30 September 1985. |
| 004–10–85 | SB 76–A16 | *Engine Controls* – Cable assembly – Possible insecure swaging. | Applicable to aircraft Serial Numbers as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. |
| 005–01–86 | SB 25–A57 | *Equipment/Furnishings* – Evacuation slide – Failure of slide to deploy correctly on demand. | Applicable to all Series aircraft, Serial Numbers as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. |
| 003–02–86 | SB 21–24–00543A | *Air Conditioning* – To improve sealing between hydraulic bay and passenger compartment. | Applicable to all Series aircraft, Serial Numbers as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin not later than 31 May 1986. |
| 004–02–86 | SB 25–58–35069A | *Equipment/Furnishings* – Emergency equipment – Evacuation slide – To reduce cover assembly latch tension (Air Cruisers SB.201–25–A2 refers). | Applicable to all Series aircraft, Serial Numbers as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin not later than 28 February 1986. |
| 001–04–86 | SB 32–A53 | *Landing Gear* – Brakes – Possible loss of braking performance. | Applicable to aircraft fitted with carbon brakes. Compliance required as detailed in Service Bulletin. |
| 011–04–86 | SB 25–13–70039A | *Equipment/Furnishings* – Emergency equipment – To introduce Air Cruiser Modification MC 9139 to evacuation slide. | Applicable to all Series aircraft, Serial Numbers as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. |
| 012–04–86 | SB 27–53 | *Flight Controls* – Stall identification – Defective electro/pneumatic solenoid valves. | Applicable to all Series 100, 100A, 200 and 200A aircraft. Compliance required as detailed in Service Bulletin. |
| 013–04–86 | SB 27–A54 | *Flight Controls* – Flap control system – Torque limiter output integrity inspection. | Applicable to all Series aircraft. Compliance required as detailed in Service Bulletin. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 002–05–86 | SB 32–A55 | *Landing Gear* – Main leg assembly – Possible failure of shock absorber pins and wheel lever attachment pin. | Service Bulletin cancelled as the required inspection is no longer relevant to aircraft in service therefore AD is now cancelled. |
| 003–05–86 | SB 27–54–70193A | *Flight Controls* – Flaps control system – To introduce Dowty Rotol Modification 146/F/198 to flap torque limiter units 676201007, 676201008 and 676201009. | Classification of Service Bulletin changed from mandatory to recommended before issue therefore AD is now cancelled. |
| 002–08–86 | SB 24–30–00757A | *Electrical Power* – DC power distribution – To prevent simultaneous loss of Essential DC and Emergency DC busbars. | Applicable to all Series aircraft, Serial Numbers as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. |
| 005–09–86 | SB 27–58 | *Flight Controls* – Stall identification – Defective electro-pneumatic solenoid valves. | Applicable to all Series aircraft. Compliance required as detailed in Service Bulletin. |
| 009–11–86 | SB 52–55–00830A | *Doors* – Passenger/Service – To remove 'disarm' locking arm from passenger and service doors. | Applicable to all Series aircraft, Serial Numbers as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin not later than 10 November 1986. |
| 011–11–86 | SB 32–73 | *Landing Gear* – Main gear assembly – Possible defects in the main fitting. | Applicable to all Series aircraft, as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. Dowty Rotol Service Bulletin 146–32–23 also refers and is referenced under this AD No in the Instruments and Equipment section. |
| 004–03–87 | SB 32–A74 | *Landing Gear* – Brakes – Possible failure of stator drives. | Cancelled and superseded by Alert Service Bulletin 32–A75 therefore AD is now cancelled. |
| 008–03–87 | SB 32–A75 | *Landing Gear* – Brakes – Possible failure of stator drives. | Applicable to all Series aircraft fitted with carbon brakes introduced on mod HCM 30089C and D. |
| 009–12–87 | SB 53–67 | *Fuselage* – Skin – Possible chafing by wing to fuselage fairings. | Applicable to all Series aircraft, as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 003–02–88 | SB 71–32–00760A | *Power Plant* – To introduce additional retention of jet pipe to engine. | Applicable to all Series aircraft, as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin not later than 31 August 1988. |
| 001–03–88 | SB 53–70 | *Fuselage* – Plates/skins – Possible cracking of rear fuselage skin at rivet holes. | Applicable to all Series aircraft, as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. |
| 003–04–88 | SB 27–74 | *Flight Controls* – Aileron and elevator trim screwjacks – Possible incorrect assembly. | Applicable to all Series aircraft, as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. |
| 013–05–88 | SB 57–24–00911A | *Wings* – Flaps – To introduce stronger roller bearing pins at lower carriage on flap track 3. | Applicable to all Series aircraft, as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin not later than 31 May 1989. |
| 002–07–88 | SB 27–75–70212A&B | *Flight Controls* – To introduce aileron disconnect unit Part No 1295R000 in lieu, or by conversion, of 1099R000 or 1224R000. Normalair-Garrett Ltd Mods 3RM and 4RM refer. | Applicable to all Series aircraft, as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin not later than 31 May 1989 unless the Fraser Nash aileron disconnect unit Part No AO–100–902 is fitted. |
| 014–08–88 | SB 32–A95 | *Landing Gear* – Nose wheel steering – possible loose steering cuff ring nut. | Applicable to all Series aircraft. Compliance required as detailed in Alert Service Bulletin. |
| 002–09–88 | SB 35–8 | *Oxygen* – Crew oxygen – Inspection of main supply cylinder for corrosion. | Applicable to all Series aircraft, as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. |
| 005–10–88 | SB 27–87 | *Flight Controls* – Aileron disconnect unit – Possible dormant failure. | Applicable to all Series aircraft pre Mod HCM70212B. Compliance required as detailed in Service Bulletin not later than 30 November 1988. |
| 014–10–88 | SB 27–88–70212C | *Flight Controls* – Introduction of Normalair-Garrett Ltd Modification No 5RM to aileron disconnect unit Part No 1295R000. | Applicable to all Series aircraft, as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 009–11–88 | SB 32–95–70409A | *Landing Gear* – Nose landing gear – To introduce improved locking arrangement of steering cuff ring nut. | Applicable to all Series aircraft, as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin not later than 30 April 1989. Dowty Rotol Service Bulletin 146–32–84 also refers and is referenced under this AD No. in the Instruments and Equipment section. |
| 002–12–88 | SB 27–77–00955A&C | *Flight Controls* – Elevator control system – To introduce an elevator 'G' weight damper, and a single acting spring strut to increase column centring force. | Applicable to 100 and 200 Series aircraft, as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin not later than 31 July 1989. |
| 002–01–89 | SB 35–10–70363F | *Oxygen* – Passenger oxygen system – To introduce Walter Kidde Modification to their oxygen mask and hose assembly Part No. K39028. | Applicable to 300A aircraft constructors no E3120. Compliance required as detailed in Service Bulletin. |
| 024–04–89 | SB 27–95–70420A | *Flight Controls* – Flap control system – To introduce flap electronic control unit (ECU) 676801007 (or later interchangeable standard) in lieu of 676801003, 676801005 and . 676801006 | Applicable to 100, 200 and 300 Series aircraft, as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin not later than 31 July 1990. Dowty Rotol Service Bulletin 146–27–75 also refers and is referenced under this AD No. in the Instruments and Equipment section. |
| 019–05–89 | SB 55–7–00955D | *Stabilisers* – Elevators – To introduce additional mass balance weights to elevators forward of hinge line. | Applicable to 100 and 200 Series aircraft, as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin not later than 30 May 1990. |
| 026–05–89 | SB 11–36–01104A&B | *Placards and Markings* – Flap computer – To introduce warning placards in avionics bay for flap computer removal and pulling of associated circuit breakers. | Applicable to 100, 200 and 300 Series aircraft, as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. |
| 005–07–89 | SB 53–84–00737D | *Fuselage* – Rear section – To introduce additional riveted attachment of stringer 21P to LH skin panel adjacent to frame 39X. | Applicable to 200 and 300 Series aircraft, as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. |
| 009–08–89 | SB 25–A157 | *Equipment/Furnishings* – Passenger compartment – To inspect insulation bags between frames 19 to 26 and 32 to 40 inclusive. | Applicable to all aircraft as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 044–09–89 | SB 57–33 | *Wings* – Root joint attachment fittings – Rear spar root joint attachment fittings at wing rib 2. | Applicable to all BAe 146 and Avro 146–RJ Series aircraft. Compliance required as detailed in Service Bulletin. |
| 048–09–89 | SB 32–A101 | *Landing Gear* – Wheels and brakes – Inspection of quick disconnect couplings in yellow and auxiliary hydraulic lines to wheel brake units. | Applicable to all aircraft post Mod HCM50075A, B and C. Compliance required as detailed in Service Bulletin. |
| 001–10–89 | SB 54–4 | *Nacelles/Pylons* – Possible incorrect installation of bush at pylon to engine front mounting yoke assembly. | Applicable to 200 and 300 Series aircraft as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. |
| 001–11–89 | SB 27–A105 | *Flight Controls* – Elevator – Inspect elevator control cables between frames 42 and 44 (LH) for possible chafing. | Alert Service Bulletin cancelled as the required inspection is now covered in the Maintenance Manual therefore AD is now cancelled. |
| 008–01–90 | SB 53–87 | *Fuselage* – Skin – Inspect underhead radiused rivets in polished fuselage skin areas. | Applicable to aircraft as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. |
| 009–01–90 | SB 53–88 | *Fuselage* – Skin – Inspect polished fuselage skins in designated areas for cracks. | Applicable to aircraft as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. |
| 008–05–90 | SB 25–198 | *Equipment/Furnishings* – Evacuation slide – Failure of evacuation slide to deploy correctly on demand. | Applicable to aircraft as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. Repeat inspection whenever an evacuation slide or slide raft is installed to an aircraft or a valve release cable is attached to a manual release valve. |
| 001–06–90 | SB 24–60 | *Electrical Power* – Inspection of voi-shan earth stud on avionics rack at frame 17. | Applicable to aircraft as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. |
| 002–06–90 | SB 24–69–70484A | *Electrical Power* – Remote controlled circuit breaker – Introduction of Eaton Corp. Mod. No. 1 to RCCB Part Numbers SM601BA40A12 and SM601BA40A13. | Applicable to 100, 100A, 200, 200A, 300 and 300A Series aircraft, as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 009–06–90 | SB 27–109–00503C | *Flight Controls* – Stall identification and warning – To introduce 'safe flight' stall identification signal summing unit C81606–5 in place of C81606–3. | Applicable to 200 and 200A Series aircraft, as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. |
| 023–06–90 | SB 57–36 | *Wings* – Inspection of outer butt strap at rib 2 lower wing skin joint. | Applicable to aircraft as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. |
| 010–09–90 | SB 52–81–56012A | *Doors* – Freight compartment – To introduce two spring struts to the freight door torque shaft. | Applicable to 100, 200 and 300 Series aircraft, as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. |
| 011–09–90 | SB 27–114–01028B | *Flight Controls* – Stall identification and warning system – Signal summing unit (SSU) – To introduce safe flight SSU C81606–6 (Incorporating corrected air speed law) in place of C81606–4. | Applicable to 300 Series aircraft as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. |
| 004–10–90 | SB 53–98 | *Fuselage* – Inspection for pitting corrosion of fuselage skins that have undergone polishing. | Applicable to aircraft as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. |
| 005–10–90 | SB 32–104–01159A | *Landing Gear* – Wheels and brakes – To prevent inadvertent parking brake application should park brake spring fail. | Applicable to 100, 100A, 200, 200A, 300 and 300A Series aircraft as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. |
| 013–11–90 | SB 32–A119 | *Landing Gear* – Main landing gear – Inspection of door rear hinge bracket assemblies. | Applicable to all series aircraft. Compliance required as detailed in Service Bulletin. |
| 015–11–90 | SB 53–102 | *Fuselage* – Inspection of bolts securing passenger cabin seat rails at frame 28. | Applicable to 300 Series aircraft as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. |
| 017–11–90 | SB 52–89–00668H, J, K and L | *Doors* – Passenger and service doors – To introduce stronger springs on passenger and service doors to ensure side baulk blade retraction. | Applicable to 100, 100A, 200, 200A, 300 and 300A Series aircraft as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. |
| 016–01–91 | SB 26–A29 | *Fire Protection* – Extinguishing – Inspection of extinguisher pipe assembly in engine nose cowl. | Applicable to 100, 100A, 200, 200A, 300 and 300A Series aircraft as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 002–02–91 | SB 24–83 | *Electrical Power* – Inspection of in-line splices APU generator circuit for overheating. | Applicable to aircraft as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. Superseded by CAA AD No. 005–04–2003. |
| 003–02–91 | SB 24–84 | *Electrical Power* – Inspection of in-line splices in the integrated drive generator circuits for overheating. | Applicable to aircraft as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. Superseded by CAA AD No. 005–04–2003. |
| 019–02–91 | SB 25–247–36079A, B, C, D and E | *Equipment/Furnishings* – Attendants seats – To introduce seat cushions for attendants seats which comply with AN59 fire blocking requirements. | Applicable to 100, 200 and 300 Series aircraft as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. |
| 022–02–91 | SB 34–128–00950J | *Navigation* – Pitot-Static system – To introduce a change in length of pitot-static hoses to the instrument panels. | Applicable to 200, 200A, 300 and 300A Series aircraft as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. |
| 005–04–91 | SB 28–18 | *Fuel* – Centre section tank – Inspection of polymer coating around centre section fuel tank and on frames 26 and 29. | Applicable to 100, 100A, 200, 200A, 300 and 300A Series aircraft as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. |
| 014–04–91 | SB 25–277–65167A | *Equipment/Furnishings* – Attendants seats – To introduce seat cushions for forward attendants seats which comply with AN59 fire blocking requirements. | Applicable to 200 and 300 Series aircraft as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. |
| 015–04–91 | SB 25–278–65168A | *Equipment/Furnishings* – Attendants seats – To introduce seat cushions for rear attendants seats which comply with AN59 fire blocking requirements. | Applicable to 200 and 300 Series aircraft as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. |
| 010–06–91 | SB 34–132–46042A | *Navigation* – Pitot-static system – To correct pitot and static flexible hose lengths for the TAS 2 unit in the avionics rack on pre phase II avionics aircraft. | Applicable to aircraft as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 011–06–91 | SB 34–131–46041A | *Navigation* – Pitot-static system – To correct pitot and static flexible hose lengths for the TAS 1 unit in the avionics rack on pre phase II avionics aircraft. | Applicable to aircraft as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. |
| 004–07–91 | SB 32–124–70491 A & B | *Landing Gear* – Brake controls and indication – To introduce improved anti-skid control boxes. | Applicable to 100, 100A, 200, 200A, 300 and 300A aircraft as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. |
| 011–08–91 | SB 53–120–46034A | *Fuselage* – To replace light alloy rivets with titanium rivets at intersections of frame 28 with stringer 22 and frame 33 with stringers 23, 22 and 21. | Applicable to 300 Series aircraft constructors Nos. E3161 and E3174. Compliance required as detailed in Service Bulletin. |
| 015–08–91 | SB 57–41 | *Wings* – Centre section – Inspection of wing top skins at rib '0' for possible cracking. | Applicable to all Series aircraft pre mod HCM00851C. Compliance required as detailed in Service Bulletin. |
| 004–09–91 | SB 25–294–36108B | *Equipment/Furnishings* – To introduce attendant's call panel mountings at 2L of revised substrate construction which will comply with AN61–1990 requirements. | Applicable to 200, 200A, 300 and 300A aircraft as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. |
| 011–09–91 | SB 32–130–70295C | *Landing Gear* – Wheels and brakes – To introduce Dunlop hydraulic fuse Part No. ACM30506 Mod. 1 in place of existing Part No. ACM29100. | Applicable to 100, 100A, 200, 200A, 300 and 300A aircraft as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. |
| 008–11–91 | SB 24–A97 | *Electrical Power* – AC generation – Possible failure of generator control unit to detect a single phase feed line open circuit. | Applicable to aircraft fitted with GEC Plessey generator control units Part No. 700–1–22490–410 and 700–1–22490–510. Compliance required as detailed in Alert Service Bulletin. |
| 005–12–91 | SB 32–131 | *Landing Gear* – Nose landing gear – Inspection of upper main fitting for possible cracks. | Applicable to all Series aircraft. Compliance required as detailed in Service Bulletin. |
| 006–12–91 | SB 25–299–60358D | *Equipment/Furnishings* – General – To introduce a revised interior decor specification to suit the customers requirements and to meet UK Airworthiness Notice No. 61 and RAI requirements of 225.853 (A–1) Amendment 66. | Applicable to 200 Series aircraft constructors Nos. E2170, E2178 and E2184. Compliance required as detailed in Service Bulletin. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
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| 008–12–91 | SB 25–303–56061A | *Equipment/Furnishings* – To introduce roof panels and overhead stowage bottom panels which will comply with AN61. | Applicable to Constructors No. E1009. Compliance required as detailed in Service Bulletin. |
| 014–12–91 | SB 25–306–60350R | *Equipment/Furnishings* – General – To introduce a revised interior decor specification. | Applicable to 300 Series aircraft Constructors Nos. E3185 and E3191. Compliance required as detailed in Service Bulletin. |
| 014–01–92 | SB 11–97–01285A | *Placards and Markings* – N2 limitations for anti-ice selection – To introduce a placard on the flight deck overhead panel and wiring to inhibit the airbrake auto-retract function. | Applicable to 100, 100A, 200, 200A, 300 and 300A aircraft as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. |
| 018–01–92 | SB 27–133 | *Flight Controls* – Airbrake system – Possible failure of feedback spring in servo-valve assembly. | Applicable to all Series aircraft. Compliance required as detailed in Service Bulletin. |
| 010–03–92 Revision 1 | – | Altitude limitation for known or forecast icing conditions. | Superseded by AD 004–02–94. |
| 009–04–92 | SB 27–135 | *Flight Controls* – Pitch servomotor – Possible incorrect drilling of foul pin holes in servomotor mounting bracket. | Applicable to 100, 100A, 200, 200A, 300 and 300A aircraft as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. |
| 010–04–92 | SB 26–32–36128A | *Fire Protection* – Smoke detection – To introduce a resonator to the warning horn of the forward and rear toilet smoke detectors. | Applicable to 100, 100A, 200, 200A, 300 and 300A aircraft as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. |
| 005–08–92 | SB 25–328 | *Equipment/Furnishings* – Emergency equipment – Possible failure of evacuation slide to deploy automatically on demand. | Applicable to aircraft fitted with Air Cruisers evacuation slide Part No. D31005–Series serial Nos. as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. |
| 005–11–92 | SB 27–137 | *Flight Controls* – Lift spoiler system – Possible dormant failure of 'lift spoiler unlocked' indication system. | Applicable to all Series aircraft. Compliance required as detailed in Service Bulletin. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
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| 023–01–93 | SB 24–91–70488B & C | *Electrical Power* – Generator control unit – Introduction of GEC mod. Nos. 1404 Issue 2 and 1409 Issue 1 to generator control unit 700–1–22490–400 and generator control unit 700–1–22490–500 and to delete the neutral connection from the Vickers pump. | Applicable to 100, 100A aircraft constructors numbers E1002 and subsequent, 200, 200A aircraft constructors numbers E2012 and subsequent and 300, 300A aircraft constructors numbers E3001 and subsequent. Compliance required as detailed in Service Bulletin. |
| 015–05–93 | SB 29–31–01339A | *Hydraulic Power* – To introduce an improved fire resistant quick release coupling half for the engine driven pump (EDP) case drain lines in the engine bay. | Applicable to 100, 100A, 200, 200A, 300 and 300A aircraft constructors numbers E3001 to E3207, E3209 to E3220 and E3222. Compliance required as detailed in Service Bulletin. |
| 002–07–93 | SB 34–A155 | *Navigation* – Windshear detection and recovery system – Inspection of interface between the flap system and the windshear computer. | Applicable to aircraft fitted with Safeflight Windshear Computer introduced by BAe modification HCM40270A and B. Compliance required as detailed in Service Bulletin. |
| 004–02–94 | – | Altitude limitation in icing conditions. | Superseded by CAA EAD 003–06–96. |
| 007–02–94 | SB 49–40 | *Airborne Auxiliary Power* – Ignition and starting – Inspection of cable terminals on A.P.U. start circuit. | Applicable to RJ70, RJ85 and RJ100 aircraft constructors numbers E1223, E1224, E1225, E2226, E2231, E2233, E2235, E2239, E3221, E3232, E3234, E3236, E3237 and E3238. Compliance required as detailed in Service Bulletin. |
| 008–02–94 | SB 27–70–00913A&B | *Flight Controls* – To introduce an amber warning light 'Lift spoilers not deployed'. | Applicable to 100, 100A, 200, 200A, 300 and 300A aircraft constructors numbers as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. |
| 013–03–94 | SB 57–40 | *Wings* – Inspection of fastener holes in the butt strap at rib 2 lower wing skin joint. | Applicable to constructors numbers E2188, E2192, E3190 and E3194. Compliance required as detailed in Service Bulletin. |
| 014–03–94 | SB 24–103 | *Electrical Power* – AC generation – Inspection of generator control units for possible incorrect under-frequency trip level settings. | Applicable to all Series aircraft. Compliance required as detailed in Service Bulletin. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 012–05–94 | SB 53–130 | *Fuselage* – Centre section – Inspection of frame 29 for possible cracking in the vicinity of bolt holes. | Applicable to all BAe 146 Series aircraft. Compliance required as detailed in Service Bulletin. |
| 008–09–94 | SB 36–23 | *Pneumatic* – Distribution – Inspection of peri-seal housings in bleed air system. | Applicable to Avro 146-RJ and BAe 146 Series 300 aircraft as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. |
| 005–01–95 | SB 24–107 | *Electrical Power* – DC generation – Inspection of terminal block on DC panel No. 1 for presence of two-way link. | Applicable to all Series BAe 146 aircraft equipped with a dual lead-acid battery installation. Compliance required as detailed in Service Bulletin. |
| 013–03–95 | SB 53–131 | *Fuselage* – Centre section – Inspection of frame 29 for possible cracking in the vicinity of bolt holes. | Applicable to Avro 146–RJ70 and 85 Series aircraft without Avro Mod. HCM01411A, B or C embodied and Avro 146–RJ100 and 115 Series aircraft without Avro mod. HCM01411A or B embodied. Compliance required as detailed in Service Bulletin. |
| 006–05–95 | SB 35–35–56091A | *Oxygen* – Crew – To introduce stainless steel pipe in lieu of flexible pipe to P2 Eros Mask to improve flow capacity. | Applicable to Avro 146–RJ85 aircraft with Mod. HCM50231A, constructors Nos. E2246, E2251, E2253, E2256, E2257, E2261, E2269, E2226, E2231, E2233, and E2235. Compliance required as detailed in Service Bulletin. |
| 007–05–95 | SB 26–35 | *Fire Protection* – APU bay forward firewall – Inspection of firewall for cracking. | Applicable to BAe 146 and Avro 146–RJ aircraft which have embodied Mod. HCM36019A (–150 Garret APU). Compliance required as detailed in Service Bulletin. |
| 006–06–95 | SB 57–47 | *Wings* – Aileron servo and trim tab drive brackets – Corrosion and cracking. | Applicable to all Series BAe 146 aircraft. Compliance required as detailed in Service Bulletin. |
| 007–06–95 | SB 57–48 | *Wings* – Aileron servo and trim tab drive brackets – Corrosion and cracking. | Applicable to all Series Avro 146–RJ aircraft up to and including E3263. Compliance required as detailed in Service Bulletin. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 003–07–95 | SB 55–13–01490B | *Stabilizers* – To introduce a definitive standard of drain holes in the elevators. | Applicable to all Series BAe 146 and Avro 146–RJ aircraft without either Mod. HCM 01490 A or C embodied. Compliance required as detailed in Service Bulletin. |
| 005–08–95 | SB 32–143 | *Landing Gear* – Main Landing Gear – Inspection of the direction link sub assembly. | Applicable to all Series BAe 146 and Avro 146–RJ aircraft as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. |
| 002–12–95 | SB 55–014–01510A | *Stabilizers* – Elevators – To introduce a revised mass balance weight to the leading edge of the horn. | Applicable to all Series BAe 146 and Avro 146/RJ aircraft. Compliance required as detailed in Service Bulletin. |
| 006–03–96 | SB 24–113–01532A | *Electrical Power* – To increase the size of the generator feeder cables between AC1/AC2 busbars and the generator contactors. | Applicable to all Series Avro 146–RJ aircraft. Compliance required as detailed in Service Bulletin. |
| 003–06–96 Revision 4 | – | Altitude limitation in icing conditions. | Applicable to all BAe 146 Series aircraft except those fitted with AlliedSignal LF507–1H engines. Compliance is required not later than 5 July 1996. Embody and observe the limitations of the following Temporary Revisions (TR) to the applicable Aircraft Flight Manual (AFM). |

| AFM | TR | |
|---|---|---|
| BAe 3.2 | TR85 Issue 4 | or later CAA Approved Issue. |
| BAe 3.3 | TR32 Issue 4 | |
| BAe 3.5 | TR33 Issue 4 | |
| BAe 3.6 | TR44 Issue 4 | |
| BAe 3.7 | TR19 Issue 5 | |
| BAe 3.9 | TR23 Issue 4 | |
| BAe 3.10 | TR34 Issue 4 | |
| BAe 3.11 | TR25 Issue 4 | |
| BAe 3.12 | TR13 Issue 4 | |
| BAe 3.13 | TR11 Issue 4 | |

AD continued overleaf

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 003–06–96 Revision 4 (continued) | | | Installation of engine modifications in accordance with FAA AD 99–15–06 (AlliedSignal Engines Service Bulletin ALF/LF 72–1020) and embodiment of British Aerospace Service Bulletin 71–72–30473A constitutes terminating action for the operating limitation defined in the above referenced AFM Temporary Revisions.<br><br>Revision 1 became effective on 10 August 1998 and superseded the original issue of AD 003–06–96 (which superseded AD 004–02–94), by introducing terminating modification action in place of the AFM limitations.<br><br>Revision 2 became effective on 11 June 1999 excluding AlliedSignal LF507–1H engines.<br><br>Revision 3 becomes effective on 13 January 2000 identifying FAA AD 99–15–06 as terminating action.<br><br>Revision 4 becomes effective on 1 March 2001, identifying an end date of 31 December 2003 for embodiment of the terminating action engine modifications. |
| 005–06–96 | SB 57–49 | *Wings* – Top wing skin stress corrosion cracking. | Applicable to BAe 146 Series and Avro 146–RJ Series aircraft as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 004–08–96 | SB 26–A38 | *Fire Protection* – Smoke Detection – Freight Compartment – Individual testing of smoke detectors. | Applicable to all BAe 146 Series 200 QT aircraft with Mod. HCM50201C embodied, all BAe 146 Series 300 QT aircraft with Mod. HCM50214C embodied and BAe 146–100 aircraft Serial No. E1002 with Mod. HCM60336D embodied. Compliance required as detailed in Service Bulletin. |
| 002–09–96 | – | ALF502 and LF507 engine oil system health monitoring requirements. | Applicable to all BAe 146 and Avro 146-RJ series aircraft fitted with Allied Signal ALF502 and LF507 engines. Compliance is initially required not later than 100 flying hours from the effective date of this Directive which is 30 September 1996. Carry out the oil system health monitoring inspections as defined in paragraph 2 Accomplishment Instructions of Allied Signal Service Bulletins LF507–1H 79–5, LF507–1F 79–5 and ALF502R 79–9 for LF507–1H, –1F and ALF502R engines as appropriate. Repeat inspections as required by Allied Signal Service Bulletins LF507–1H 79–5, LF507–1F 79–5 and ALF502R 79–9. |
| 004–12–96 | SB 57–50 | Inspection for, and application of primer to 'drill marked' areas on the underside of the wing top skin panels. | Applicable to BAe 146 Series and Avro 146-RJ Series aircraft as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. Superseded by AD 009–02–2000. |
| 005–12–96 | SB 32–144 | Landing Gear – Main landing gear – Inspection of the outer link for cracks. | Applicable to all BAe 146 Series and Avro 146-RJ Series aircraft with sidestays as listed on Messier-Dowty Service Bulletin 146–32–128. Compliance required as detailed in Service Bulletin. Superseded by CAA AD 004–05–2001. |
| 002–03–97<br>Revision 1 | – | Removal of US Air/PSA EO's and ACO's from ex US Air/PSA aircraft. | Applicable to BAe 146–200 series aircraft E2022, E2023, E2024, E2028, E2030, E2031, E2034 and E2047.<br><br>Compliance is required not later than 12 months from the effective date of this Directive which is 17 April 1997. |

AD continued overleaf

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 002–03–97 Revision 1 (continued) | | | Inspect to ensure removal of FAA approved modifications in accordance with the following Marshall Aerospace Service Bulletins.<br><br>SBM 11–001, –002, –003<br>SBM 21–002, –003, –004<br>SBM 25–010, –011, –012, –013, –014<br>SBM 26–001, –002, –003<br>SBM 27–002, –003<br>SBM 33–001<br>SBM 34–001<br>SBM 35–002<br>SBM 49–001<br>SBM 52–006, –007<br>SBM 79–001<br><br>NOTE: SBM 77–001 was deleted at Revision 1. |
| 001–04–97 | SB 55–15 | *Stabilizers* – To inspect horizontal stabilizer to vertical stabilizer attachment brackets for corrosion. | Applicable to all Series BAe 146 aircraft, all Avro 146-RJ70 aircraft up to E1267, all Avro 146-RJ85 aircraft up to E2300 and all Avro 146-RJ100 aircraft up to E3301. Compliance required as detailed in Service Bulletin. |
| 006–09–97 | SB 32–145 | *Landing Gear* – To inspect eye bolt/piston rod of main landing gear retraction jack for corrosion. | Applicable to all BAe 146 and Avro 146–RJ series aircraft as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. |
| 007–09–97 | SB 24–120 | *Electrical Power* – To inspect ERMA terminal lugs in the electrical equipment bay and hydraulic equipment bay. | Applicable to Avro 146–RJ aircraft as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. |
| 010–07–97 | SB 55–16 | *Stabilizers* – To inspect elevator hinge bracket rib 1 for cracking. | Applicable to BAe 146–200 aircraft as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 004–03–98 | SB11–137–30405A | *Placards/Markings* – To introduce a flight deck placard on the centre instrument panel to indicate that 26000 ft altitude icing limitations are applicable and to introduce a new replacement placard to the ice protection panel for N2 limitations. | Applicable to all BAe 146 series aircraft with ALF502R–3A, ALF502R–5, ALF502R–5A and ALF502R–5B series engines. Compliance required as detailed in Service Bulletin. |
| 005–04–98 | SB 53–144 | *Fuselage* – To inspect for skin cracking in the vicinity of frame 29 between stringers 12 and 13. | Applicable to all BAe 146 series 100 and 200 aircraft and series 300 aircraft as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. |
| 006–04–98 | SB 57–55 | *Wings* – To inspect LH and RH wing bottom skin stringers for machining into stringer web. | Applicable to Avro 146–RJ aircraft as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. |
| 015–10–98 | SB 53–152 | *Fuselage* – To inspect for cracking along the face of the retraction jack attachment boss in the left hand nose landing gear sidewall. | Applicable to all BAe 146 and Avro 146-RJ series aircraft as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. |
| 005–12–98 | SB 32–150–70656A | *Landing Gear* – Introduction of new MLG uplocks and MLG door locks with revised rollers. | Applicable to all BAe 146 and Avro 146–RJ series aircraft. Compliance required as detailed in Service Bulletin. |
| 009–02–99 | SB 26–44 | *Fire Protection* – Detection – Inspection for chafing damage by powerplant firewall responder unit(s) on adjacent fuel pipe. | Applicable to BAe 146 and Avro 146–RJ series aircraft as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. |
| 004–09–99 | SB 57–56 | *Wings* – To inspect for loose Jo-Bolts and fretting of crown fittings on all stringers at wing rib 0 and rib 2 left hand and right hand. | Applicable to BAe 146 and Avro 146-RJ series aircraft as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. |
| 006–09–99 | SB 54–10 | *Pylons* – Inspection of pylon to wing forward attachment bolts and introduction of lower torque values and sealant under bolt heads and nuts. | Applicable to BAe 146 and Avro 146–RJ series aircraft as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. |
| 002–11–99 | SB 57–A58 | *Wings* – Internal structure – Top and bottom wing skin, forward and rear spars, ribs and stringers – Inspection for micro-biological contamination and corrosion. | Applicable to Avro 146–RJ100 aircraft E3221, E3242, E3244, E3245, E3247, E3248, E3250, E3255 and E3263. Compliance required as detailed in Alert Service Bulletin. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 009–02–2000 | SB 57–57 | *Wings* – Inspection for and application of primer to 'drill' marked areas on the underside of the wing top skin panels and inspection for paint debris in the wing fuel tanks. | Applicable to BAe 146 and Avro 146–RJ series aircraft as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. Supersedes AD 004–12–96. |
| 004–04–2000 | SB 25–418–36215A | *Equipment/Furnishings* – To introduce repositioned support lanyard on Hella passenger service units. | Applicable to Avro 146–RJ series aircraft as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. |
| 001–06–2000 | SB 32–157 | *Landing Gear* – Main landing gear sidestay – NDT inspection of inner sidestay for cracking at fuselage end (LH and RH). | Applicable to BAe 146 and Avro 146–RJ series aircraft as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. |
| 002–06–2000 | SB 32–158 | *Landing Gear* – Nose landing gear – NDT inspection of the upper end of the nose landing gear oleo for cracking. | Applicable to BAe 146 and Avro 146–RJ series aircraft as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. |
| 002–09–2000 | SB 26–60 | *Fire Protection* – Extinguishers – Inspection for reversed wiring on Pacific Scientific fire bottles – Engines 1,2,3,4 and auxiliary power unit. | Applicable to Avro 146-RJ series aircraft with modifications HCM01582A or HCM01582B or HCM36192A or HCM36192B embodied. Compliance required as detailed in Service Bulletin. |
| 004–10–2000 | SB 57–62 | *Wings* – Internal structure – Front and rear spars – Inspection for corrosion and cracking. | Applicable to BAe 146 series 100 aircraft E1002, E1003, E1004 and E1005 and BAe 146 series 300 aircraft E3001. Compliance required as detailed in Service Bulletin. |
| 002–11–2000 | SB 53–42 | *Fuselage* – Rear pressure bulkhead – Inspection of horizontal butt joint. | Applicable to BAe 146 series 100, 200 and 300 aircraft Pre-Mod HCM00713A. Compliance required as detailed in Service Bulletin. |
| 003–11–2000 | SB 21–148 | *Air Conditioning* – Environmental control system – To inspect part numbers on forward and aft pressurisation discharge valves and flight deck mounted pressure controller. | Cancelled and superseded by AD 004-02-2002. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 003–01–2001 Revision 1 | SB 80–18–50293A<br>SB 80–19–50293B<br>SB 80–20–50293C | *Starting* – To introduce a change-over contactor into the engine start circuit to provide an additional level of protection against the soft start resistor overheating. | Applicable to BAe 146 and Avro 146–RJ series aircraft as detailed in Service Bulletins. Compliance required as detailed in Service Bulletins. AD revised to identify Service Bulletins 80–19–50293B and 80–20–50293C, which have been raised to cover this task on certain specific aircraft serial numbers as detailed in the SB applicability section. |
| 008–02–2001 | SB 34–338 | *Navigation* – Pitot static system – To inspect S4 and S5 static pipes. | Applicable to Avro 146–RJ70, RJ85 and RJ100 series aircraft with mod HCM01080W embodied. Compliance required as detailed in Service Bulletin. |
| 002–03–2001 | SB 21–150 | *Air Conditioning* – To inspect engine oil seals, APU and ECS jet pump and air conditioning pack for oil contamination. | Applicable to BAe 146 series 100, 200 and 300 aircraft. Compliance required as detailed in Service Bulletin. |
| 004–03–2001 | SB 57–064 | *Wings* – To replace bolts (left and right side) on wing rear spar at centre fuel tank. | Applicable to Avro 146–RJ 85 aircraft E2302 to E2306 inclusive and Avro 146–RJ100 aircraft E3301. Compliance required as detailed in Service Bulletin. |
| 003–04–2001 | SB 34–339–50261Y | *Navigation* – To introduce diodes to prevent TCAS audio remaining inhibited following a GPWS warning. | Applicable to BAe 146–100, –200 and –300 Series aircraft with mods HCM50261X and (HCM01077L or HCM50273B) and (HCM50040E or HCM50040N) embodied. Compliance required as detailed in Service Bulletin. |
| 004–04–2001 | SB 24–137–01691A | *Electrical Power* – To introduce a Vickers standby generator Part No. 3022049–000 in lieu of the existing Vickers unit. | Applicable to BAe 146–100, –200 and –300 Series aircraft and Avro 146–RJ70, RJ85 and RJ100 Series aircraft. Compliance required as detailed in Service Bulletin. |
| 002–05–2001 | SB 57–066 | *Wings* – Flaps – To inspect flap structure and machined ribs for evidence of corrosion. | Applicable to BAe 146–100, –200 and –300 Series aircraft and Avro 146–RJ70,RJ85 and RJ100 Series aircraft which are pre-modification HCM01694F. Compliance required as detailed in Service Bulletin. |
| 004–05–2001 | SB 32–156 | *Landing Gear* – Main landing gear – Side stay – Inspection of the outer link for cracks (LH and RH). | Applicable to BAe 146 and Avro 146–RJ aircraft as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. Supersedes CAA AD 005–12–96. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 005–05–2001 | SB 32–166 | *Landing Gear* – Main landing gear – Side stay – Safe lives of inner links. | Applicable to BAe 146–100 and 200 Series aircraft as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. |
| 002–07–2001 | SB 53–164 | *Fuselage* – Centre and rear fuselage external inspections. | Applicable to BAe 146–100, –200 and –300 Series aircraft and Avro 146–RJ70, RJ85 and RJ100 Series aircraft. Compliance required as detailed in Service Bulletin. |
| 004–08–2001 | SB 32–168 | *Landing Gear* – Nose landing gear – Inspection for correct torque tightening of cap screw. | Applicable to BAe 146–100, –200 and –300 Series aircraft and Avro 146–RJ70, RJ85 and RJ100 Series aircraft. Compliance required as detailed in Service Bulletin. |
| 002–09–2001 | SB 53–162 | *Fuselage* – To inspect for possible fuselage skin chafing by wing to fuselage fairing access panels (left and right side). | Applicable to BAe 146 and Avro 146–RJ Series aircraft with modification HCM01037A embodied and without modification HCM01698A embodied. Compliance required as detailed in Service Bulletin. |
| 004–09–2001 Revision 1 | – | Suspension of RVSM approval. | Applicable to British Aerospace AVRO 146–RJ70, –RJ85 and –RJ100 aircraft with modification HCM20005A embodied. Compliance is required from receipt of this Directive, but not later than 30 September 2001.<br><br>The RVSM approval of the AVRO 146–RJ70, –RJ85 and –RJ100 aircraft with modification HCM20005A embodied is suspended. Insert a copy of this Directive into the Aircraft Flight Manual, Normal Procedures Section 4.01.15, opposite page 3 (Mod 20005A).<br>NOTE: BAE Systems will supply a replacement AFM page with RVSM approval data removed, upon incorporation of the BAE Systems revision; this Directive may be removed. |

*(AD continued overleaf)*

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 004–09–2001<br>Revision 1 (continued) | | | The RVSM approval is re-instated for AVRO 146–RJ Series aircraft that are modified in accordance with BAE Systems Service Bulletin 34–240–20005A at Revision 5 or later issue. The Service Bulletin is the terminating action for the requirements of the original issue of this Directive.<br><br>The original Directive was issued on 27 September 2001. Revision 1 was issued on 25 January 2002. |
| 005–10–2001 | SB 71–077–01693A | *Engines* – Introduction of a fireproof ceramic terminal block 'G' in engine zones 412, 422, 432 and 442. | Applicable to BAe 146 and Avro 146–RJ Series aircraft as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. |
| 004–12–2001 | SB 53–165 | *Fuselage* – To inspect for evidence of corrosion at inboard faces and web/flanges of frames 15, 18, 41, 43. | Applicable to British Aerospace 146 and Avro 146–RJ Series aircraft without modification HCM30514A or C, and B or D embodied. Compliance is required as detailed in Service Bulletin. |
| 005–12–2001 | SB 27-169-01692A | *Flight Controls* – To introduce elevator surface flight dampers. | Applicable to BAe 146 and Avro 146-RJ Series aircraft. Compliance required as detailed in Service Bulletin. |
| 004–02–2002 | SB 21–155 | *Air Conditioning* – Environmental control system – To inspect part numbers on forward and aft pressurisation discharge valves and flight deck mounted pressure controller. | Applicable to BAe 146 and Avro 146–RJ Series aircraft. Compliance required as detailed in Service Bulletin. Cancels and supersedes CAA AD 003-11-2000. |
| 003–09–2002 | SB 26–065 | *Fire Protection* – Inspection/test of wiring to Pacific Scientific engine fire extinguishers. | Applicable to BAe 146 and Avro 146–RJ Series aircraft as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. |
| 003–10–2002 | SB 21–156 | *Air Conditioning* – To inspect air conditioning sound-attenuating ducts for signs of oil contamination. | Applicable to BAe 146–100, –200 and –300 Series aircraft as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 001–11–2002 | SB 22–068–70628B | *Autoflight* – To introduce a new Honeywell 4068300–905 digital flight guidance computer (DFGC) incorporating changes to radio altitude monitoring and other system enhancements. | Applicable to Avro 146–RJ70, RJ85 and RJ100 aircraft as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. |
| 007–02–2003 | SB 28–030 | *Fuel* – Wing contents – To inspect fuel quantity indication wiring in wing fuel tanks. | Applicable to BAe 146–100, 200 and 300 Series aircraft and Avro 146–RJ70, RJ85 and RJ100 Series aircraft as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. |
| 005–04–2003 | SB 24–139 | *Electrical Power* – Inspection of in-line splices in the APU generator and integrated drive generator (IDG) feeder cables for overheating. | Applicable to BAe 146–100, 200 and –300 series aircraft as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. Supersedes CAA ADs 002–02–91 and 003–02–91. |
| 006–04–2003 | SB 27–037 R3 | *Flight Controls* – Elevator 'G' weight installation – Possible cracking of support structure. | Applicable to BAe 146 aircraft pre Modification HCM00654A. Compliance required as detailed in Service Bulletin. |
| 007–04–2003 | SB 49–036–36019E R4 | *Airborne Auxiliary Power (APU)* – Introduction of improved APU inlet flexible duct Part No. DXA07175. | Applicable to BAe 146 aircraft with Modifications HCM30027A, HCM36019A or HCM30373A and Avro 146–RJ aircraft with Modifications HCM36019A or HCM30373A. Compliance required as detailed in Service Bulletin. |
| 007–06–2003 | SB 53–167 | *Fuselage* – Forward fuselage external inspections. | Applicable to BAe 146–100, 200 and 300 Series aircraft and Avro 146–RJ70, RJ85 and RJ100 Series aircraft. Compliance required as detailed in Service Bulletin. |

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# United Kingdom Civil Aviation Authority

# AIRWORTHINESS DIRECTIVE

## AD No: G-2004-0004

Issue Date: 26 February 2004

This AD is issued by the UK CAA acting for and on behalf of the European Aviation Safety Agency as the Primary Aviation Authority (ICAO Annex 8 Authority of State of Design) for the affected product(s).

Approved by the European Aviation Safety Agency under approval number 2004-1545 on 24 February 2004.

In accordance with Article 9(7)(b) of the Air Navigation Order 2000 as amended the following action required by this Airworthiness Directive (AD) is mandatory for applicable aircraft registered in the United Kingdom.
No person may operate an aircraft to which an AD applies except in accordance with the requirements of that AD unless otherwise agreed with the Authority of the State of Registry.

| Type Approval Holders Name: | Type/Model Designation(s): |
|---|---|
| **BAE SYSTEMS (OPERATIONS) LTD** | **BAE 146** |

**Type Certificate Data Sheet No:** BA16

**Superseded/ Revised ADs:** None

**ATA 53 – STRUCTURE – INSPECTION OF PRESSURE FLOOR OVER MAIN LANDING GEAR BAY**

**Manufacturer(s):** British Aerospace (Regional Aircraft) Ltd

**Applicability:** Model BAe 146 Series aeroplanes without Modification HCM00972A or HCM00972C embodied.

**Reason:** Fatigue induced cracking can occur in the fuselage pressure skin above the left and right main landing gear (MLG) bay as a result of cabin pressure cycling. This problem was previously recognised by BAE Systems, and the affected area is already inspected as part of Supplementary Structural Inspection (SSI) task 53-20-153. Failure to detect the fatigue damage can allow crack lengths to increase to a size where the structural integrity of the fuselage and its ability to maintain a pressure differential would be compromised.

Significant cracking in the fuselage pressure skin above the MLG bay has been reported following unrelated maintenance, demonstrating that the published inspection technique (DVI) does not provide a guarantee that any damage will be detected.

This Airworthiness Directive therefore mandates BAE Systems (Operations) Service Bulletin 53-170 dated 8 August 2003 that introduces a revised inspection technique, together with changes to the inspection thresholds and repeat periods for the various structural configurations that are affected and instructions for repair of damage should it be detected.

**Effective Date:** 16 March 2004

continued on next page

**Compliance/Action:**

**Aeroplanes without HCM00972A or HCM00972C and without Modification HCM00744M or HCM00850A:**

a) Prior to the accumulation of 15,000 flights, carry out an initial inspection of the pressure floor over the main landing gear bay for cracks, in accordance with paragraph 2 of BAE Systems (Operations) Service Bulletin 53-170 dated 8 August 2003 or later CAA approved revision. Where cracks or other damage are detected repair in accordance with Service Bulletin 53-170 or an approved repair scheme before further flight.

b) Where the aeroplane has exceeded 14,500 flights at the effective date of this Airworthiness Directive, carry out the initial inspection in accordance with paragraph 2 of BAE Systems (Operations) Service Bulletin 53-170 dated 8 August 2003 or later CAA approved revision within a further 500 flights. Where cracks or other damage are detected repair in accordance with Service Bulletin 53-170 or an approved repair scheme before further flight.

c) Repeat the inspection in accordance with paragraph 2 of BAE Systems (Operations) Service Bulletin 53-170 dated 8 August 2003 or later CAA approved revision at an interval not exceeding 1,000 flights.

**Aeroplanes without HCM00972A or HCM00972C and with Modification HCM00744M or HCM00850A:**

d) Prior to the accumulation of 15,000 flights, carry out an initial inspection of the pressure floor over the main landing gear bay for cracks, in accordance with paragraph 2 of BAE Systems (Operations) Service Bulletin 53-170 dated 8 August 2003 or CAA later approved revision. Where cracks or other damage are detected repair in accordance with Service Bulletin 53-170 or an approved repair scheme before further flight.

e) Where the aeroplane has exceeded 14,000 flights at the effective date of this Airworthiness Directive, carry out the initial inspection in accordance with paragraph 2 of BAE Systems (Operations) Service Bulletin 53-170 dated 8 August 2003 or CAA later approved revision within a further 1,000 flights. Where cracks or other damage are detected repair in accordance with Service Bulletin 53-170 or an approved repair scheme before further flight.

f) Repeat the inspection in accordance with paragraph 2 of BAE Systems (Operations) Service Bulletin 53-170 dated 8 August 2003 or later CAA approved revision at an interval not exceeding 3,000 flights.

**Reference Publications:** BAE Systems (Operations) Service Bulletin SB 53-170 dated 8 August 2003, may be obtained from Project Management Group, Customer Information Department, BAE Systems(Operations) Limited, Prestwick International Airport, Ayrshire, KA9 2RW, Scotland. Telephone: +44 (0) 1292 675207 Facsimile: +44 (0) 1292 675704 E-mail: RApublications@baesystems.com

**Remarks:** Enquiries regarding this Airworthiness Directive should be referred to Mr M P Gadd, Civil Aviation Authority, Programmes Department, Safety Regulation Group, Aviation House, Gatwick Airport South, West Sussex, RH6 0YR, United Kingdom. Telephone: +44 (0) 1293 573313 Facsimile: +44 (0) 1293 573976 E-mail: michael.gadd@srg.caa.co.uk

# United Kingdom Civil Aviation Authority

# AIRWORTHINESS DIRECTIVE

## AD No: G-2004-0006

Issue Date: 2 March 2004

This AD is issued by the UK CAA acting for and on behalf of the European Aviation Safety Agency as the Primary Aviation Authority (ICAO Annex 8 Authority of State of Design) for the affected product(s).

Approved by the European Aviation Safety Agency under approval number 2004-1698 on 26 February 2004.

In accordance with Article 9(7)(b) of the Air Navigation Order 2000 as amended the following action required by this Airworthiness Directive (AD) is mandatory for applicable aircraft registered in the United Kingdom.
No person may operate an aircraft to which an AD applies except in accordance with the requirements of that AD unless otherwise agreed with the Authority of the State of Registry.

| Type Approval Holders Name: | Type/Model Designation(s): |
|---|---|
| **BAE SYSTEMS (OPERATIONS) LTD** | **AVRO 146-RJ** |

**Type Certificate Data Sheet No:** BA16

**Superseded/ Revised ADs:** None

### ATA 34 – NAVIGATION - VHF NAVIGATION SYSTEM - TO INTRODUCE DISTANCE BEARING INDICATOR PART NO. 63543-280-2 - CORRECTION OF TRANSFORMER FAULT ON DISTANCE BEARING INDICATOR PART NO. 63543-280-1

**Manufacturer(s):** British Aerospace (Regional Aircraft) Ltd

**Applicability:** Model AVRO 146-RJ Series RJ70, RJ85 and RJ100 aeroplanes certificated in any category, fitted with Thales Avionics Distance Bearing Indicator (DBI) - part number 63543-280-1 with serial numbers 3084, 3171, 3442, 3443, 3485 to 3488, 3504, 3505, 3518 to 3521, 3528 to 3531, 3544 to 3547, 3551 to 3554, 3576, 3577, 3602 to 3605, 3624 to 3627, 3664, 3665, 3672, 3673, 3686, 3687, 3697 to 3700, 3717 to 3719, 3762 to 3765, 3787 to 3790, 3830 to 3833, 3858 to 3861, 3901, 3902, 3912 to 3915, 3955 to 3958, 3986 to 3989, 4017 to 4020, 4042 to 4045, 4070, 4071, 4099 to 4104, 4137 and 4138.

**Reason:** A manufacturing fault with the DBI PSU transformer could result in the propagation of the aircraft 115V AC input power supply through the instrument onto the DBI ARINC 429 Input/Output interfaces. An analysis of this failure concluded that at the aircraft level the failure effect could be loss of all aircraft primary navigation instruments.

**Effective Date:** 16 March 2004

**Compliance/Action:** Within four months after the effective date of this Airworthiness Directive, determine the part number and serial number of the Thales Distance Bearing Indicator installed, in accordance with BAE Systems (Operations) Service Bulletin SB 34-371-70671A dated 19 September 2003 or later CAA approved revision. If identified in the applicability above remove from the aeroplane and replace with a modified Thales Distance Bearing Indicator, part number 63543-280-2, or part number 63543-280-1 with a serial number not listed in the applicability above, or another approved Distance Bearing Indicator, in accordance with BAE Systems (Operations) Service Bulletin SB 34-371-70671A dated 19 September 2003 or later CAA approved revision.

**Reference Publications:** BAE Systems (Operations) Service Bulletin SB 34-371-70671A dated 19 September 2003, may be obtained from Project Management Group, Customer Information Department, BAE Systems (Operations) Limited, Prestwick International Airport, Ayrshire, KA9 2RW, Scotland. Telephone: +44 (0) 1292 675207, Facsimile: +44 (0) 1292 675704, E-mail: RApublications@baesystems.com

**Remarks:** Enquiries regarding this Airworthiness Directive should be referred to Mr M P Gadd, Civil Aviation Authority, Programmes Department, Safety Regulation Group, Aviation House, Gatwick Airport South, West Sussex, RH6 0YR, United Kingdom. Telephone: +44 (0) 1293 573313 Facsimile: +44 (0) 1293 573976 E-mail: michael.gadd@srg.caa.co.uk

# United Kingdom Civil Aviation Authority

# AIRWORTHINESS DIRECTIVE

## AD No: G-2004-0007

Issue Date: 16 March 2004

This AD is issued by the UK CAA acting for and on behalf of the European Aviation Safety Agency as the Primary Aviation Authority (ICAO Annex 8 Authority of State of Design) for the affected product(s).

Approved by the European Aviation Safety Agency under approval number 2004-2324 on 12 March 2004.

In accordance with Article 9(7)(b) of the Air Navigation Order 2000 as amended the following action required by this Airworthiness Directive (AD) is mandatory for applicable aircraft registered in the United Kingdom.
No person may operate an aircraft to which an AD applies except in accordance with the requirements of that AD unless otherwise agreed with the Authority of the State of Registry.

| Type Approval Holders Name: | Type/Model Designation(s): |
|---|---|
| **BAE SYSTEMS (OPERATIONS) LIMITED** | **BAe 146 and AVRO 146-RJ (ALL SERIES)** |

**Type Certificate Data Sheet No:** BA16

**Superseded/ Revised ADs:** None

### ATA 49 - AUXILIARY POWER UNIT - INTRODUCTION OF INSULATION BLANKETS AND EXHAUST DRAIN BLANK TO THE SUNDSTRAND APU EXHAUST

**Manufacturer(s):** British Aerospace (Regional Aircraft) Ltd

**Applicability:** Models BAe 146 Series and AVRO 146-RJ Series aeroplanes with Sundstrand APU installed (Modification HCM30373A) or Sundstrand APU installed with optional duct (Modification HCM30373A and HCM36166C) certificated in any category.

**Reason:** APU exhaust duct skin temperatures within the ECS bay have been found to be higher than the certificated maximum. The ECS bay is not a designated fire zone hence there is no fire detection or suppression system and ventilation airflow around the APU exhaust is low.

As fuel and hydraulic pipe work pass through the ECS bay a risk of flammable fluid ignition exists if leaking fluid contacts the APU exhaust duct skin.

**Effective Date:** 8 April 2004

**Compliance/Action:** Within nine months of the effective date of this Airworthiness Directive, install modification HCM36240A which introduces insulation blankets and exhaust drain pipe blank to the Sundstrand APU exhaust in accordance with BAE Systems (Operations) Ltd Service Bulletin 49-068-36240A dated 10 October 2003 or later CAA approved revision.

**Reference Publications:** BAE Systems (Operations) Ltd Service Bulletin SB 49-068-36240A dated 10 October 2003, may be obtained from Project Management Group, Customer Information Department, BAE Systems (Operations) Limited, Prestwick International Airport, Ayrshire, KA9 2RW, Scotland. Telephone: +44 (0) 1292 675207 Facsimile: +44 (0) 1292 675704 E-mail: RApublications@baesystems.com

**Remarks:** Enquiries regarding this Airworthiness Directive should be referred to Mr M P Gadd, Civil Aviation Authority, Programmes Department, Safety Regulation Group, Aviation House, Gatwick Airport South, West Sussex, RH6 0YR, United Kingdom. Telephone: +44 (0) 1293 573313 Facsimile: +44 (0) 1293 573976 E-mail: michael.gadd@srg.caa.co.uk

## BRITISH AEROSPACE ATP SERIES AIRCRAFT

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 007–08–88 | SB A–ATP–72–1 | *Propeller* – Overspeed governing – Replace the overspeed governors with correctly calibrated units. | Service Bulletin has been cancelled, therefore the AD is now cancelled. |
| 001–09–88 | SB A–ATP–11–1 | *Placards and Markings* – Revision to warning label for filling the potable water tank. | Applicable to aircraft Serial Nos 2002, 2003 and 2004. Compliance and requirement as detailed in Alert Service Bulletin.<br><br>Entry re-instated, inadvertently removed from listing. |
| 007–09–88 | SB A–ATP–28–1 | *Fuel* – Wing tanks – To check port and starboard fuel tanks and their associated collector tanks for foreign objects and damage. | Service Bulletin has been cancelled, therefore the AD is now cancelled. |
| 008–11–88 | SB A–ATP–26–1 | *Fire Protection* – Spurious engine fire warning. | Service Bulletin has been cancelled, therefore the AD is now cancelled. |
| 013–11–88 | SB A–ATP–30–5 | *Ice and Rain Protection* – Inspection to ensure adequate clearance between windscreen heating cable loom and structure. | Service Bulletin has been cancelled, therefore the AD is now cancelled. |
| 017–11–88 | SB ATP–24–3 | *Electrical Power* – Main wheel bays – To provide insulation of terminal posts on TB's K, H and J in left and right main wheel bays. | Superseded by AD 045–09–89. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 055–12–88 | SB A–ATP–32–1 | *Landing Gear* –- To check the locking of the eye-end and bearing fitting on the main landing gear retraction actuators. | Superseded by AD 025–01–89. |
| 059–12–88 | SB A–ATP–27–5 | *Flight Controls* – Rudder boost unit – Excessive breakout forces. | Applicable to all aircraft fitted with rudder boost unit Part No ACA 1388 MOD state 7. Compliance and requirement as detailed in Alert Service Bulletin. |
| 060–12–88 | SB ATP–30–3 | *Ice and Rain Protection* – Windscreen and window rain repellent. | Applicable to all aircraft pre modification 35073A. Compliance and requirement as detailed in Service Bulletin. |
| 006–01–89 | SB A–ATP–61–1 | *Propellers* – To introduce a ground test to ensure complete isolation between the autofeather circuits of each engine. | Service Bulletin is cancelled because the relevant Maintenance Manual Chapter has been revised, therefore AD is now cancelled. |
| 025–01–89 | SB ATP–32–5 | *Landing Gear* – To introduce a revised method of checking the locking on main landing gear retraction actuators. | Applicable to all aircraft with main landing gear retraction actuators Part Nos. 104960004, 104960005 and 104960006 fitted. Compliance and requirement as detailed in Service Bulletin. |
| 026–01–89 | SB ATP–24–4 | *Electrical Power* – To introduce changes to generator circuit to ground neutral connection to airframe to prevent generator ‘drop-out’. | Applicable to all aircraft without modification 10034B. Compliance and requirement as detailed in Service Bulletin.<br><br>Entry re-instated, inadvertently removed from listing. |
| 032–01–89 | SB ATP–21–3 | *Air Conditioning* – To introduce a once only inspection to ensure that adequate clearance exists between the dump valve cable conduit and flying and engine control cable runs. | Service Bulletin has been cancelled, therefore the AD is now cancelled. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 003–02–89 | SB A–ATP–55–1 | *Stabilizers* – To introduce a once-only inspection of the tailplane structure to establish that bolts have been fitted adjacent to elevator bell crank levers and primary stops. | Service Bulletin has been cancelled, therefore the AD is now cancelled. |
| 006–02–89 | SB ATP–32–4 | *Landing Gear* – To cover incorporation of Dowty Rotol Service Bulletin 200–32–01 – Main landing gear shock absorber outer tube failure – Clearing Dowty Concession No 132795. | Applicable to aircraft Serial Nos 2002 and 2008 fitted with shock absorber outer tube incorporating Dowty Concession No 132795. Compliance and requirement as detailed in Service Bulletin. Dowty Rotol Service Bulletin 200–32–01 also refers and is referenced under this AD No in the Instrument and Equipment Section. |
| 004–03–89 | SB ATP–27–7 | *Flight Controls* – To introduce peening to control column lower pulley guard bolts. | Service Bulletin has been cancelled, therefore the AD is now cancelled. |
| 006–03–89 | SB A–ATP–32–7 | *Landing Gear* – To introduce an inspection and replacement of the main landing gear forward door operating mechanism attachment bolts. | Superseded by AD 003–07–89. |
| 023–03–89 | SB ATP–34–7 | *Navigation* – To introduce a once-only inspection of certain ASI pipelines to ensure that swaging has taken place. | Service Bulletin has been cancelled, therefore the AD is now cancelled. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 023–04–89 | SB ATP–24-6 | *Electrical Power* – Wiring and clipping – Provision of additional clip position in left aft jet pipe area to prevent generator cable chafing on flap track housing. | Applicable to aircraft Serial No. 2006. Compliance and requirement as detailed in Service Bulletin not later than 14 July 1989.<br><br>Entry re-instated, inadvertently removed from listing. |
| 020–05–89 | SB ATP–29–1 | *Hydraulic Power* – To introduce a once only inspection of adaptor bulkhead Part No. AE83673G on bulkhead stn 98 between engine zone 1 and 2 to determine its serviceability. | Service Bulletin has been cancelled, therefore the AD is now cancelled. |
| 006–06–89 | SB ATP–27–11 | *Flight Controls* – Aileron trim and balance tabs and rudder trim tab – To introduce a once only inspection to ensure that trim tab and balance tab hinge pins are secure. | Service Bulletin has been cancelled, therefore the AD is now cancelled. |
| 001–07–89 | SB ATP–53–4 | *Fuselage* – Introduction of stronger rivets at four positions around the forward baggage door cut-out. | Applicable to aircraft Serial Nos. 2002 to 2010 inclusive. Compliance and requirement as detailed in Service Bulletin not later than 31 December 1989. |
| 002–07–89 | SB ATP–55–2 | *Stabilisers* – Rudder centre hinge – Improvement of angle bracket attachment. | Applicable to aircraft Serial Nos. 2002 to 2011 inclusive. Compliance and requirement as detailed in Service Bulletin not later than 31 December 1989. |
| 003–07–89 | SB ATP–32–9 | *Landing Gear* – To increase bolt sizes in bracket supporting main u/c door pick up frame. | Applicable to aircraft Serial Nos. 2002 to 2014 inclusive. Compliance and requirement as detailed in Service Bulletin not later than 31 December 1989. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 007–07–89 | SB ATP–30–9 | *Ice and Rain Protection* – Airfoil de-icing water separator assemblies, Part No. 44E06–1A, to introduce a once only inspection to ensure that correct water separator filter elements are fitted. | Service Bulletin has been cancelled, therefore the AD is now cancelled. |
| 009–07–89 | SB ATP–76–3 | *Engine Controls* – Condition control break bias unit assembly Part No. 44650M01 – To introduce an inspection for link arms Part No. 44685 issue A with greater than 1000 flight hours at every 125 hours servicing period, for cracking at the lightening holes. | Applicable to aircraft fitted with break bias pulley units JD007J1592–000 Sarma Part No. 44650M01. Compliance and requirement as detailed in Service Bulletin. |
| 010–07–89 | SB ATP–21–8 | *Air Conditioning* – Introduction of a once only inspection to ensure correct connections of the ECS Fault Protection and Annunciation circuit wiring at terminal blocks G and H in Zone 151–00–00 and M and N in Zone 152–00–00. | Service Bulletin has been cancelled, therefore the AD is now cancelled. |
| 013–07–89 | SB ATP–26–2 | *Fire Protection* – Introduction of a once only inspection of the engine fire protection system to check firewire earth bonding values. | Service Bulletin has been cancelled, therefore the AD is now cancelled. |
| 014–07–89 | SB A–ATP–32–12 | *Landing Gear* – Main landing gear – Inspection of main bore and cross bores of main fitting. | Applicable to aircraft fitted with main landing gear Part Nos. 201045001, 201045002 and 201045003. Compliance and requirement as detailed in Alert Service Bulletin. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 003–08–89 | SB ATP–61–2 | *Propellers* – Introduction of application of Icex or Autoglym No. 12 to each propeller blade when operating in icing conditions. | Applicable to aircraft pre modification 10129A or 10174A standard. Compliance and requirement as detailed in Service Bulletin. |
| 008–08–89 | SB A–ATP–34–31 | *Navigation* – Electronic flight control system. | Applicable to all aircraft. Compliance and requirement as detailed in Service Bulletin.<br><br>Entry re-instated, inadvertently removed from listing. |
| 010–08–89 | SB ATP–34–22 | *Navigation* – Introduction of a once only inspection to ensure adequate clearance between instrument static pipe assemblies and adjacent avionics crate/structure in the forward avionics compartment and fitment of support clipping where necessary. | Applicable to all aircraft. Compliance and requirement as detailed in Service Bulletin. |
| 045–09–89 | SB ATP–24–9 | *Electrical Installation* – Main wheel bays – To replace terminal blocks 'H' and 'J' in the left, and terminal blocks 'H' and 'K' in the right main wheel bays by environmentally sealed junction modules. | Applicable to aircraft Serial Nos. 2007, 2008, 2009 and 2010. Compliance and requirement as detailed in Service Bulletin not later than 31 March 1990. |
| 046–09–89 | SB ATP–24–10 | *Electrical Power* – To introduce AC generators Part No BA 03301–01 and –02 embodying Lucas Mod PPC 4691. | Applicable to aircraft fitted with AC generators Part No BA 03301–01 and –02. Compliance and requirement as detailed in Service Bulletin not later than 22 December 1989. |
| 047–09–89 | SB ATP–34–30 | *Navigation* – Standby compass – To introduce an improved compass swing procedure and instruction label for use of the standby compass. | Applicable to all aircraft. Compliance and requirement as detailed in Service Bulletin not later than 20 October 1989. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 010–10–89 | SB A–ATP–27–21 | *Flight Controls* – Introduction of a repeat inspection for broken or damaged support plates in the right hand control column gaiter. | Applicable to all aircraft. Compliance and requirement as detailed in Alert Service Bulletin. |
| 011–10–89 | SB ATP–27–8 | *Flight Controls* – Aileron primary control cable wing loops – Inspect for wear and fracture. | Applicable to all aircraft. Compliance and requirement as detailed in Service Bulletin. |
| 002–11–89 | SB ATP–27–18 | *Flight Controls* – To remove the stall warning frame heaters from the essential 28V DC busbars and place them on the non-essential busbars. | Applicable to aircraft Serial Nos 2002 to 2018 inclusive. Compliance and requirement as detailed in Service Bulletin not later than 31 March 1990. |
| 004–12–89 | SB ATP–22–8 | *Auto Flight* – To introduce a once only inspection to ensure the correct orientation and function of both pitch and roll trim indicators Part No. 20242010–132. | Applicable to aircraft Serial Nos 2001 to 2019 inclusive. Compliance and requirement as detailed in Service Bulletin not later than 19 February 1990. |
| 002–01–90 | SB ATP–78–1 | *Exhaust* – To introduce an inspection of the engine jet-pipe assembly for cracking. | Applicable to all aircraft. Compliance and requirement as detailed in Service Bulletin. |
| 006–01–90 | SB ATP–11–12 | *Placards and Markings* – Introduction of revised label for starboard flight deck emergency exit (pilots window) operating handle. | Applicable to aircraft Serial Nos 2002 to 2015 inclusive. Compliance and requirement as detailed in Service Bulletin not later than 12 April 1990. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 007–01–90 | SB ATP–52–9 | *Doors* – To improve drainage of water from the forward and aft passenger doors and the aft baggage door. | Applicable to aircraft Serial Nos 2002 to 2019 inclusive. Compliance and requirement as detailed in Service Bulletin not later than 31 July 1990. |
| 009–03–90 | SB ATP–55–3 | *Stabilizers* – To introduce an inspection of the rudder lower hinge attachment brackets and the attachments of reinforcing plates and bearing housing. | Applicable to all aircraft pre modification 10170A standard. Compliance and requirement as detailed in Service Bulletin not later than 31 May 1990. |
| 013–03–90 | SB ATP–53–3 | *Fuselage* – Intercostal – Addition of missing rivets in aileron trim control structure beneath centre console. | Applicable to aircraft Serial Nos 2003, 2004 and 2006. Compliance and requirement as detailed in Service Bulletin. |
| 013–04–90 | SB ATP–24–21 | *Electrical Power* – To introduce an inspection to all electrical cable ring tongue terminals, crimped to SS 8010 standard. | Applicable to aircraft Constructors Nos. 2001 to 2020 inclusive. Compliance and requirement as detailed in Service Bulletin not later than 31 July 1990. |
| 014–04–90 | SB ATP–27–29 | *Flight Controls* – Rudder booster and locking unit Part No. ACA 1388 – Introduction of Mod state 10 units. | Applicable to aircraft fitted with rudder booster and locking units Part No. ACA 1388 pre Mod state 10. Compliance and requirement as detailed in Service Bulletin. |
| 026–04–90 | SB A–ATP–61–5 | *Propeller* – Inspection of the propeller blades for possible debonding of the nickel sheath. | Applicable to all aircraft. Compliance and requirement as detailed in Alert Service Bulletin. |
| 003–05–90 | SB ATP–27–26 | *Flight Controls* – Primary control cables in fuselage and wings – Inspection and replacement for wear. | Applicable to all aircraft. Compliance and requirement as detailed in Service Bulletin. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 024–06–90 | SB A–ATP–76–8 | *Engine Controls* – Engine zone 2 overheat. | Applicable to aircraft Constructors Nos. 2002, 2003, 2004, 2008, 2009, 2010, 2011, 2017 and 2018. Compliance and requirement as detailed in Alert Service Bulletin. |
| 005–07–90 | SB ATP–57–6 | *Wings* – To introduce a 'one-off' inspection of the right hand front spar for omitted fasteners. | Applicable to aircraft Constructors Nos. 2002 to 2014 inclusive, 2016, 2017, 2018, 2019, 2023 and 2024. Compliance and requirement as detailed in Service Bulletin. |
| 006–07–90 | SB ATP–53–14 | *Fuselage* – To introduce an inspection of the nose landing gear retraction actuator bracket attachment assembly and repair/ replacement information as required. | Applicable to aircraft Constructors Nos. 2002 to 2024 inclusive. Compliance and requirement as detailed in Service Bulletin. |
| 013–09–90 | SB A–ATP–32–26 | *Landing Gear* – Inspection of normal operating linkage and operational test of the auxiliary system. | Applicable to all aircraft. Compliance and requirement as detailed in Service Bulletin. |
| 024–02–91 | SB ATP–53–15 | *Fuselage* – Introduction of centre section reinforcement. | Applicable to aircraft Constructors Nos. 2002 to 2019. Compliance and requirement |
| 013–03–91 | SB ATP–32–33 | *Landing Gear* – To introduce the requirements of Dowty Aerospace Gloucester Service Bulletin 200–32–143 – Nose Landing gear – Introduction of corrosion inhibitor to main fitting. | Applicable to aircraft as detailed in Service Bulletin. Compliance and requirement as detailed in Service Bulletin. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 016–03–91 | SB ATP–32–30 | *Landing Gear* – Inspection and modification of the normal selector mechanism. | Applicable to aircraft Constructors Nos. 2001 to 2037. Compliance and requirement as detailed in Service Bulletin. |
| 006–04–91 | SB ATP–32–29 | *Landing Gear* – Introduction of two new swivel assemblies, a restricting collar and a protection cover for the emergency undercarriage release mechanism. | Applicable to aircraft Constructors Nos. 2001 to 2037. Compliance and requirement as detailed in Service Bulletin. |
| 021–04–91 | SB ATP–24–34 | *Electrical Power* – To reduce standby compass deviation error by introducing modified earthing arrangements to the pitot static and stall warning systems and by introducing modified earthing arrangements to the overhead stowage units. | Applicable to aircraft as detailed in Service Bulletin. Compliance and requirement as detailed in Service Bulletin. |
| 010–09–91 | SB ATP–30–10 | *Ice and Rain Protection* – Improvements of the washer system and repositioning of the windscreen washer nozzles. | Applicable to aircraft as detailed in Service Bulletin. Compliance and requirement as detailed in Service Bulletin. |
| 006–10–91 | SB ATP–27–41–70031B | *Flight Controls* – Introduction of stall warning lift transducer Part No. C74007–4 in lieu of existing units Part No. C74007–2 or C74007–3. | Applicable to aircraft Constructors Nos. 001 to 2032 and 2034 to 2040. Compliance and requirement as detailed in Service Bulletin. |
| 006–11–91 | SB ATP–24–42–10244A | *Electrical Power* – To de-activate alternative three-phase supply to transformer rectifier units. | Applicable to aircraft Constructors Nos. 2001 to 2040 fitted with changeover contactor Part No. SM15CXA6. Compliance and requirement as detailed in Service Bulletin. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 016–11–91 | SB ATP–26–5–35225A | *Fire Protection* – Engine – Introduction of ICC fire detector at the intercompressor case. | Applicable to aircraft Constructors Nos. 2001 to 2045. Compliance and requirement as detailed in Service Bulletin. |
| 012–01–92 | SB ATP–30–20–10248A and C | *Ice and Rain Protection* – Introduction of electrical power filters and fixed fittings into main and side windscreen heating systems (Pre-mod 10106A 200 volt windscreens). | Applicable to aircraft Constructors Nos. 2002 to 2045. Compliance and requirement as detailed in Service Bulletin. |
| 021–01–92 | SB ATP–24–45–35229A | *Electrical Power* – Introduction of bonding leads to the throttle stepper motor controller, the oil cooler temperature controller in Module 3 and the engine de-ice timers. | Applicable to all aircraft. Compliance and requirement as detailed in Service Bulletin. |
| 017–02–92 | SB ATP–32–37 | *Landing Gear* – To introduce a once only inspection of the nose wheel steering quadrant and the upper steering control toggle link assembly. | Applicable to aircraft Constructors Nos. 2001 to 2044. Compliance and requirement as detailed in Service Bulletin. |
| 004–07–92 | SB ATP–24–49–10247A | *Electrical Power* – Introduction of leach contactor (Type HA1F–002) in lieu of cutler hammer contactor (Type SM15–CX–A6 or A8) in the TRU power supply changeover circuit. | Applicable to aircraft Constructors Nos. 2001 to 2053. Compliance and requirement as detailed in Service Bulletin. |
| 002–09–92 | SB ATP–57–13 | *Wings* – Inspection for cracks in the aft end of the outboard engine rib boom angles. | Applicable to aircraft Constructors Nos. 2002 to 2063. Compliance and requirement as detailed in Service Bulletin. |
| 011–12–92 | SB ATP–54–9 | *Nacelles* – To introduce redefined fatigue lives and an inspection of the bolts attaching the LH and RH aft isolator brackets to the engine subframe aft mounting beams. | Applicable to all aircraft. Compliance and requirement as detailed in Service Bulletin. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 001–01–93 | SB ATP–27–55 | *Flight Controls* – Introduction of a once only inspection of the gearbox/primary flap drive torque tube splined flanged-coupling bolts at STN 'O' for security of attachment. | Applicable to aircraft Constructors Nos. 2001 to 2049 inclusive. Compliance and requirement as detailed in Service Bulletin. |
| 009–04–93 | SB ATP–24–55 | *Electrical Power* – To ensure the integrity of the bonding of module 3 via the throttle stepper motor controller (stepper motor drive unit). | Applicable to all aircraft. As a prerequisite modification 35229A (SB ATP–24–45) must be embodied. Compliance and requirement as detailed in Service Bulletin. |
| 012–05–93 | SB ATP–26–9 | *Fire Protection* – Introduction of a once only safety ohmmeter check to ensure the integrity of the engine fire extinguisher circuits at the cartridge connectors. | Applicable to aircraft Constructors Nos. 2001 to 2055 inclusive. Compliance and requirement as detailed in Service Bulletin. |
| 001–07–93 | SB ATP–54–11 | *Nacelles/Pylons* – To introduce inspections of the Quick Engine Change Unit (QECU) subframe yoke. | Applicable to all aircraft. Compliance and requirement as detailed in Service Bulletin. |
| 009–08–93 | SB ATP–21–24–10306A | *Air Conditioning* – ECS fan control – Introduction of Genelco circuit breaker part no. 4330–014–10. | Applicable to aircraft Constructors Nos. 2002 to 2065 inclusive. Compliance and requirement as detailed in Service Bulletin. |
| 011–08–93 | SB ATP–27–49–10234A | Flight Controls – Minor wiring change to obviate an uncommanded elevator split being generated by a single (stray earth) fault. | Applicable to aircraft Constructors Nos. 2002 to 2047 inclusive. Compliance and requirement as detailed in Service Bulletin. |
| 012–08–93 | SB ATP–57–14 | *Wings* – To introduce an inspection check of the wing top surface stringer joints bolts at rib 0. | Applicable to aircraft Constructors Nos. 2001 to 2053 and 2055. Compliance and requirement as detailed in Service Bulletin. |
| 002–09–93 | SB ATP–80–06 | *Starting* – Introduction of a life limitation for the engine igniter plugs and staggered replacement period to improve ignition reliability. | Applicable to all aircraft. Compliance and requirement as detailed in Service Bulletin. |
| 003–09–93 | SB ATP–54–12–35274A | *Nacelles/Pylons* – Debris duct assembly – Introduction of an eductor plate | Applicable to all aircraft. Compliance and requirement as detailed in Service Bulletin. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 009–10–93 | SB ATP–A30–29 | *Ice and Rain Protection* – Pitot head – Reinstallation of the P1 pitot head removed by the accomplishment of SB ATP–30–25–10305A. | Superseded by CAA AD 006–12–93. |
| 014–10–93 | SB ATP–24–58 | *Electrical Power* – Transformer rectifier units. Inspection of D.C. connections and cooling fans. | Applicable to aircraft fitted with Transformer Rectifier Unit TR202A Part No. 84/59100 and Transformer Rectifier Unit TR202B Part No. 84/60040. Compliance and requirement as detailed in Service Bulletin. |
| 006–12–93 | SB ATP–30–31–10324B | *Ice and Rain Protection* – Pitot head – Reinstallation of the P1 and P2 pitot heads removed by the accomplishment of SB ATP–30–10305A. | Applicable to aircraft fitted with Modification 10305A. Compliance and requirement as detailed in Service Bulletin. |
| 007–12–93 | SB ATP–32–48 | *Landing Gear* – Main wheel – Failure of main wheel bearing in service. | Applicable to aircraft constructors nos. 2001 to 2063. Compliance and requirement as detailed in Service Bulletin. |
| 003–01–94 | SB ATP–30–33–10324C | *Ice and Rain Protection* – Pitot head – Reinstallation of the P1, P2 and P3 pitot heads removed by the accomplishment of SB ATP–30–25–10305A. | Applicable to aircraft fitted with Modification 10305A. Compliance and requirement as detailed in Service Bulletin. |
| 005–02–94 | SB ATP–23–21–35288A | *Communications* – To prevent loss of communications following a fault on ground crew jackbox or PA handset. | Applicable to aircraft constructors nos. 2002 to 2063. Compliance and requirement as detailed in Service Bulletin. |
| 005–06–94 | SB ATP–11–19–10328A | *Placards and Markings* – Introduction of new cockpit limitations placard. | Applicable to aircraft constructors nos. 2002 to 2063 operating to Flight Manual Documents ATP001, ATP003 or ATP005. Compliance and requirement as detailed in Service Bulletin. |
| 006–06–94 | SB ATP–52–26–10350B | *Doors* – Repair to class one doors to prevent shoot-bolt bush migration. | Applicable to aircraft constructors nos. 2002 to 2063. Compliance and requirement as detailed in Service Bulletin. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 012–07–94 | SB ATP–30–39–30146A | *Ice and Rain Protection* – Introduction of engine de-ice timers AC69116–13 and AE20628–13. | Applicable to aircraft constructors nos. 2002 to 2056. Compliance and requirement as detailed in Service Bulletin. |
| 005–08–94 | SB ATP–30–37–30143A | *Ice and Rain Protection* – Introduction of wiring changes to allow flexible intake duct to be powered automatically with engine air intake lip. | Applicable to aircraft constructors nos. 2002 to 2063. Compliance and requirement as detailed in Service Bulletin. |
| 006–08–94 | SB ATP–54–13–35274B | *Nacelles* – Introduction of improved engine air intake. | Applicable to aircraft constructors nos. 2002 to 2063. Compliance and requirement as detailed in Service Bulletin. |
| 009–08–94 | SB ATP–79–23 | *Oil* – Cracking of engine air cooled oil cooler – Inspection/rectification. | Applicable to aircraft constructors nos. 2002 to 2063 fitted with air cooled oil coolers Part Nos. 8248C000, 8439C000 or 8714C000. Compliance and requirement as detailed in Service Bulletin. |
| 004–10–94 | SB ATP–76–16 | *Engine Controls* – Inspection of engine power cables for excess wear/damage. | Applicable to aircraft constructors nos. 2002 to 2063. Compliance and requirement as detailed in Service Bulletin. |
| 006–10–94 | SB ATP–53–29 | *Fuselage* – Door apertures – Inspect gussets for cracks and corrosion. | Applicable to aircraft constructors nos 2002 to 2012 and 2019 to 2022. Compliance and requirement as detailed in Service Bulletin. |
| 001–11–94 | SB ATP–53–30–10372A | *Fuselage* – Nose landing gear – To introduce an inspection of the nose landing gear retraction actuator bracket attachment assembly and to repair/replace as required. | Applicable to aircraft constructors nos. 2002 to 2056. Compliance and requirement as detailed in Service Bulletin. |
| 003–01–95 | SB ATP–32–53–35294A | *Landing Gear* – Main wheel – Introduction of main wheels AHA2120 and AHA2122 in lieu and by conversion of main wheel AHA1663. | Applicable to aircraft constructors nos. 2002 to 2063. Compliance and requirement as detailed in Service Bulletin. |
| 004–05–95 | SB ATP–79–25–10382A | *Oil* – Introduction of modified oil filter differential pressure switch airframe wiring. | Applicable to aircraft constructors nos. 2002 to 2056. Compliance and requirement as detailed in Service Bulletin. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 002–07–95 | SB ATP–53–31 | *Fuselage* – Inspection for corrosion on external antenna reinforcing plates. | Applicable to aircraft Constructors Nos. 2002 to 2063. Compliance and requirement as detailed in Service Bulletin. |
| 001–09–95 | SB ATP 29–12 | *Hydraulics* – Introduction of revised piping to the auxiliary reservoir supply and brake pressure bleed system. Removal of the landing gear bypass pipeline and fitting of additional non return valve in the main pressure system. With revised flight manual procedures. | Applicable to aircraft Constructors Nos. 2002 to 2063 with modification 10303A (Service Bulletin ATP 32–41) embodied. Compliance and requirement as detailed in Service Bulletin. |
| 003–12–95 | SB ATP 27–78 | *Flight Control* – Introduction of improvements to the flight control installation. | Applicable to aircraft Constructors Nos. 2002 to 2056, 2061 and 2063. Compliance and requirement as detailed in Service Bulletin. |
| 003–01–96 | SB ATP 21–36 | *Air Conditioning* – Environment control system – Inspection of the ram air inlet ducts. | Applicable to aircraft Constructors Nos. 2002 to 2063. Compliance and requirement as detailed in Service Bulletin. |
| 003–04–96 | SB ATP 27–80 | *Flight Control* – Inspection for adequate clearance around flap torque tubes. | Applicable to aircraft Constructors Nos. 2002 to 2063. Compliance and requirement as detailed in Service Bulletin. |
| 002–05–96 | SB ATP/J61–32–71 | *Landing Gear* – Wheels and brakes – Brake unit part No. AHA1612 and AHA2004 – Introduction of inspection and procedure to find and to set the corrected wear remaining length of the wear indicator pin. | Applicable to ATP and Jetstream Series 6100 aircraft Constructors Nos. 2002 to 2067. Compliance and requirement as detailed in Service Bulletin. |
| 004–02–97 | SB ATP–29–15 | *Hydraulic Power* – Inspection of the main hydraulic accumulator for corrosion. | Applicable to aircraft Constructors Nos. 2002 to 2063. Compliance and requirement as detailed in Service Bulletin. |
| 004–03–97 | SB ATP–A52–30 | *Doors* – Front and rear passenger and rear baggage door – Inspection of door handle operating shafts. | Applicable to aircraft Constructors Nos. 2002 to 2067. Compliance and requirement as detailed in Alert Service Bulletin. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 004–06–97 | SB ATP–32–80 | *Landing Gear* – Brakes – Hydraulic power – Inspection of the brake hydraulic accumulators for corrosion. | Applicable to aircraft Constructors Nos. 2002 to 2063 with brake hydraulic accumulator APPH Part No. AIR 87342. Compliance and requirement as detailed in Service Bulletin. |
| 002–08–97 | SB ATP–32–84 | *Doors* – Main landing gear doors – Inspection of the main landing gear forward door mechanism. | Applicable to aircraft Constructors Nos. 2001 to 2063. Compliance and requirement as detailed in Service Bulletin. |
| 004–01–98 | SB ATP–56–4 | *Windows* – Inspection and lubrication of ATP right hand side cockpit sliding window external release handle mechanism. | Applicable to aircraft Constructors Nos. 2002 to 2063. Compliance and requirement as detailed in Service Bulletin. |
| 007–01–98 | SB ATP–30–52 | *Ice and Rain Protection* – Engine de-icing – Inspection/test of engine nacelles for cable chafing and oil/moisture contamination. | Applicable to all aircraft. Compliance and requirement as detailed in Service Bulletin. |
| 008–01–98 | SB ATP–A32–85 | *Main Landing Gear* – Forward door mechanism – Inspection of the spring strut for looseness of the fork end. | Applicable to aircraft Constructors Nos. 2001 to 2063 on which modification 10447A has not been embodied. Compliance and requirement as detailed in Alert Service Bulletin. |
| 004–05–98 | SB ATP–32–91 | *Landing Gear* – Nose wheel steering – Introduction of life limitation and repeat inspection of steering control cables and pulleys. | Applicable to aircraft Constructors Nos. 2002 to 2063. Compliance and requirement as detailed in Service Bulletin. |
| 013–10–98 | SB ATP–27–71–10386A | *Flight Controls* – Deletion of aileron secondary control system (SCS) shear pin and control column microswitches. | Applicable to aircraft Constructors Nos. 2002 to 2063. Compliance and requirement as detailed in Service Bulletin. |
| 014–10–98 | SB ATP–A32–93 | *Nose Landing Gear* – Replacement of weight on wheels microswitch harness sub-assembly. | Applicable to aircraft Constructors Nos. 2002 to 2063. Compliance and requirement as detailed in Alert Service Bulletin. |
| 016–10–98 | SB ATP–A32–94 | *Landing Gear* – Nose landing gear – Introduction of steering compensator serviceability tests. | Applicable to aircraft Constructors Nos. 2002 to 2063. Compliance and requirement as detailed in Alert Service Bulletin. |
| 019–11–98 | SB ATP–A71–14 | *Powerplant* – Drainage – Chafe damage to a fire skin access panel and fuel drain hose in module 2 of the nacelle. | Applicable to all aircraft. Compliance and requirement as detailed in Alert Service Bulletin. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 003–02–99 | SB ATP–27–85 | *Flight Controls* – Inspection for correct pipe union in the engine to rudder boost supply line. | Applicable to all aircraft. Compliance and requirement as detailed in Service Bulletin. |
| 005–05–99 | SB ATP–27–86 | *Flying Controls* – Inspection of bolt orientation at rudder primary drive rod and synchro drive rod ends. | Applicable to all aircraft. Compliance and requirement as detailed in Service Bulletin. |
| 006–06–99 | SB ATP–53–36 | *Structure* – Inspection of nose landing gear downlock, bulkhead 378FS and the adjacent structure. | Applicable to aircraft Constructors Nos. 2002 to 2063. Compliance and requirement as detailed in Service Bulletin. |
| 007–06–99 | SB ATP–30–056 | *Ice and Rain Protection* – Engine intake de-icing system – Installation of intake ducts with new cable routes and improved contamination protection (Left and Right). | Applicable to aircraft Constructors Nos. 2002 to 2063. Compliance and requirement as detailed in Service Bulletin. |
| 008–02–2000 | SB ATP–32–99 | *Landing Gear* – Main – Inspection of the torque links apex joint assembly (Left and Right). | Applicable to all aircraft. Compliance and requirement as detailed in Service Bulletin. |
| 005–05–2000 | SB ATP–32–100 | *Doors* – Main landing gear doors – Inspection of the main landing gear door mechanisms. | Applicable to aircraft Constructors Nos. 2001 to 2063. Compliance and requirement as detailed in Service Bulletin. |
| 003–08–2000 | SB ATP–32–98 | *Landing Gear* – Nose landing gear – Installation of a non-return valve and a by-pass valve to the nose landing gear assembly. | Applicable to aircraft Constructors Nos. 2002 to 2063. Compliance and requirement as detailed in Service Bulletin. |
| 007–11–2000 | SB ATP–32–103 | *Landing Gear* – Installation of baulk device to main landing gear hook plates and A-frame. | Applicable to all aircraft. Compliance and requirement as detailed in Service Bulletin. |
| 002–01–2001 | SB ATP–30–58 | *Ice and Rain Protection* – To reconfigure automatic transfer such that both engine de-ice timers remain operational. | Applicable to all aircraft. Compliance and requirement as detailed in Service Bulletin. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 003–03–2001 | SB ATP–28–019 | *Fuel* – Inspection and rectification of the fuel pipes within the fuel 'float switch' test pipeline. | Applicable to all aircraft. Compliance and requirement as detailed in Service Bulletin. |
| 006–03–2001 | SB ATP–54–18 | *Engine* – Introduction of ATP SSI 54–10–101C (X-ray inspection of engine subframe tubes in zone 1). | Applicable to all aircraft. Compliance and requirement as detailed in Service Bulletin. |
| 007–03–2001 | SB ATP–54–19 | *Engine* – Introduction of ATP SSI 54–10–107B (X-ray inspection of attachment struts in zone 5). | Applicable to all aircraft. Compliance and requirement as detailed in Service Bulletin. |
| 008–01–2002 | SB ATP–28–020 | *Fuel* – Introduction of safe life to the fuel float switch test pipeline. | Applicable to all aircraft. Compliance and requirement as detailed in Service Bulletin. The bulletin is terminating action for CAA AD 003-03-2001. |
| 004–04–2002 | SB ATP–32–105 | *Landing gear* – Introduction of changes to the mounting structure to accommodate a nose landing gear with additional pintle pin baulking. | Applicable to all aircraft. Compliance and requirement as detailed in Service Bulletin. |
| 005–08–2002 | SB ATP–51–001 | *Structures* – Inspections for environmental damage. | Applicable to all aircraft. Compliance and requirement as detailed in Service Bulletin. |
| 001–09–2002 | SB ATP–A28–021 | *Fuel-Distribution* – Chafe damage to a cross feed drain pipe. | Applicable to all aircraft. Compliance and requirement as detailed in Alert Service Bulletin. |
| 005–01–2003 | SB ATP–24–71 | *Electrical Power* – Relocation of battery earth posts. | Applicable to all aircraft. Compliance and requirement as detailed in Service Bulletin. |
| 002–02–2003 | SB ATP–28–022 | *Fuel* – Distribution – Removal of the fuel cross-feed drain stub pipe and valve, and inspection of electrical cable looms in the port and starboard wing dry bays. | Applicable to all aircraft. Compliance and requirement as detailed in Service Bulletin. |

# United Kingdom Civil Aviation Authority

# AIRWORTHINESS DIRECTIVE

## AD No: G-2004-0001

Issue Date: 22 January 2004

This AD is issued by the UK CAA acting for and on behalf of the European Aviation Safety Agency as the Primary Aviation Authority (ICAO Annex 8 Authority of State of Design) for the affected product(s).

Approved by the European Aviation Safety Agency under approval number 2004-444 on 16 January 2004.

In accordance with Article 9(7)(b) of the Air Navigation Order 2000 as amended the following action required by this Airworthiness Directive (AD) is mandatory for applicable aircraft registered in the United Kingdom.
No person may operate an aircraft to which an AD applies except in accordance with the requirements of that AD unless otherwise agreed with the Authority of the State of Registry.

| Type Approval Holders Name: | Type/Model Designation(s): |
|---|---|
| **BAE SYSTEMS (OPERATIONS) LIMITED** | **BRITISH AEROSPACE ATP** |

**Type Certificate Data Sheet No:** BA23

**Superseded/ Revised ADs:** None

### ATA 54 – NACELLES/PYLONS – INSPECTION OF BOLTS ATTACHING AFT ISOLATOR BRACKETS TO THE ENGINE SUBFRAME AFT MOUNTING BEAMS

**Manufacturer(s):** BAE SYSTEMS (Operations) Limited

**Applicability:** British Aerospace Model ATP aeroplanes post modification 35256A (Service Bulletin ATP-54-10).

**Reason:** Service experience indicates that engine vibration can cause a reduction in torque loading of the bolts attaching the aft isolators to the engine subframe. Testing has demonstrated that reduced torque loading has an adverse effect on the fatigue life of the attachment bolts. In-service bolt failures have been reported. Failure of all bolts in the bolt group will affect the ability of the engine sub-frame to control the effects of resonance and whirl flutter, and may result in engine separation.

The inspections and any required rectification actions detailed in BAE SYSTEMS Service Bulletin ATP-54-20 are required to be performed to ensure continued airworthiness of the aeroplane.

**Effective Date:** 26 January 2004

continued on next page

**Compliance/Action:**

a) Within 2,000 landings after the last torque check was performed, either after implementing SB ATP-54-10 or installation of the powerplant in accordance with AMM 71-00-00-400-810, inspect each bolt attaching the aft isolator bracket to the engine subframe in accordance with paragraph 2A of Service Bulletin ATP-54-20 dated 29 July 2003 or later CAA approved revision.

b) Where bolts have exceeded 1,700 landings since the last torque check, inspect each bolt attaching the aft isolator bracket to the engine subframe in accordance with paragraph 2A of Service Bulletin ATP-54-20 dated 29 July 2003 or later CAA approved revision, prior to the aeroplane exceeding 300 landings from the effective date of the Airworthiness Directive.

c) From the effective date of this Airworthiness Directive and prior to installation to an aeroplane, spare quick engine change units (QECU) sub-frames must be inspected in accordance with paragraph 2A of Service Bulletin ATP-54-20 dated 29 July 2003 or later CAA approved revision.

d) Repeat the inspection of each bolt attaching the aft isolator bracket to the engine subframe in accordance with paragraph 2A of Service Bulletin ATP-54-20 dated 29 July 2003 or later CAA approved revision, at an interval not exceeding 2,000 landings.

**Reference Publications:** BAE SYSTEMS (Operations) Limited Service Bulletin ATP-54-20 dated 29 July 2003, may be obtained from Project Management Group, Customer Information Department, BAE SYSTEMS (Operations) Limited, Prestwick International Airport, Ayrshire, KA9 2RW, Scotland. Telephone: +44 (0) 1292 675207 Facsimile: +44 (0) 1292 675704 E-mail: RApublications@baesystems.com.

**Remarks:** Enquiries regarding this Airworthiness Directive should be referred to Mr M P Gadd, Civil Aviation Authority, Aircraft Certification Section, Safety Regulation Group, Aviation House, Gatwick Airport South, West Sussex, RH6 0YR, United Kingdom. Telephone: +44 (0) 1293 573313 Facsimile: +44 (0) 1293 573976 E-mail: michael.gadd@srg.caa.co.uk

# United Kingdom Civil Aviation Authority

# AIRWORTHINESS DIRECTIVE

## AD No: G-2004-0020

Issue Date: 25 August 2004

This AD is issued by the UK CAA acting for and on behalf of the European Aviation Safety Agency as the Primary Aviation Authority (ICAO Annex 8 Authority of State of Design) for the affected product(s).

Approved by the European Aviation Safety Agency under approval number 2004-9031 on 24 August 2004.

In accordance with Article 9(7)(b) of the Air Navigation Order 2000 as amended the following action required by this Airworthiness Directive (AD) is mandatory for applicable aircraft registered in the United Kingdom.
No person may operate an aircraft to which an AD applies except in accordance with the requirements of that AD unless otherwise agreed with the Authority of the State of Registry.

Type Approval Holders Name:

**BAE SYSTEMS (OPERATIONS) LIMITED**

Type/Model Designation(s):

**BRITISH AEROSPACE ATP**

**Type Certificate Data Sheet No:** BA23

**Superseded/ Revised ADs:** None

### ATA 5 – TIME LIMITS – REVISED AIRWORTHINESS LIMITATIONS

**Manufacturer(s):** British Aeropace plc

**Applicability:** All British Aerospace Model ATP aeroplanes, certified in any category.

**Reason:** The certification requirements for damage tolerant and safe life structure are given in BAE ATP Aircraft Maintenance Manual (AMM) Chapter 5. The need to revise these requirements has been identified, as some Structurally Significant Items (SSI) cannot be adequately inspected using the Non Destructive Inspection (NDI) techniques specified in earlier AMM revisions. This Airworthiness Directive (AD) requires the accomplishment of these tasks in accordance with the latest revision of the BAE ATP Aircraft Maintenance Manual. Compliance with these requirements is necessary to maintain airworthiness.

**Effective Date:** 9 September 2004

**Compliance/Action:** From the effective date of this AD, perform the tasks referred to in Paragraphs a) and b) below at the intervals specified in the BAE ATP Aircraft Maintenance Manual Chapter 5 revision 74 or later EASA approved revision.

a) The ATA Chapter 27,32,52, 53 and 54 tasks listed in Chapter 05-10-11.
b) The SSI inspection tasks listed in Chapter 05-10-17.

**Reference Publications** BAE SYSTEMS (Operations) Limited ATP Aircraft Maintenance Manual, may be obtained from Project Management Group, Customer Information Department, BAE SYSTEMS (Operations) Limited, Prestwick International Airport, Ayrshire, KA9 2RW, Scotland. Telephone: +44 (0) 1292 675207 Facsimile: +44 (0) 1292 675704 E-mail: RApublications@baesystems.com

**Remarks:** Enquiries regarding this Airworthiness Directive should be referred to Mr A Sanderson, Civil Aviation Authority, Structures and Materials Department, Safety Regulation Group, Aviation House, Gatwick Airport South, West Sussex, RH6 0YR, United Kingdom. Telephone: +44 (0) 1293 573313 Facsimile: +44 (0) 1293 573976 E-mail: andrew.sanderson@srg.caa.co.uk

## BRITISH AEROSPACE JETSTREAM SERIES AIRCRAFT

(including Jetstream aircraft manufactured by Handley Page and Scottish Aviation)

NOTE: For the purpose of this entry the Handley Page HP 137 Jetstream Mk 1 is referred to as the 'Mk 1' and the Scottish Aviation Jetstream Series 200 is referred to as the 'Series 200'.

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 2337 PRE 80 | 1142 | *Fuselage* – To introduce D-Pads and reinforcing strips to front pressure bulkhead. | Mk 1 without Modification 5025. Required at or before 1500 landings. |
| 2338 PRE 80 | 1147 | *Fuselage* – To improve strength of attachments at frames 75.15. | Mk 1 without Modification 5025. Required on or before completion of 1500 pressurised flights. |
| 2339 PRE 80 | 1218 | *Fuselage* – To introduce Guard at rear of DV window to improve bird-strike protection. | Mk 1 without Modification 5025. Should have been embodied before 31 March 1970. |
| 2340 PRE 80 | 1224 | *Wings* – To introduce Aileron inboard external mass balance. | Mk 1 without Modification 5025. Should have been embodied at next maintenance check. |
| 2341 PRE 80 | 1251 | *Electrical Power* – To introduce a type 10D2 Diode to each positive input of the central warning panel. | Mk 1 without Modification 5025. Should have been embodied before 1 February 1972. |
| 2342 PRE 80 | 1258 | *Electrical Power* – To introduce double pole switching on electric trim circuit. | Mk 1 fitted with kit 717 without Modification 5010. Must be embodied before the electrical trim system is brought into action. |
| 2343 PRE 80 | 1358 | *Fuselage* – To introduce reinforcement to front pressure bulkhead boundary angle. | All Mk 1. Required at or before 2500 flights. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 2344 PRE 80 | 5001 | *Power Plant* – Extension of fireproof bulkhead zone 2/3. | Mk 1 without Modification 5025. Should have been embodied before 1 August 1971. |
| 2345 PRE 80 | 5002 | *Power Plant* – Fire Protection – Fire extinguisher circuit. Duplication of supply. | Mk 1 without Modification 5025. Should have been embodied before 1 March 1972. |
| 2346 PRE 80 | 5003 | *Fuel and Hydraulic Systems* – Repositioning of fuel and hydraulic cocks. | Mk 1 without Modification 5025. Should have been embodied before 1 July 1971. |
| 2347 PRE 80 | 5004 | *Fuel System* – To introduce fuel gauge amplifier Part No. KA6 in lieu of KA1. | Mk 1 without Modification 5025. Should have been embodied before 1 March 1972. |
| 2348 PRE 80 | 5006 | *Electrical Power* – To replace 30 amp fuse (F10) with 25 amp circuit breaker in generator control box. | Mk 1 without Modification 5025. Should have been embodied before 1 March 1972. |
| 2349 PRE 80 | 5071 | *Electrical Power* – To introduce 10 amp circuit breakers in lieu of 15 amp for landing and taxi lamp circuits. | All Mk 1. Also Series 200 without Modification 6050. Should have been embodied before 30 June 1974. |
| 2350 PRE 80 | 5075 | *Power Plant* – To introduce improved zone 1 drain system. | All Mk 1. Also Series 200 without Modification 6050. Should have been embodied before 31 October 1974. |
| 2351 PRE 80 | 5081 | *Power Plant* – Fire Protection – To improve fire warning system in zone 2. | All Mk 1. Also Series 200 without Modification 6050. Should have been embodied before 30 August 1974. |
| 2352 PRE 80 | 5100 | *Hydraulic Power* – To reposition NRV in emergency hydraulic system. | All Mk 1 and Series 200. Should have been embodied before 1 July 1976. |
| 2353 PRE 80 | 5111 | *Wings* – To improve strength of outboard hinge on outboard flap. | All Mk 1 and Series 200. Should have been embodied before 31 August 1976. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 2354 PRE 80 | SB 1/2 | Fatigue lives of items. | All Mk 1. See RMS for alleviating modifications. |
| 2355 PRE 80 | SB 6/3 | *Windows* – Inspection for crazing on Perspex windows. | All Mk 1 and Series 200. Inspection required within 25 hours and subsequently at 25 hour intervals. |
| 2356 PRE 80 | SB 6/5 | *Fuselage* – Nose undercarriage retraction jack – Support structure and front pressure bulkhead – Fatigue cracking. | All Mk 1 and Series 200. Compliance required as detailed in Service Bulletin. |
| 2357 PRE 80 | SB 7/1 | *Wings* – Check depth of engagement, wing front spar spigot. | Mk 1 without Modification 1219. Inspection required at or before next check inspection. |
| 2358 PRE 80 | SB 9/4 | *Flight Controls* – Swaged end of auto-pilot cable adjuster fouling left aileron control cable clamp. | All Mk 1 and Series 200 and all cable clamps Pt. No. 137–18E–11 in store, without Modification 5105. Inspection required within 20 hours and subsequently included in 200 hour inspection. |
| 2359 PRE 80 | SB 9/5 | *Flight Controls* – Inspection of flap hinge structure at outer hinge attachment. | Mk 1 and Series 200 without Modification 5111. Inspection required before next flight and subsequently at every 50 landings. |
| 2360 PRE 80 | SB 10/5 | *Landing Gear* – Main undercarriage leg – gland nut loosening after failure of locknut. | All Mk 1 and Series 200. Inspection required within 25 hours and subsequently included in 100 hour inspection. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 2361 PRE 80 | SB 17/4 | *Power Plant* – Engine electrical HP cock. | Mk 1 fitted with an Astazou XIV C1 engine without Turbomeca Modification TU 83 or TU 84. Also Series 200 without Turbomeca Modification TU 83 or TU 84 fitted to both engines. |
| 2362 PRE 80 | SB 17/6 | *Power Plant* – Engine – Modification (Turbomeca Astazou XIV) – Introduction of turbine containment ring. (Turbomeca Mod. TU 124 refers). | All Mk 1 fitted with Astazou XIV engines. Compliance required as in Turbomeca Service Bulletin No. 0124. |
| 2363 PRE 80 | SB 18/3 | *Fuel System* – Fuel System NRV. | All Mk 1 and Series 200. Inspection required within 20 hours and subsequently included in 200 hour inspection. |
| 2364 PRE 80 | Airworthiness Notice No. 82 | *Electrical Generation System* – Warning of loss of generated electrical power. | All Mk 1 and Series 200. Compliance required as detailed in Airworthiness Notice. |
| 010–11–80 | SB 6/7 | *Fuselage* – Restrictions on permissible maximum cabin differential pressure. | Applicable to all Mk 1 and Series 200 aircraft. Compliance required as detailed in Service Bulletin. |
| 011–11–80 | SB 7/3 | *Wings* – Inspection of wing bottom skin panel at main undercarriage bay. | Applicable to all Mk 1 and Series 200 aircraft. Compliance required as detailed in Service Bulletin. |
| 007–02–81 | SB 8/2 | *Flight Controls* – Rudder structure – Skin panel stiffeners cracking – Inspection and modification. | Applicable to all Mk 1 and Series 200 aircraft. Compliance required as detailed in Service Bulletin. |
| 008–02–81 | SB 10/9 | *Landing Gear* – Inspection of the yoke housing for the main undercarriage attachment spigots. | Applicable to all Mk 1 and Series 200 aircraft. Compliance required as detailed in Service Bulletin. |
| 003–07–81 | SB 9/10 | *Flight Controls* – Inspection of rudder pedal adjusting mounting bracket. | Applicable to all Mk 1 and Series 200 aircraft. Compliance required as detailed in Service Bulletin. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 005–08–82 | S.B. 6/8 | *Doors* – Cabin entrance door internal handle – Disconnection. | Applicable to all Mk 1 and Series 200 aircraft. Compliance required as detailed in Service Bulletin. |
| 006–01–83 | S.B. 7/5 | *Landing Gear* – Main landing gear hinge fittings – Bolts loose. | Applicable to all Mk 1 and Series 200 aircraft. Compliance required as detailed in Service Bulletin. |
| 007–01–83 | S.B. 7/8 | *Landing Gear* – Main landing gear hinge fitting and support angle cracking. | Applicable to all Mk 1 and Series 200 aircraft. Compliance required as detailed in Service Bulletin. |
| 002–07–83 | 57–A-JM–5220 | *Wings* – Access panel W33 – Panel landing ring assembly fastener hole sizes. | Applicable to all Mk 1 and 200 Series aircraft and Jetstream Series 3100 aircraft as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. |
| 010–08–83 | 27–A–JM7328 | *Flight Controls* – Elevator – To improve longitudinal stability. | Applicable to Series 3100 aircraft as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. |
| 004–02–84 | 28–JM 7161 | *Fuel System* – Reposition of crossfeed pipe to obviate fuel pipe fracture in the event of a wheels-up landing. | Applicable to Series 3100 aircraft Serial Nos. as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. |
| 005–02–84 | 57–JA 831005 | *Wings* – To check clearance between mounting assembly – screwjack, lower inboard mounting and packing piece in aileron shroud. | Applicable to Series 3100 aircraft Serial Nos. as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 006–02–84 | 27–AJM 9002 | *Flying Controls* – Flap and flap lift dump selectors – Part No 8661B – Malfunctions. | Applicable to Mk1, Series 200 and 3100 aircraft Serial Nos as detailed in Alert Service Bulletin. Compliance required as detailed in Service Bulletin. |
| 003–03–84 | 30–A–JM 7387 | *Ice and Rain Protection* – To monitor LH and RH propeller anti-ice current consumption. | Applicable to Series 3100 aircraft Serial Nos. 601 to 630 inclusive. Compliance required in accordance with SB. |
| 007–04–84 | 53–JM7297 | *Fuselage* – Introduction of additional stringers below stringers 142, port and starboard. Aircraft speed restriction when demonstrating engine failure until embodiment of Mod. JM7297. | Applicable to Series 3100 aircraft Serial Nos. 601 to 619 inclusive. Compliance required by 15 August 1984. |
| 005–05–84 | 27–JM–5236 | *Flying Controls* – Improved flap and lift dump selector valves. | Applicable to all Mk. 1 and Series 200 and to Series 3100 Serial Nos. 601 to 619 inclusive, except 615. Compliance required as detailed in Service Bulletin. |
| 006–05–84 | 29–JM–7226 | *Hydraulics* – Introduction of revised control of shut-off cocks. | Applicable to Series 3100 Serial Nos. 601 to 614 inclusive and 616. Compliance required as detailed in Service Bulletin. |
| 007–05–84 | 33–A–JA–840410 | *Lights* – To correct attitude of tail navigation lights. | Applicable to all Mk. 1 and Series 200 and to Series 3100 Serial Nos. 601 to 623 inclusive. Compliance required as detailed in Service Bulletin. |
| 008–05–84 | 53–JM–7389 | *Fuselage* – Introduction of relocated fuselage drain hole. | Applicable to Series 3100 Serial Nos. 601, 603, 604, 606 and 608 to 630 inclusive. Compliance required as detailed in SB. |
| 009–05–84 | 57–JM–7298 | *Wings* – To introduce a bonding point at Stn. 297, port and starboard. | Applicable to Series 3100 Serial Nos. 602, 604 to 607 inclusive, 609 to 614 inclusive and 616. Compliance required as detailed in Service Bulletin. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 003–07–84 | 71–A–JM7418 | *Powerplant* – Rear turbine bearing oil feed pipe fouling bleed air pre-cooler. | Applicable to Series 3100 aircraft Serial Nos. 601 to 624 and 627. Compliance required as detailed in Alert Service Bulletin. |
| 004–07–84 | 33–A–JM7431 | *Lighting* – Introduction of trickle charge facility to Emergency Lighting Power Packs. | Applicable to Series 3100 aircraft Serial Nos. 601 to 646 inclusive. Compliance required as detailed in Alert Service Bulletin. |
| 004–08–84 | 21–JM7388 | *Air Conditioning* – Introduction of modified bleed air pre-cooler pipe. | Applicable to Series 3100 Serial Nos. 601 to 632 inclusive. Compliance required as detailed in Service Bulletin. |
| 001–12–84 | 61–A–JA 841025 | *Propeller* – Introduction of ICEX application on propeller blades. | Applicable to all Jetstream 3100 Series aircraft. Compliance required as detailed in Alert Service Bulletin. |
| 002–12–84 | 30–JM 7453 | *Ice and rain protection* – Introduction of improved propeller de-icing system. | Applicable to Jetstream 3100 aircraft Serial Nos. 601 to 645. Compliance required by 28 February 1985 in accordance with Service Bulletin. |
| 014–01–85 | 27–JM9002 | *Flying Controls* (Selector Valves) – To introduce a revised heat treated liner and bobbin assembly in selector valves part number 8661/B. | Service Bulletin cancelled by British Aerospace Airworthiness Directive cancelled by CAA. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
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| 004–02–85 | ADAL/137/001 | Introduction of changes to improve electrical distribution system. | Applicable to Jetstream Series 200 aircraft Serial Nos 241, 243 and 246. Compliance required as detailed in Aeronautical Development Associates Service Bulletin. |
| 005–02–85 | 57–A–JA 840917 | Displacement of wing/fuselage attachment spigot bush in LH and RH wing spigot housing plate. | Applicable to Jetstream 3100 aircraft Serial Nos 602, 604 to 606, 610 to 621, 623 to 628, 630 to 635 and 637. Compliance required as detailed in Alert Service Bulletin. |
| 006–02–85 | 61–JA841006 | *Propellers* – Inspection of propeller blades and propeller blade counter-weights. | Applicable to all Mk 1 and Series 200 aircraft. Compliance required as detailed in Service Bulletin. |
| 004–03–85 | 27–A–JA841132 | *Flying Controls* – To introduce re-designed cable guard for aileron servo cables at fuselage Stn 77.75 and fairlead at fuselage Stn 89.15. | Applicable to HP137 Mk1, Jetstream Series 200 and Series 3100 aircraft. Compliance required as detailed in Alert Service Bulletin. |
| 012–04–85 | 32–A–JA840318 | *Landing gear* – Failure of main landing gear door operating rod eye end, door hinge assembly and hinge brackets. | Applicable to Mk 1, Series 200 and 3100 aircraft. Compliance required as detailed in Service Bulletin. |
| 013–04–85 | 57–JM–7314 | *Wings* – Reinforcing the bottom skin at landing gear bay cut-out at wing Stn 115. | Applicable to Jetstream 3100 aircraft Serial Nos 601 to 614 and 616 to 619. Compliance required as detailed in Service Bulletin. |
| 014–04–85 | 71–JA–850123 | *Power Plant* – Astazou XIV and XVI installation inspection and rigging of the secondary engine mounting eye bolts. | Applicable to Mk 1 and Series 200 aircraft. Compliance required as detailed in Service Bulletin. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 014–05–85 | 29–JA–840508 | *Hydraulics* – Revised method of clipping lines in the leading edge. | Applicable to Jetstream 3100 aircraft Serial Nos 601 to 636. Compliance required as detailed in Service Bulletin. |
| 015–05–85 | 32–A–JA850127 | *Landing Gear* – Inspection of main landing gear hinge fitting and support angle. | Applicable to Series 3100 aircraft Serial Nos. as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. |
| 003–06–85 | 24–JA850518 | *Electrical Power* – Battery temperature monitor unit – internal wiring crossed. | Applicable to Series 3100 aircraft Serial Nos. as detailed in Service Bulletin, equipped with battery temperature monitor unit Part No. BTMK 502. Compliance required as detailed in Service Bulletin. |
| 012–09–85 | 57–JM5232 | *Wings* – Feather edges at holes used to secure under wing fuel tank access panels. | Applicable to all Mk.1 and Series 200 and to Series 3100 Serial Nos. 601 to 637. Compliance required as detailed in Service Bulletin. |
| 013–09–85 | 71–JA850625 | *Power Plant* – Replacement of insufficiently heat treated engine mounting structure attachment bolts. | Applicable to Series 3100 aircraft. Serial Nos. 601 to 607, 609 to 633, 635 to 640 and 649. Compliance required as detailed in Service Bulletin. |
| 014–09–85 | 33–JA850128 | *Lights* – To introduce an illuminated warning sign above the main entrance door and label at toilet door. | Applicable to Series 3100 aircraft Serial Nos. as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
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| 015–09–85 | 53–A–JA850610 | *Fuselage* – To introduce an inspection for cracks of the nose equipment bay spine member. | Applicable to all Mk.1 and Series 200 and to Series 3100 Serial Nos. 601 to 614 inclusive, 616 and 617. Compliance required as detailed in Service Bulletin. |
| 016–09–85 | 24–A–JA850648 | *Electrical Power* – To ensure adequate clearance between one installed main DC flexible busbar and adjacent circuit breakers. | Applicable to Series 3100 aircraft Serial Nos. 601 to 659. Compliance required as detailed in Service Bulletin. |
| 009–10–85 | 57–A–JA850941 | *Wings* – Inspection of the spigot Part No. 13781B7 LH and RH at Fuselage station 199 to ensure security of locking. | Applicable to Series 3100 aircraft Serial Nos. 601 to 666. Compliance required as detailed in Service Bulletin. |
| 010–10–85 | BAe Dynamics Group, Technical Note HX1478–001–TN | *Propellers* – Inspection/rework of propeller blade drive pin locking Grub-Screw. | Applicable to all propellers Type 23LF manufactured by Hamilton Standard and Ratier Figeac fitted to Mk 1 and Series 200 aircraft. Compliance required as detailed in Technical Note not later than 31 December 1985. |
| 001–11–85 | 24–A–JM7490 | *Electrical Power* – Introduction of 28v essential power source for right upper centre panel instrument lighting. | Applicable to Series 3100 aircraft. Compliance required as detailed in Service Bulletin. |
| 012–11–85 | 22–A–JA851141 | *Autopilot* – Introduction of supplementary maintenance checks and flight operations of autopilot and electric trim. | Applicable to Series 3100 aircraft Serial Nos. as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
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| 006–12–85 | 32–JA840827 | *Landing Gear* – Nose gear – Introduction of torque check on top cap bolts. | Applicable to Mk. 1, Series 200 and 3100 aircraft. Compliance required as detailed in Service Bulletin. |
| 003–01–86 | 32–A–JA851226 | *Landing gear* – To introduce NDT and visual inspections of main landing gear pintle housing for cracks. | Applicable to all Mk. 1 and Series 200 and Series 3100 aircraft as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. |
| 009–02–86 | 27–JA840421 | *Flying Controls* – Introduction of life-in-service limit for flap torque shaft assemblies. | Applicable to all Mk. 1, Series 200 and 3100 and 3200 aircraft. Compliance required as detailed in Service Bulletin. |
| 010–02–86 | 32–JM5253 | *Landing Gear* – Introduction of higher strength trunnion caps at the nose landing gear fitting. | Service Bulletin cancelled at Revision 1 therefore AD is now cancelled. |
| 010–04–86 | 22–A–JA860413 | *Autopilot* – Replacement of elevator trim servo motor. | Applicable to Series 3100 aircraft Serial Nos. as detailed in Service Bulletin. Compliance required as detailed in SB. |
| 005–06–86 | 27–JM5257 | *Flying Controls* – To introduce positive locking to aileron drive quadrant stud securing nut. | Applicable to all Mk. 1 and Series 200 and to Series 3100 Serial Nos. 601 to 633, 635 to 646 and 648 to 654 inclusive. Compliance required as detailed in SB. |
| 011–06–86 | 28–JA850911 | *Fuel* – To introduce a strengthened valve spindle in 1 inch actuated ball valves fitted to fuel, hydraulic and water methanol shut-off valves. | Applicable to Series 3100 aircraft Serial Nos. as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
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| 001–08–86 | 32–A–JA860412 | *Landing Gear* – To introduce an inspection of the nose landing gear cylinder. | Applicable to Mk. 1, Series 200 and 3100 aircraft as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. |
| 004–12–86 | 22–A–JA861023 | *Autopilot* – Introduction of life limitation, and replacement of elevator trim servo cable, ET1, Part No. 137187E472. | Applicable to all Series 3100 aircraft with Sperry SPZ–200B or SPZ–500 autopilot installation excluding aircraft that have autopilot installed under Customer Requirement Kit JK2864 (Service Bulletin 34–JK2864). Compliance required as detailed in Alert Service Bulletin. |
| 006–12–86 | 22–A–JA861215 | *Autopilot* – Introduction of inhibition of autopilot. | Applicable to Series 3100 aircraft Serial Nos. as detailed in Alert Service Bulletin. Compliance required as detailed in Alert Service Bulletin. |
| 003–02–87 | 27–A–JA870210 | *Flying Controls* – Inspection of selected primary flying control cables ball end fitting for cracking. | Applicable to Series 3100 aircraft Serial Nos. as detailed in Alert Service Bulletin. Compliance required as detailed in Alert Service Bulletin. |
| 004–02–87 | 32–JA860812 | *Landing Gear* – To inspect main landing gear cylinder for cracks. | Applicable to Mk.1, Series 200 and 3100 aircraft as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. |
| 024–05–87 | 53–A–JA870510 | *Fuselage* – Inspection of NLG retraction jack upper mounting fitting securing bolts. | Applicable to all Mk.1, Series 200 and 3100 aircraft which have Modification JM 5127 embodied. Compliance required as detailed in Alert Service Bulletin. |
| 002–06–87 | 22–A–JA870428 | *Auto Flight* – Introduction of life limitation, and replacement of elevator trim servo cable, ET1, Part No. 137187E472. | Applicable to Mk.1 and Series 200 aircraft as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
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| 007–09–87 | 24–A–JM7631 | *Electrical Power* – Introduction of revised cable clearance at essential busbar. | Applicable to Series 3100 aircraft Serial Nos. as detailed in Alert Service Bulletin. Compliance required as detailed in Alert Service Bulletin. |
| 020–09–87 | 76–A–JM7620 | *Engine Controls* –To introduce an increase in ground idle rev/min from 68% to 72%. | Applicable to Series 3100 aircraft Serial Nos as detailed in Alert Service Bulletin. Compliance required as detailed in Alert Service Bulletin. |
| 007–01–88 | 57–JM5201 | *Wings* – Introduction of strengthened attachments to the ailerons. | Applicable to Mk 1 and Series 200 aircraft on the UK Register cleared for operation up to 12,500 lb all-up-weight. Compliance required as detailed in Service Bulletin. |
| 003–03–88 | 27–JM7561 | *Flight Controls* – Introduction of gust locks disengagement at or before 50% of operating lever travel. | Applicable to Series 3100 aircraft Serial Nos. 601 to 749. Compliance required as detailed in Service Bulletin not later than 31 December 1988. |
| 001–04–88 | 76–A–JA880440 | *Engine Controls* – Rigging and functional checks of propeller feather controls. | Applicable to all Series 3100 aircraft Serial Nos 601 to 789, 791 to 794 and 796. Compliance required as detailed in Alert Service Bulletin. |
| 002–06–88 | 76–A–JA880442 | *Engine Controls* – To introduce an increase in the propeller governor low speed setting from 94% to 96%. | Applicable to Series 3100 aircraft fitted with engines as detailed in Alert Service Bulletin. Compliance required as detailed in Alert Service Bulletin not later than 30 June 1988. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
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| 011–06–88 | 57–A–JA880144 | *Wings* –Inspection of shear angle at wing rib 36. | Applicable to all Mk 1, Series 200 and Series 3100 aircraft. Compliance required as detailed in Alert Service Bulletin. |
| 012–06–88 | 27–A–JA880145 | *Flight Controls* –Cracking of brake master cylinder mounting assemblies at rudder pedals. | Applicable to all Mk 1, Series 200, Series 3100 and Series 3200 aircraft with Constructors Nos. 601 to 870. Compliance required as detailed in Alert Service Bulletin. |
| 004–09–88 | 24–A–JA880640 | *Electrical Power* – Inspection and modification of Leland Model ASH 674–3 and 674–33 static inverters. | Applicable to Series 3100 aircraft Serial Nos as detailed in Alert Service Bulletin. Compliance required as detailed in Alert Service Bulletin. |
| 002–10–88 | 22–A–JA880547 | *Auto-Flight* – Inspection of elevator trim servo idler pulley pivot, for correct assembly. | Applicable to all Mk 1 and Series 200 Aircraft with Bendix M4C/M4D autopilot to Handley Page Kits 701 or 703, or with electric trim to Handley Page Kits 717 or 718. Compliance required as detailed in Alert Service Bulletin. |
| 003–10–88 | 24–A–JM7672A | *Electrical Power* – Introduction of circuit breakers in inverter 26V AC output cables. | Applicable to Series 3100 aircraft Serial Nos. 696 to 794, 796 to 799, 801 to 804, 806 to 809, 811 to 813, 815 to 817 and 820. Compliance required as detailed in Alert Service Bulletin not later than 31 January 1989. |
| 004–10–88 | 27–A–JA881041 | *Flight Controls* – Inspection of the flap torque shaft universal joints. | Applicable to all Mk 1, Series 200 and Series 3100 aircraft and Series 3200 aircraft Serial Nos. 790, 800, 805, 810, 814, 818, 819, 821, 823, 824 and 828. Compliance required as detailed in Alert Service Bulletin. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
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| 019–11–88 | 26–A–JA881142 | *Fire Protection* – Incorrect connections to engine fire extinguisher cartridges. | Applicable to all Series 3100 aircraft. Compliance required as detailed in Alert Service Bulletin. |
| 003–12–88 | 27–JM5313 | *Flight Controls* – Introduction of pivot pin retaining plates at the flap torque shaft universal joints. | Applicable to all Mk 1, Series 200 and Series 3100 aircraft and Series 3200 aircraft as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. |
| 027–01–89 | 24–JM7657A | *Electrical Power* – Inhibition of TTL test and stall protection test functions during flight. | Applicable to Series 3100 aircraft Serial Nos. as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin not later than 30 October 1989. |
| 010–03–89 | 29–A–JA881143 | *Hydraulic Power* – Introduction of a modification to the detent ball catch of the emergency selector valve. | Applicable to Mk 1, Series 200, Series 3100 and Series 3200 aircraft as detailed in Alert Service Bulletin. Compliance required as detailed in Alert Service Bulletin. |
| 021–05–89 | 27–JM5322 | *Flight Controls* – Introduction of extended pivot pin retaining plates at the flap torque shaft universal joints. | Applicable to Mk 1, Series 200, Series 3100 and Series 3200 aircraft as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. |
| 005–06–89 | 61–JM5325 | *Propeller* – Introduction of revised set points for PMV and PPMV microswitches. | Applicable to Mk 1 and Series 200 aircraft as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
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| 027–08–89 | 55–JM5200 | *Stabilisers* – Tailplane – Introduction of strengthened front and rear spar boom attachments. | Applicable to Mk 1 and Series 200 aircraft as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. |
| 012–10–89 | 34–JA890444 | *Navigation* –To reduce the possibility of smoke in the flight compartment from the IND–300 weather radar indicator. | Applicable to Series 3100 and Series 3200 aircraft as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. |
| 007–11–89 | 52–A–JM7704 | *Doors* – To provide retention of the shouldered bolt at the upper connection of the passenger/ crew door restraint cable. | Applicable to Series 3100 and Series 3200 aircraft serial Nos. 757 and 770 to 850 excluding 841, 848 and 849. Compliance required as detailed in Alert Service Bulletin not later than 28 February 1990. |
| 009–02–90 | 33–A–JA891240 | *Lights* – Inspection of cabin fluorescent lighting and power unit wiring. | Applicable to all Series 3100 and Series 3200 aircraft fitted with SELA or ALC lighting systems which have power units Part No. TR992 or TR992-03 fitted. Compliance required as detailed in Service Bulletin. |
| 002–03–90 | 24–A–JM7708 | *Electrical Power* – Introduction of switching of inverter synchronization lines by transfer switch. | Applicable to Series 3100 aircraft serial Nos. 697 to 839 inclusive and Series 3200 aircraft serial Nos. 790 to 867, 869 and 870. Compliance required as detailed in Alert Service Bulletin not later than 31 May 1990. |
| 003–03–90 | 34–JA891143 | *Navigation* – Introduction of shortened cable looms to No. 1 and No. 2 vertical gyroscopes. | Applicable to Series 3100 aircraft serial Nos. 703, 705 and 707. Compliance required as detailed in Service Bulletin not later than 31 August 1990. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
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| 031–04–90 | 24–A–JA900443 | *Electrical Power* – Deletion of inverter transfer function. | Applicable to Series 3100 aircraft constructors numbers 697 to 839 inclusive and Series 3200 aircraft constructors numbers 790 to 904 inclusive. Compliance required as detailed in Alert Service Bulletin. |
| 019–06–90 | 27–A–JA900544 | *Flight Controls* – Flap torque shaft assemblies, reduction in fatigue life. | Applicable to all Mk 1, Series 200, Series 3100 and Series 3200 aircraft. Compliance required as detailed in Alert Service Bulletin. |
| 012–11–90 | 24–JM7740 | *Electrical Power* – Introduction of inverter Part No. 1B350–1B1–3. | Applicable to Series 3100 aircraft and Series 3200 aircraft constructors numbers 697 to 904 inclusive. Compliance required as detailed in Service Bulletin. |
| 014–01–91 | 32–JA901040 | *Landing Gear* – Fit new or modified top cap assembly and check length of bolts on nose landing gear. | Applicable to Mk 1, Series 200, Series 3100 and Series 3200 aircraft as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. |
| 017–01–91 | 29–JM7360 | *Hydraulic Power* – To introduce revised handle, stowage and access for hydraulic hand pump. | Applicable to Series 3100 aircraft constructors numbers 601 to 646, 648 to 655, 657, 658 and 660. Compliance required as detailed in Service Bulletin. |
| 014–02–91 | 9/5162 | *Flight Controls* – To introduce mounting bracket, Part No. 1379111E 1 to the rudder mechanism installation left and right hand, in place of Part No. 13723E 3 or 13723E 5. | Applicable to Mk 1 and Series 200 aircraft. Compliance is required as detailed in Modification 5162. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
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| 017–03–91 | 27–A–JA910340 | *Flight Controls* – Changes in operational procedures for landing in icing conditions, and associated changes to aircraft modification standard. | Applicable to Series 3100 aircraft. Compliance required as detailed in Service Bulletin. |
| 005–05–91 | 28–JM5354 | *Fuel System* – Introduction of fuel water-drain-valve body assemblies with a positive lock feature. | Applicable to Mk 1, Series 200, Series 3100 and Series 3200 aircraft as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. |
| 006–05–91 | 32–A–JA910140 | *Landing Gear* – Introduction of a wheel retaining nut torque check and an improved wheel retaining nut. | Applicable to Mk 1, Series 200, Series 3100 and Series 3200 aircraft as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. |
| 007–05–91 | 76–A–JA910542 | *Engine Controls* – Life limitation of power lever control cables. | Applicable to Mk 1, Series 200, Series 3100 and Series 3200 aircraft with constructors numbers in the range 790 to 960. Compliance required as detailed in Service Bulletin. |
| 012–06–91 | 29–JA901242 | *Hydraulic Power* – Emergency selector valve – Introduction of an inspection to check operating load. | Applicable to Mk 1, Series 200, Series 3100 and Series 3200 aircraft as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. |
| 024–06–91 | 57–JM8160 | *Wings* – Introduction of cold worked holes at main spar access panel attachments. | Applicable to Series 3200 aircraft up to and including constructors number 922. Compliance required as detailed in Service Bulletin. |
| 008–09–91 | 71–JM7755 | *Powerplant* – Introduction of a revised power lever to the manual fuel valve (LH and RH). | Applicable to Series 3100 and Series 3200 aircraft up to and including constructors number 928. Compliance required as detailed in Service Bulletin. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
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| 009–10–91 | 80–A–JA911045 | *Engine Controls* – Introduction of additional post flight procedure and removal of diodes from engine stop circuit. | Applicable to Series 3100 aircraft and Series 3200 aircraft constructors numbers 790 to 950 inclusive. Compliance required as detailed in Alert Service Bulletin. |
| 007–12–91 | 52–JM7752 | *Doors* – Introduction of improved escape hatch shear fitting. | Applicable to Series 3100 and Series 3200 aircraft constructors numbers as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. |
| 015–01–92 | 57–JM8175 | *Wings* – Introduction of cold worked holes at main spar fuel fitting holes. | Applicable to Series 3200 aircraft up to and including constructors number 950. Compliance required as detailed in Service Bulletin. |
| 016–01–92 | 27–A–JA911044 | *Flight Controls* – Changes in operational procedures for landing in icing conditions, and associated changes to aircraft modification standard. | Applicable to Mk 1 and Series 200 aircraft. Compliance required as detailed in Alert Service Bulletin. |
| 014–02–92 | 27–A–JM7771 | *Flight Controls* – Introduction of rudder gust lock unit assembly with modified stop. | Applicable to Series 3200 aircraft constructors numbers 931 to 939. Compliance required as detailed in Alert Service Bulletin. |
| 015–02–92 | 52–A–JA911140 | *Doors* – Inspection of taper pin on passenger/ crew door locking mechanism. | Applicable to Series 3100 aircraft and Series 3200 aircraft as detailed in Alert Service Bulletin. Compliance required as detailed in Alert Service Bulletin. |
| 028–05–92 | 74–JM7693A | *Ignition* – Introduction of auto-relight magnetic latching relays (LH & RH). | Applicable to Series 3100 aircraft and Series 3200 aircraft constructors numbers as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. |
| 001–09–92 | 57–A–JA920540 | *Wings* – To introduce revised joggled doublers in the main landing gear bay (LH & RH). | Applicable to Series 3200 aircraft up to and including constructors number 969. Compliance required as detailed in Service Bulletin. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
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| 006–10–92 | 26–A–JA920401 | *Fire Protection* – Inspection and replacement of fire bottle hoses. | Applicable to Series 3100 aircraft and Series 3200 aircraft constructors numbers 601 to 964 inclusive, except 703, 705 and 707. Compliance required as detailed in Service Bulletin. |
| 007–10–92 | 31–A–JA921050 | *Indicating/Recording Systems* – Check type F1000 flight data recorders for correct operation and modify flight data recorder circuit. | Applicable to Series 3200 aircraft with a Fairchild type F1000 Flight data recorder installed. Compliance required as detailed in Service Bulletin. |
| 009–10–92 | 30–A–JA920444 | *Ice and Rain Protection* – Inspections and introduction of revised pipes and hoses in the tail unit de-icing system. | Applicable to Mk 1, Series 200 aircraft, Series 3100 aircraft and Series 3200 aircraft constructors numbers up to 969 and constructors number 971. Compliance required as detailed in Service Bulletin. |
| 004–02–93 | 56–JA920843 | *Windows* – Inspection of left and right pilots windscreens for cracking of PVB interlayer. | Applicable to Mk 1, Series 200 aircraft, Series 3100 aircraft and Series 3200 aircraft constructors numbers 790 to 840 inclusive; which have left and right windscreens with part nos. as detailed in Pilkington Aerospace Service Bulletin 037–56–1001. Compliance required as detailed in Service Bulletin. |
| 007–02–93 | 57–A–JA920640 | *Wings* – Inspection for migration of the wing/ fuselage forward attachment spigot bushes. | Applicable to Mk 1, Series 200 aircraft and Series 3100 aircraft constructors numbers 601 to 702 inclusive. Compliance required as detailed in Service Bulletin. |
| 008–02–93 | 57–JA921140 | *Wings* – Inspection and introduction of special nut to mounting spigots in the aileron control system. | Applicable to Mk 1, Series 200 aircraft, Series 3100 aircraft and Series 3200 aircraft up to and including constructors number 979. Compliance required as detailed in Service Bulletin. |
| 007–03–93 | 57–JA921144 | *Wings* – Inspection of the spigot housing plate at the wing/fuselage forward attachment sliding joint and introduction of a new modified spigot and spigot housing plate. | Applicable to Series 3200 aircraft constructors numbers 790 to 960 inclusive. Compliance required as detailed in Service Bulletin. |
| 010–03–93 | J41–A26–002 | *Fire Protection* – Engine – Tests to detect defective joints in the fire extinguisher control system. | Applicable to Series 4100 aircraft constructors numbers 004 to 007 inclusive. Compliance required as detailed in Service Bulletin. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
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| 006–04–93 | J41–A–32–004 | *Landing Gear* – Aft doors of the main landing gear – Introduction of new improved actuating hinge bracket. | Applicable to Series 4100 aircraft constructors numbers 004 to 011 inclusive. Compliance required as detailed in Service Bulletin. |
| 007–04–93 | J41–A–55–003 | *Stabilisers* – Elevators – To look for loose rivets in the left and right elevators. | Applicable to Series 4100 aircraft constructors numbers 004 to 011 inclusive. Compliance required as detailed in Service Bulletin. |
| 013–05–93 | J41–A52–016 | *Doors* – Main baggage – bay door – To inspect the door pressure seal. | Applicable to Series 4100 aircraft, which do not have modification number JM41204 embodied or on which repair scheme J41R0370 has not been accomplished. Compliance required as detailed in Service Bulletin. |
| 014–05–93 | 57–JA921203 | *Wings* – Inspection to detect damage to lower main skin and lower front spar structure at stns 36 to 40, LH and RH. | Applicable to Series 3100 aircraft. Compliance required as detailed in Service Bulletin. |
| 005–06–93 | J41–25–006 | *Equipment/Furnishings* – Bulkhead assembly – Installation of a de-compression vent. | Applicable to Series 4100 aircraft constructors numbers 004 to 011 inclusive. Compliance required as detailed in Service Bulletin. |
| 010–08–93 | 52–JM7793 | *Doors* – Passenger/Crew door – Introduction of revised microswitch rigging and drawbolt penetration. | Applicable to Series 3100 and 3200 aircraft constructors numbers up to and including 972. Compliance required as detailed in Service Bulletin. |
| 013–08–93 | J41–A27–020 | Flight Controls – Aileron tab – Positive locking of hinge wire. | Applicable to Series 4100 aircraft. Compliance required as detailed in Service Bulletin. |
| 014–08–93 | J41–A52–021 | Doors – Passenger/Crew – Inspection of the electrical loom of the main entrance door for damage and its subsequent re-routing clear of the speedlock solenoid and the inner skin of the door. | Applicable to Series 4100 aircraft constructors numbers 41004 to 41016 inclusive where repair scheme 141R0365 has not been embodied. Compliance required as detailed in Service Bulletin. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
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| 001–09–93 | J41–A24–012 | Electrical Power – DC generation – Earth post failure. | Applicable to Series 4100 aircraft. Compliance required as detailed in Service Bulletin. |
| 004–09–93 | 57–JA930640 | Wings – Bottom skin – Inspection of landing gear bay, LH and RH. | Applicable to Series 3200 aircraft. Compliance required as detailed in Service Bulletin. |
| 003–10–93 | J41–A25–034 | Equipment/Furnishings – Introduction of foreign object and debris guard to rear cabin attendant seat. | Applicable to Series 4100 aircraft constructors numbers 41004 to 41023 on which kit JK43469 has not been installed or on which Service Bulletin J41–53–006 has not been accomplished. Compliance required as detailed in Service Bulletin. |
| 010–10–93 | J41–57–003 | Electrical Power – Wing rear spar harness – Introduction of additional clipping point. | Applicable to Series 4100 aircraft constructors numbers 41004 to 41016 inclusive. Compliance required as detailed in Service Bulletin. |
| 011–10–93 | J41–53–011 | Fuselage – Forward section – Reinforcement of the aileron drive quadrant support structure below the flight compartment floor. | Applicable to Series 4100 aircraft constructors numbers 41004 to 41018 inclusive. Compliance required as detailed in Service Bulletin. |
| 012–10–93 | 57–JA930941 | Wings – Inspection of the spigot housing plate at the wing/fuselage forward attachment sliding joint. | Applicable to HP137 Mk1 aircraft, Series 200 aircraft and Series 3100 aircraft. Compliance required as detailed in Service Bulletin. |
| 013–10–93 | J41–A24–013 | Electrical Power – Sealed lead acid aircraft batteries – Frequency of servicing change. | Applicable to Series 4100 aircraft with Hawker Energy batteries part number 9750F0531 installed. Compliance required as detailed in Service Bulletin. |
| 007–11–93 | J41–53–012 | Fuselage – Structure – Reinforcing of the mounting structure of the elevator controls on rear pressure bulkhead. | Applicable to Series 4100 aircraft constructors numbers 41004 through 41011 which do not have modification number JM41262A fitted and all other Series 4100 aircraft which do not have modification number JM41262B fitted. Compliance required as detailed in Service Bulletin. |
| 005–12–93 | J41–A–27–026 | Flight Controls – Aileron – Inspection of aileron quadrant bearing. | Applicable to Series 4100 aircraft constructors number 41004 and subsequent which do not have modification JM41307A or modification JM41307B embodied. Compliance required as detailed in Service Bulletin. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 008–12–93 Revision 1 | 57–JA930848 | *Wings* – Lower skin – Inspection of wing lower skin at inboard end of auxiliary spar boom. | Cancelled and superseded by CAA AD 005–06–2003. |
| 009–12–93 | 52–A–JA930901 | *Doors* – Passenger/crew door – Internal door handle mounting platform structure failure. | Applicable to HP137 Mk 1 aircraft, Series 200 aircraft, Series 3100 aircraft and Series 3200 aircraft. Compliance required as detailed in Service Bulletin. |
| 002–01–94 | J41–11–004 | *Placards and Markings* – Interior placards – Introduction of placard at the elevator decouple control handle. | Applicable to Series 4100 aircraft constructors numbers 41004 through 41024. Compliance required as detailed in Service Bulletin. |
| 002–02–94 | J41–32–017 | *Landing Gear* – Introduction of main landing gear crashworthy trunnion pins. | Applicable to Series 4100 aircraft, constructors numbers 41004 through 41027. Compliance required as detailed in Service Bulletin. |
| 003–02–94 | 32–JA930343 | *Landing Gear* – Main gear – Inspect pintle to cylinder interface for cracks. | Applicable to HP137 Mk 1 aircraft, Series 200 aircraft, Series 3100 aircraft and Series 3200 aircraft fitted with AP Precision Hydraulics Ltd main landing gear as detailed in Service Bulletin. Service Bulletin cancelled at Revision 4, the requirement of the bulletin is now incorporated into SB 32–JA960142 at Revision 2 (AD 005–03–96). AD 003–02–94 is therefore cancelled. |
| 012–03–94 | J41–25–018 | *Equipment/Furnishings* – Introduction of decompression vents in the left and right forward stowage and the forward right wardrobe assembly. | Applicable to Series 4100 aircraft constructors numbers 41005 through 41015, 41019 through 41024, 41028 and 41029. Compliance required as detailed in Service Bulletin. |
| 003–04–94 | Document Ref JS/CPCP/1 | Corrosion Prevention and Control Programme. | Applicable to HP137 Mk 1, Series 200, 3100 and 3200 aircraft. Compliance required as detailed in CPCP. |
| 003–06–94 | J41–A27–034 | *Flight Control* – Spoiler System– Inspection of spoiler activators and introduction of revised system flushing and bleeding procedure. | Applicable to Series 4100 aircraft constructors numbers 41004 through 41015, 41018 through 41026, 41028 through 41030 and 41032. Compliance required as detailed in Service Bulletin. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 004–06–94 | J41–A52–036 | *Doors* – Main entrance door – Inspection for cracks on the handrail assembly. | Applicable to Series 4100 aircraft which have handrail assembly Part No. 6020203 Iss. C. with Modification No. JM41179 installed. Compliance required as detailed in Service Bulletin. |
| 007–08–94 | J41–29–005 | *Hydraulic Power* – Hydraulics case drain – Introduction of additional fairlead support and revised material for case drain line in engine/ nacelle rear spar support. | Applicable to Series 4100 aircraft constructors numbers 41005 to 41015 inclusive, 41019 to 41024 inclusive, 41028 and 41029. Compliance required as detailed in Service Bulletin. |
| 008–08–94 | J41–29–001 | *Hydraulic Power* – Spoiler system – Installation of new bleed nipples at the retract and extend connections of the actuator. | Applicable to Series 4100 aircraft on which Modification JM41290B has not been embodied. Compliance required as detailed in Service Bulletin. |
| 005–09–94 | J41–27–036 | *Flight Controls* – Aileron and elevator disconnect – Travel stop migration in the control handles. | Applicable to Series 4100 aircraft constructors numbers 41004 to 41039. Compliance required as detailed in Service Bulletin. |
| 006–09–94 | J41–A53–028 | *Fuselage* – Aerodynamic fairings – Flexural cracks and damage to the overwing fairing (left and right). | Applicable to Series 4100 aircraft constructors number 41004 and subsequent on which modification JM41392 has not been embodied or on which Service Bulletin J41–53–031 has not been accomplished. Compliance required as detailed in Alert Service Bulletin. |
| 003–11–94 | J41–73–007 | *Engine Fuel and Control* – Indicating – Installation of a new pressure switch in the fuel filter blockage system, left and right. | Applicable to Series 4100 aircraft constructors numbers 41004 through 41046. Compliance required as detailed in Service Bulletin. |
| 002–01–95 | 32–A–JA941245 | *Landing Gear* – Main gear – Inspect pintle to cylinder interface for cracks. | Applicable to HP137 Mk1 aircraft and Jetstream Series 200, 3100 and 3200 aircraft fitted with main landing gear as detailed in Service Bulletin. Service Bulletin cancelled at Revision 4, the requirement of the bulletin is now incorporated into SB 32–JA960142 at Revision 2 (AD 005–03–96). AD 002–01–95 is therefore cancelled. |
| 001–02–95 | J41–A34–026 | *Navigation* – To check deviation of standby Compass. | Applicable to Series 4100 aircraft constructors numbers 41004 to 41038 inclusive excluding 41018 and 41031. Compliance required as detailed in Service Bulletin. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 003–04–95 | J41–A32–042 | *Landing Gear* – Landing gear control – Introduction of wiring changes to prevent uncommanded retraction of the landing gear. | Applicable to Series 4100 aircraft constructors numbers 41004 through 41046 and 41048 through 41052 fitted with landing gear control unit part numbers 717701–1 or 717701–1 at modification A standard. Compliance required as detailed in Service Bulletin. |
| 002–05–95 | J41–76–013 | *Engine Controls* – Power and condition controls – Installation of revised flexible control cables (left and right). | Applicable to Series 4100 aircraft without Mod. JM41478 or JM41485A embodied. Compliance required as detailed in Service Bulletin. |
| 003–05–95 | J41–11–007 | *Placards* – Main entrance door – Position of door open internal placards. | Applicable to Series 4100 aircraft constructors numbers 41004 through 41046. Compliance required as detailed in Service Bulletin. |
| 002–06–95 | J41–A25–061 | *Equipment/Furnishings* – Passenger seats – To replace seat belt shackles. | Applicable to Series 4100 aircraft constructors numbers 41004 through 41062. Compliance required as detailed in Service Bulletin. |
| 007–07–95 | J41–25–063 | *Equipment/Furnishings* – To inspect and, if necessary replace seat base cushion fireblock covers. | Applicable to Series 4100 aircraft constructors numbers 41048, 41050, 41051, 41054, 41061, 41062 and 41065. Compliance required as detailed in Service Bulletin. |
| 008–07–95 | J41–53–014 | *Fuselage* – Introduction of revised type II exit surround structure. | Applicable to Series 4100 aircraft constructors numbers 41004 through 41064. Compliance required as detailed in Service Bulletin. |
| 003–09–95 | J41–32–044 | *Landing Gear* – Landing gear control – Introduction of a new landing gear control unit and revised wiring. | Applicable to Series 4100 aircraft constructors numbers 41004 through 41073. Compliance required as detailed in Service Bulletin. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
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| 004–09–95 | J41–53–020–41382A | *Fuselage* – Rear pressure bulkhead repair. | Applicable to Series 4100 aircraft constructors numbers 41004 through 41047. Compliance required as detailed in Service Bulletin. |
| 004–11–95 | J41–25–068 | *Equipment/Furnishings* – Bulkhead assembly – Installation of a revised decompression panel. | Applicable to Series 4100 aircraft constructors numbers 41005 through 41017 and 41019 through 41033. Compliance required as detailed in Service Bulletin. |
| 008–11–95 | J41–32–049 | *Landing Gear* – Main Landing Gear – Drag brace – Inspect upper link – Inspection and Rectification. | Applicable to Series 4100 aircraft constructors numbers 41004 through 41009 and 41017 with drag brace Part No. AIR84352-0 through AIR84352-4 (with offset lightening holes). Compliance required as detailed in Service Bulletin. |
| 005–01–96 | J41–11–014 | *Placards* – Main baggage bay – Introduction of new weight limitations. | Applicable to Series 4100 aircraft constructors numbers 41012, 41013, 41015, 41017, 41019 through 41023, 41025 through 41029, 41031, 41033, 41041 through 41043, 41045, 41055, 41058, 41059, 41063 and 41064 on which service bulletin J41–53–006 has not been accomplished. Compliance required as detailed in Service Bulletin. |
| 006–01–96 | J41–A53–030 | *Fuselage* – Floors – Installation of an incorrect intercostal in the floor structure of the flight compartment. | Applicable to Series 4100 aircraft constructors numbers 41039 through 41043, 41045 through 41059, 41066, 41067 and 41072 through 41074. Compliance required as detailed in Service Bulletin. |
| 007–01–96 | J41–24–033 | *Electrical Power* – DC generation – Overheat failure of earth posts (left and right). | Applicable to Series 4100 aircraft constructors numbers 41004 through 41074. Compliance required as detailed in Service Bulletin. |
| 008–01–96 | J41–27–041 | *Flight Control* – Aileron – Incorrect eye end bearings installed on the final drive control rod assemblies (left and right). | Service Bulletin re-classified as optional at revision 1, therefore AD is cancelled. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 002–02–96 | J41–A24–036 | *Electrical Power* – DC Starter generator – Bearing failure. | Applicable to Series 4100 aircraft without Service Bulletin J41–24–040 or modification JM41619 embodied. Compliance required as detailed in Service Bulletin.<br>NOTE: Revision 1 to the SB removes the requirement for staggered maintenance for these DC starter generators. |
| 005–03–96 | 32–JA 960142 | *Landing Gear* – Main gear – To introduce repeat inspection of pintle to cylinder interface for cracks. | Applicable to HP 137 Mk 1, Series 200, Series 3100 and Series 3200 aircraft fitted with main gear types as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. The Service Bulletin at Revision 2 incorporated the requirements of SB 32–JA930343 (AD 003–02–94) and SB 32–A–JA941245 (AD 002–01–95) which have both been cancelled. |
| 004–04–96 | J41–A53–024 | *Fuselage* – Centre fuselage – Cracks on frame 179 at the attachment bracket for the door restraint cable. | Applicable to Series 4100 aircraft Constructors Nos. 41004 through 41086. Compliance required as detailed in Alert Service Bulletin. |
| 001–05–96 | J41–A27–042 | *Flight Controls* – Aileron system – Failure of the aileron disconnect control system to disconnect. | Applicable to Series 4100 aircraft Constructors Nos. 41004 through 41084 on which Service Bulletin J41–27–046 has not been accomplished. Compliance required as detailed in Service Bulletin. |
| 003–05–96 | J41–32–023 | *Landing Gear* – Main gear – Replacement pins for shock strut and drag brace. | Applicable to Series 4100 aircraft Constructors Nos. 41060 and 41071 to 41078. Compliance required as detailed in Service Bulletin. |
| 006–05–96 | J41–A57–015 | *Wings* – Flaps – Failure of structure for the attachment of the flap nacelle fairing. | Applicable to all Series 4100 aircraft that are pre modifications JM41575B and JM41575C. Compliance required as detailed in Alert Service Bulletin. |
| 004–06–96 | J41–55–002 | *Stabilisers* – Tailplane – Failure of weather seals between the tailplane and fin. | Applicable to Series 4100 aircraft Constructors Nos. 41005 through 41069 and 41071 through 41078. Compliance required as detailed in Service Bulletin. |
| 002–07–96 | J41–A22–005 | *Autoflight* – Autopilot – Overheat failure of the flight control computer. | Applicable to Series 4100 aircraft Constructors Nos. 41004 through 41092 on which Service Bulletin J41–22–006 (Kit JK42867) has not been accomplished. Compliance required as detailed in Alert Service Bulletin. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 003–07–96 | J41–22–006 | *Autoflight* – Autopilot – Installation of circuit breakers to prevent an overheat failure of the flight control computer. | Applicable to Series 4100 aircraft Constructors Nos. 41004 through 41092. Compliance required as detailed in Service Bulletin. |
| 004–07–96 | J41–32–054 | *Landing Gear* – Main Gear – Replacement bolts for shock strut. | Applicable to Series 4100 aircraft Constructors Nos. 41081 through 41086. Compliance required as detailed in Service Bulletin. |
| 005–07–96 | J41–A22–008 | *Autoflight* – Elevator Trim Servo – To inspect for loose motor housing. | Applicable to Series 4100 aircraft Constructors Nos. 41004 through 41090. Compliance required as detailed in Alert Service Bulletin. |
| 005–08–96 | J41–53–039 | *Fuselage* – Replacement of stringer joint piece Part No. 14153014–95 at Station 130. | Applicable to Series 4100 aircraft Constructors Nos. 41081 through 41091. Compliance required as detailed in Service Bulletin. |
| 006–08–96 | 30–JA 950641 | *Ice and Rain Protection* – Windshield wipers – Service life of arm assembly and attachment bolt. | Applicable to HP 137 Mk 1, Series 200, Series 3100 and Series 3200 aircraft. Compliance required as detailed in Service Bulletin. |
| 002–10–96 | 32–JA 960601 | *Landing Gear* – Nose Gear – Measurement of material thickness at the toggle attachments. | Applicable to HP 137 Mk 1, Series 200, Series 3100 and Series 3200 aircraft. Compliance required as detailed in Service Bulletin. |
| 006–10–96 | 22–JK 2628 | *Autoflight* – Introduction of additional trim relays in the autopilot system to remove the 800 hour life cycle restriction. | Applicable to all Series 3100 aircraft equipped with an autopilot installed under JAL Modifications JM3027, 3243, 3352 or 3483. Compliance required as detailed in Service Bulletin. |
| 001–12–96 | J4I–A26–007 | *Fire Protection* – Engine and nacelle fire – extinguisher system – To find and replace possibly defective hoses in the system. | Applicable to Series 4100 aircraft Constructors Nos. 41004 through 41100. Compliance required as detailed in Alert Service Bulletin. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 006–12–96 | J41–27–045 | *Flight Controls* – Aileron control – Incorrect heat treatment of chain links installed in the control column. | Applicable to Series 4100 aircraft Constructors Nos. 41089 through 41093. Compliance required as detailed in Service Bulletin. |
| 007–12–96 | J41–A53–023 | *Fuselage* – Forward fuselage – Inspection for cracks in diaphragms installed between Stn 4 and Stn 8. | Applicable to Series 4100 aircraft Constructors Nos. 41004 through 41104. Compliance required as detailed in Alert Service Bulletin. |
| 003–03–97 | J41–52–043 | *Doors* – Passenger door – Inspection of roller guide shear cleats. | Applicable to Series 4100 aircraft Constructors Nos. 41004 through 41099. Compliance required as detailed in Alert Service Bulletin. |
| 005–03–97 | J41–57–020 | *Wings* – Boroscope inspection for corrosion of wing upper splice plate Part No. 14157126-3. | Applicable to Series 4100 aircraft Constructors Nos. 41004 through 41096. Compliance required as detailed in Service Bulletin. |
| 002–05–97 | J41–32–058 | *Landing Gear* – Main wheel – Tie bolts – Introduction of revised maintenance instructions and life requirements. | Applicable to Series 4100 aircraft with main wheels Part No. AHA 1837 installed. Compliance required as detailed in Service Bulletin. |
| 003–07–97 | J41–A32–061 | *Landing Gear* – Main – Loose spherical bearings in the lower link of the drag brace. | Applicable to Series 4100 aircraft Constructors Nos. 41004 through 41100. Compliance required as detailed in Service Bulletin. |
| 004–07–97 | J41–24–027 | *Electrical Power* – Introduction of improved sealing to electrical connectors on rear pressure bulkhead area. | Applicable to Series 4100 aircraft Constructors Nos. 41004 through 41079. Compliance required as detailed in Service Bulletin. |
| 009–07–97 | J41–53–041 | *Fuselage* – Nose wheel bay structure – Introduction of additional side plates to uplock attachments. | Applicable to Series 4100 aircraft Constructors Nos. 41004 through 41100. Compliance required as detailed in Service Bulletin. |
| 003–08–97 | J41–52–058 | *Doors* – Passenger door – Lubrication of 'G' lock and speed lock systems. | Applicable to all Series 4100 aircraft. Compliance required as detailed in Service Bulletin. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 004–08–97 | J41–11–010 | *Placards and Markings* – Main baggage compartment – Introduction of reduced loading limitations. | Applicable to Series 4100 aircraft Constructors Nos. as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. |
| 001–09–97 | J41–A–52–059 | *Doors* – Passenger door – Introduction of increased diameter 'G' lock rollers. | Applicable to Series 4100 aircraft Constructors Nos. 41004 through 41101 without Repair Scheme 141R1135 or 141R1353 accomplished. Compliance required as detailed in Alert Service Bulletin. |
| 015–11–97 | J41–11–020 | *Placards and Markings* – Introduction of warning label for rear baggage bay fire extinguisher. | Applicable to Series 4100 aircraft Constructors Nos. 41004 through 41100. Compliance required as detailed in Service Bulletin. |
| 003–12–97 | 27–A–JM7847 | *Flying Controls* – Stall warning and protection system – Removal of the ground inhibit function. | Applicable to all Series 3100 and 3200 aircraft with Modification JM7813A (SB 27–JM7813A) or Modification JM7813B embodied. Compliance required as detailed in Alert Service Bulletin. |
| 001–02–98 | 29–A–JA970940 | *Hydraulic Power* – Internal corrosion of hydraulic components by water contamination of the hydraulic fluid. | Applicable to Series 3200 aircraft Constructors Nos. as detailed in Alert Service Bulletin. Compliance required as detailed in Alert Service Bulletin. |
| 001–04–98 | 57–A–JA980441 | *Wings* – Inspection of main landing gear bay auxiliary spar. | Applicable to all Series 3200 aircraft. Compliance required as detailed in Alert Service Bulletin. |
| 003–07–98 | 32–A–JA980540 | *Main Landing Gear* – Brake units – Inspection to ensure wear indicator pins are correctly set. | Applicable to Series 3100 and 3200 aircraft as detailed in Alert Service Bulletin. Compliance required as detailed in Alert Service Bulletin. |
| 007–07–98 | 27–A–JA980606 | *Flight Controls* – Elevator – Failure of the bearing in the bias spring. | Applicable to Mk 1, Series 200, 3100 and 3200 aircraft. Compliance required as detailed in Alert Service Bulletin. |
| 005–08–98 | J41–52–060 | *Doors* – Cargo doors – Inspection of the mounting structure for the bottom rollers of the main baggage bay door and inspection of the door counter-balance mechanism. | Applicable to all Series 4100 aircraft post Modification JM41036B or on which Service Bulletin J41–53–008 has been accomplished. Compliance required as detailed in Service Bulletin. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
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| 007–08–98 | J41–25–075 Rev 3 or later revision | *Equipment/Furnishings* – Compliance with front row passenger head impact requirements. | Applicable to Series 4100 aircraft Constructors Nos. 41004 through 41101 and 41103. Compliance required as detailed in Service Bulletin. |
| 003–09–98 | 32–JA900942 | *Landing Gear* – Introduction of new nose wheel steering jack seals. | Applicable to Mk 1, Series 200, 3100 and 3200 aircraft fitted with nose landing gear types 1873, B00A702852A, B00A703064A and B00A703056A. Compliance required as detailed in Service Bulletin. |
| 006–09–98 | J41–27–052 | *Flight Controls* – Strengthening of elevator and rudder controls at the rear pressure bulkhead. | Applicable to all Series 4100 aircraft. Compliance required as detailed in Service Bulletin. |
| 006–10–98 | 32–A–JA980840 | *Landing Gear* – Nose wheel steering – Inspection for correct operation and free play in the nose wheel steering system. | Applicable to Mk 1, Series 200, 3100 and 3200 aircraft. Compliance required as detailed in Alert Service Bulletin. |
| 007–10–98 | 32–JA980841 | *Landing Gear* – Nose wheel steering – Introduction of steering selector valve overhaul life. | Applicable to Mk 1, Series 200, 3100 and 3200 aircraft. Compliance required as detailed in Service Bulletin. |
| 012–03–99 | 32–JA981043 | *Landing Gear* – Nose landing gear – Lubrication and free movement check of steering jack. | Applicable to Mk 1, Series 200, 3100 and 3200 aircraft fitted with nose landing gear types 1873, B00A702852A, B00A703064A and B00A703056A. Compliance required as detailed in Service Bulletin. |
| 005–04–99 | J41–28–010 | *Fuel* – Distribution – Protection of the cable assembly to the fuel standby (boost) pump (left and right). | Applicable to all Series 4100 aircraft. Compliance required as detailed in Service Bulletin. |
| 004–05–99 | J41–11–024 | *Placards and Markings* – Introduction of a temporary placard to prohibit aircraft pushback with engines running. | Applicable to all Series 4100 aircraft. Compliance required as detailed in Alert Service Bulletin. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
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| 003–09–99 | 28–A–JA990841 | *Fuel* – Quantity indication – Damaged insulation on wires to the contents units in the fuel tanks. | Applicable to all Series 3200 aircraft. Compliance required as detailed in Alert Service Bulletin. Compliance with CAA AD 001–03–2002 (Service Bulletin 28–JM8226) is terminating action. |
| 005–09–99 | J41–A–27–053 | *Flight Controls* – Inspection of elevator cable tension regulator lever. | Applicable to all Series 4100 aircraft. Compliance required as detailed in Alert Service Bulletin. |
| 007–09–99 | J41–32–068 | *Landing Gear* – Inspection and rectification of main landing gear retract actuator ramrod piston retaining nut. | Applicable to Series 4100 aircraft fitted with main landing gear retract actuators Part No. AIR86496 all suffixes. Compliance required as detailed in Service Bulletin. |
| 010–09–99 | 55–A–JA–990640 | *Stabiliser* – inspection of vertical stabiliser skins – Right and left hand side. | Applicable to Mk 1 and Series 200 aircraft. Compliance required as detailed in Alert Service Bulletin. |
| 006–12–99 | 53–JA990842 | *Fuselage* – Inspection for cracking on rudder quadrant support structure. | Applicable to Mk 1, Series 200, 3100 and 3200 aircraft except Constructors Nos. 936 and 940. Compliance required as detailed in Alert Service Bulletin. |
| 002–03–2000 | J41–A27–055 | *Flight Controls* – Rudder pedals – Elimination of potential restricted movement of the rudder pedals. | Applicable to all Series 4100 aircraft. Compliance required as detailed in Alert Service Bulletin. |
| 003–03–2000 | J41–53–046 | *Fuselage* – Introduction of 'D' packers to hydraulic hand pump mounting brackets. | Applicable to all Series 4100 aircraft. Compliance required as detailed in Service Bulletin. |
| 002–04–2000 | 32–JA 991140 | *Landing Gear* – Inspection of main landing gear radius rod. | Applicable to Mk 1, Series 200, 3100 and 3200 aircraft fitted with radius rod Part Nos. 1847 and 1862 all suffixes. Compliance required as detailed in Service Bulletin. |
| 003–04–2000 | 61–JK12170 | *Propellers* – Inspection of propeller blades for cracking and introduction of propeller limitation placard for McCauley propellers. | Applicable to Series 3200 aircraft fitted with McCauley propellers. Compliance required as detailed in Service Bulletin. |
| 004–05–2000 | 32–JA000342 | *Landing Gear* – Nose landing gear – Introduction of steering actuator with modified piston rod. | Applicable to Mk 1, Series 200, 3100 and 3200 aircraft. Compliance required as detailed in Service Bulletin. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 006–05–2000 | J41–27–059 | *Flying Controls* – Introduction of an elevator cable tension regulator incorporating secondary locking of the regulator input lever. | Applicable to all Series 4100 aircraft. Compliance required as detailed in Service Bulletin. |
| 006–11–2000 | 32–JA981042 | *Landing Gear* – Main and nose landing gears – To introduce life limitations and provide means of establishing total flight cycles since new for critical components. | Applicable to HP 137 Mk 1, Series 200, Series 3100 and Series 3200 aircraft. Compliance required as detailed in Service Bulletin. |
| 001–06–2001 | J41–53–047 | *Fuselage* – Introduction of detailed visual, radiographic and eddy current inspections of the nose fuselage structure between station 4 and station 11. | Applicable to all Series 4100 aircraft. Compliance required as detailed in Service Bulletin. |
| 001–07–2001 | J41–32–076 | *Landing Gear* – Nose landing gear – Introduction of a reduced life limit on the steering pinions. | Applicable to all Series 4100 aircraft. Compliance required as detailed in Service Bulletin. |
| 005–07–2001 | 32–A–JA010740 | *Landing Gear* – Main landing gear – Inspection of radius rods for heat treatment standard. | Applicable to HP 137 Mk 1, Series 200, Series 3100 and Series 3200 aircraft. Compliance required as detailed in Service Bulletin. |
| 004–10–2001 | J41–A32–079 | *Landing Gear* – Inspection of nose landing gear casing for cracks. | Applicable to Series 4100 aircraft. Compliance required as detailed in Service Bulletin. |
| 001–11–2001 | J41–A61–012 | *Propellers* – Propeller assembly – Reduced performance due to loss of propeller efficiency. | Applicable to Series 4100 aircraft. Compliance required as detailed in Alert Service Bulletin. |
| 006–11–2001 | SB J41-27-061 | *Flight Controls* – Aileron trim – Installation of a chain on the trim screw jack that cannot be installed incorrectly. | Applicable to Series 4100 aircraft. Compliance required as detailed in Service Bulletin. |
| 003-01-2002 | J41-53-051 | *Fuselage* - Introduction of detailed visual inspection of aft fuselage frames. | Applicable to Series 4100 aircraft. Compliance required as detailed in Service Bulletin. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
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| 004–01–2002 Revision 1 | SB 55-JA010941 | *Stabilisers* – Introduction of a detail visual inspection of the vertical stabiliser attachment fittings and introduction of corrosion preventative treatment. | Service Bulletin 55–JA010941 withdrawn at Revision 1, superseded by Service Bulletin 55–JA020543 (CAA AD 004–10–2002). Therefore AD 004–01–2002 is cancelled at Revision 1. |
| 005–01–2002 | SB J41-53-050 | *Fuselage* – Introduction of detailed visual inspection of the passenger cabin seat rails. | Applicable to Series 4100 aircraft. Compliance required as detailed in Service Bulletin. |
| 006–01–2002 Revision 1 | SB J41-55-011 | *Stabilisers* – Introduction of a detail visual inspection of the vertical stabiliser attachment fittings and introduction of corrosion preventative treatment. | Service Bulletin J41–55–011 withdrawn at Revision 1, superseded by Service Bulletin J41–55–012 (CAA AD 005–10–2002). Therefore AD 006–01–2002 is cancelled at Revision 1. |
| 007–01–2002 | SB J41-32-080 | *Landing Gear* – Inspection of main landing gear door drive trunnion pins. | Applicable to Series 4100 aircraft. Compliance required as detailed in Service Bulletin. |
| 005–02–2002 | SB J41–51–001 | *Structures* – Introduction of new and revised inspections for fatigue and environmental damage. | Applicable to Series 4100 aircraft. Compliance required as detailed in Service Bulletin. |
| 001–03–2002 | SB 28–JM8226 | *Fuel* – Quantity indication – Installation of a new harness in the fuel tank and an inspection of the cable to the fuel boost pump (left and right). | Applicable to Series 3200 aircraft. Compliance required as detailed in Service Bulletin. The Service Bulletin supersedes and is the terminating action for CAA AD 003–09–99. |
| 007–04–2002 | SB J41-32-078 | *Landing Gear* – main and nose landing gears – To introduce life limitations. | Applicable to Series 4100 aircraft. Compliance required as detailed in Service Bulletin. |
| 006–08–2002 | SB J41–32–081 | *Landing Gear* – Introduction of overhaul lives for auxiliary components installed on the main and nose landing gear. | Applicable to Series 4100 aircraft. Compliance required as detailed in Service Bulletin. |
| 004–10–2002 | SB 55–JA020543 | *Stabilisers* – Introduction of a detailed visual inspection of the horizontal and vertical stabiliser attachment fittings. | Applicable to HP 137 Mk 1, Series 200, Series 3100 and 3200 aircraft. Compliance required as detailed in Service Bulletin. Cancels and supersedes CAA AD 004–01–2002. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 005–10–2002 | SB J41–55–012 | *Stabilisers* – Introduction of a detailed visual inspection of the vertical and horizontal stabiliser attachment fittings. | Applicable to Series 4100 aircraft. Compliance required as detailed in Service Bulletin. Cancels and supersedes CAA AD 006–01–2002. |
| 003–11–2002 | SB 32–JA020741 | *Landing Gear* – Inspection of steering jack piston rod for cracks. | Applicable to HP 137 Mk 1, Series 200, Series 3100 and 3200 aircraft. Compliance required as detailed in Service Bulletin. |
| 006–02–2003 | SB 57–JA020740 | *Wing* – Inspection of bolts at wing stub spigot post assembly at frame 199. | Applicable to HP 137 Mk 1, Series 200, Series 3100 and 3200 aircraft. Compliance required as detailed in Service Bulletin. |
| 003–05–2003 | SB 51–JA020940 | *Structures* – Introduction of new and revised inspections for fatigue damage. | Cancelled and superseded by AD G–2004–0017. |
| 003–06–2003 | SB 32–JA030340 | *Landing Gear* – Inspection of radius rod spherical bearing. | Applicable to HP 137 Mk 1, Series 200, Series 3100 and 3200 aircraft. Compliance required as detailed in Service Bulletin. |
| 005–06–2003 | SB 57–JA021140 | *Wings* – Lower skin – Inspection of wing lower skin at inboard end of auxiliary spar boom and main landing gear cut-out doubler between wing stations 64 and 70. | Applicable to Series 3200 aircraft. Compliance required as detailed in Service Bulletin. |
| 006–06–2003 | SB J41–57–028 | *Wings* – Inspection of aileron rear spar. | Applicable to Series 4100 aircraft. Compliance required as detailed in Service Bulletin. |

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# United Kingdom Civil Aviation Authority

# AIRWORTHINESS DIRECTIVE

## AD No: G-2004-0003

Issue Date: 24 February 2004

This AD is issued by the UK CAA acting for and on behalf of the European Aviation Safety Agency as the Primary Aviation Authority (ICAO Annex 8 Authority of State of Design) for the affected product(s).

Approved by the European Aviation Safety Agency under approval number 2004-1538 on 24 February 2004.

In accordance with Article 9(7)(b) of the Air Navigation Order 2000 as amended the following action required by this Airworthiness Directive (AD) is mandatory for applicable aircraft registered in the United Kingdom.
No person may operate an aircraft to which an AD applies except in accordance with the requirements of that AD unless otherwise agreed with the Authority of the State of Registry.

| Type Approval Holders Name: | Type/Model Designation(s): |
|---|---|
| **BAE SYSTEMS (OPERATIONS) LTD** | **JETSTREAM 4100** |

**Type Certificate Data Sheet No:** BA27

**Superseded/ Revised ADs:** None

### ATA 32 - NOSE LANDING GEAR - INSPECTION - CHECK FOR FREE MOVEMENT OF THE CAPSULE

**Manufacturer(s):** BAE Systems/Jetstream Aircraft Ltd

**Applicability:** Model Jetstream 4100 all Series aeroplanes certificated in any category.

**Reason:** There have been two recent incidents reported by US operators of Jetstream 4100 aeroplanes conducting emergency landings with the nose landing gear not fully extended. Initial investigations suggest that there may be a problem of binding between the upper and lower sliding/support bearings and the NLG capsule that is part of the shortening mechanism. Since these incidents two further reports were received from US operators relating to migration of the lower bearing through which the NLG capsule slides as the landing gear shortens, which is indicative of excessive friction between the bearing and capsule. High friction at the lower bearing may sometimes result in failure of the mechanisms that secure the bearing in position. This type of failure still allows the gear to fully extend and lock down. Whenever high friction is present at the upper bearing and/or the lower bearing that prevents free movement of the capsule, the NLG may ultimately fail to extend.

**Effective Date:** 25 February 2004

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**Compliance/Action:**

a) Within 300 cycles or 30 days of the effective date of this Airworthiness Directive, carry out the inspection of the nose landing gear capsule/bearing assemblies in accordance with paragraph 2 of BAE Systems (Operations) Service Bulletin J41-A32-082, Revision 1 and APPH Service Bulletin AIR83586-32-22 Revision 1, paragraph 2.A. (Part 1).

b) If the inspection in accordance with paragraph (a) of this Airworthiness Directive is satisfactory, carry out the inspection of the nose landing gear capsule/bearing assemblies in accordance with paragraph 2 of BAE Systems (Operations) Service Bulletin J41-A32-082, Revision 1 and APPH Service Bulletin AIR83586-32-22 Revision 1, paragraph 2.B. (Part 2), and then APPH Service Bulletin AIR83586-32-22 Revision 1, paragraph 2.A. (Part 1) within 3000 flight hours.

Repeat the inspection of the nose landing gear capsule/bearing assemblies in accordance with paragraph 2 of BAE Systems (Operations) Service Bulletin J41-A32-082, Revision 1 and APPH Service Bulletin AIR83586-32-22 Revision 1, paragraph 2.B. (Part 2), and then APPH Service Bulletin AIR83586-32-22 Revision 1, paragraph 2.A. (Part 1), at an interval not exceeding 3,000 flight hours.

c) If the inspection in accordance with paragraph (a) of this Airworthiness Directive is not satisfactory, carry out the inspection of the nose landing gear capsule/bearing assemblies in accordance with paragraph 2 of BAE Systems (Operations) Service Bulletin J41-A32-082, Revision 1 and APPH Service Bulletin AIR83586-32-22 Revision 1, paragraph 2.B. (Part 2), and then APPH Service Bulletin AIR83586-32-22 Revision 1, paragraph 2.A. (Part 1) prior to further flight.

d) If the inspection in accordance with paragraph (c) of this Airworthiness Directive is satisfactory carry out the inspection of the nose landing gear capsule/bearing assemblies in accordance with paragraph 2 of BAE Systems (Operations) Service Bulletin J41-A32-082, Revision 1 and APPH Service Bulletin AIR83586-32-22 Revision 1, paragraph 2.A. (Part 1) within 600 flight hours.

e) If the inspection in accordance with paragraph (c) of this Airworthiness Directive is not satisfactory, remove the NLG and install a replacement NLG.

f) Upon installation of a replacement NLG carry out the inspection of the nose landing gear capsule/bearing assemblies in accordance with paragraph 2 of BAE Systems (Operations) Service Bulletin J41-A32-082, Revision 1 and APPH Service Bulletin AIR83586-32-22 Revision 1, paragraph 2.A. (Part 1).

Complete the inspection of the replacement NLG in accordance with paragraph (b) through (e) of this Airworthiness Directive, as applicable.

**Reference Publications:** BAE Systems (Operations) Ltd Service Bulletin J41-A32-082, Revision 1 and APPH Ltd Service Bulletin AIR83586-32-33, Revision 1, may be obtained from Project Management Group, Customer Information Department, BAE Systems (Operations) Ltd, Prestwick International Airport, Ayrshire, KA9 2RW, Scotland. Telephone: +44 (0) 1292 675207 Facsimile: +44 (0) 1292 675704 E-mail: Rapublications@baesystems.com

**Remarks:** Enquiries regarding this Airworthiness Directive should be referred to Mr M P Gadd, Civil Aviation Authority, Programmes Department, Safety Regulation Group, Aviation House, Gatwick Airport South, West Sussex, RH6 0YR, United Kingdom. Telephone: +44 (0) 1293 573313 Facsimile: +44 (0) 1293 573976 E-mail: michael.gadd@srg.caa.co.uk

**Note:** This Airworthiness Directive was issued as an Emergency AD on 24 February 2004.

# United Kingdom Civil Aviation Authority

# AIRWORTHINESS DIRECTIVE

**AD No: G-2004-0017**

Issue Date: 22 July 2004

This AD is issued by the UK CAA acting for and on behalf of the European Aviation Safety Agency as the Primary Aviation Authority (ICAO Annex 8 Authority of State of Design) for the affected product(s).

Approved by the European Aviation Safety Agency under approval number 2004-7765 on 16 July 2004.

In accordance with Article 9(7)(b) of the Air Navigation Order 2000 as amended the following action required by this Airworthiness Directive (AD) is mandatory for applicable aircraft registered in the United Kingdom.
No person may operate an aircraft to which an AD applies except in accordance with the requirements of that AD unless otherwise agreed with the Authority of the State of Registry.

| Type Approval Holders Name: | Type/Model Designation(s): |
|---|---|
| **BAE SYSTEMS (OPERATIONS) LIMITED** | **BRITISH AEROSPACE REGIONAL AIRCRAFT JETSTREAM SERIES 3200** |

**Type Certificate Data Sheet No:** BA15

**Superseded AD:** 003-05-2003

## ATA 51 - STRUCTURES - INSPECTION - INTRODUCTION OF NEW AND REVISED INSPECTIONS FOR FATIGUE DAMAGE

**Manufacturer(s):** Scottish Aviation Ltd, Jetstream Aircraft Ltd, British Aerospace (Regional Aircraft) Ltd, British Aerospace (Operations) Ltd, BAE Systems (Operations) Ltd.

**Applicability:** Model British Aerospace Regional Aircraft Jetstream 3200 Series aeroplanes, certificated in any category.

**Reason:** A review of the Jetstream 3200 structure has been completed as part of an aircraft life extension investigation. This has generated a series of additional safety related inspections of the fuselage and wing structures. Details of these inspections were published in BAE Systems Service Bulletin (SB) 51-JA020940, Original Issue dated 22 August 2003.

This Airworthiness Directive (AD) supersedes CAA AD 003-05-2003 and mandates the contents of Revision 1 of BAE Systems Service Bulletin 51-JA020940. The SB now contains revised inspection techniques deemed necessary to adequately accomplish certain inspection tasks, and to specify grace periods applicable for aircraft that have exceeded the initial inspection thresholds specified in the SB.

**Effective Date:** 5 August 2004

continued on next page

**Compliance/Action:** From the effective date of this AD perform the inspections at the threshold and intervals specified in BAE Systems Service Bulletin 51-JA020940, Revision 1, STRUCTURES - Introduction of New and Revised Inspections for Fatigue Damage, dated 20 May 2004, or later EASA approved revision. If any damage is found, repairs must be performed in accordance with the aircraft structural repair manual or other approved repair scheme.

For the inspection task defined in BAE Systems Service Bulletin 51-JA020940, Revision 1, Appendix 1, Paragraph M, Part 14 (Inspection of Window Pans), attention is drawn to the fact that the Service Bulletin in original issue contained a typographical error. This may have resulted in confusion as to the level of inspection required. If a detailed visual inspection was performed with the windows removed then full credit can be taken for the accomplishment of the initial inspection. If a detailed visual inspection was performed with the windows installed the clarified Non Destructive Inspection task stated in BAE Systems Service Bulletin 51-JA020940, Revision 1, Appendix 1, Paragraph M, Part 14, must be performed before 1 July 2005. Thereafter, all subsequent Window Pan inspections are to be accomplished on or before the repeat interval stated in BAE Systems Service Bulletin 51-JA020940, Revision 1 or later EASA approved revision.

Credit may be taken for the remaining inspections previously accomplished in accordance with BAE Systems Service Bulletin 51-JA020940, Original issue, where the inspection task is unchanged by BAE Systems Service Bulletin 51-JA020940, Revision 1.

Notes: New requirements introduced by SB 51-JA020940, Revision 1, are stated in Paragraph M - Approval, Appendix 2, Part 1. For the tasks defined in SB 51-JA020940, Revision 1, Appendix 1, Paragraph M, Parts 14 and 15, where the initial inspection interval is stated as 25,800 landings or 10 years, the requirement: whichever occurs first, is to apply. Where the Repeat inspection interval is stated as: 4400 landings or 2 years, the requirement: which ever occurs first, is to apply. Where the inspection interval is stated as: 4400 landings or D check, this is to be read as: 4400 landings or 2 years whichever occurs first.

**Reference Publications:** BAE Systems Service Bulletin 51-JA020940, Revision 1, may be obtained from Project Management Group, Customer Information Department, BAE Systems (Operations) Ltd, Prestwick International Airport, Ayrshire, KA9 2RW, Scotland. Telephone: +44 (0) 1292 675207, Facsimile: +44 (0) 1292 675704, E-mail: RApublications@baesystems.com

**Remarks:** Enquiries regarding this Airworthiness Directive should be referred to Mr A Sanderson, Civil Aviation Authority, Aircraft Certification Section, Safety Regulation Group, Aviation House, Gatwick Airport South, West Sussex, RH6 0YR, United Kingdom. Telephone: +44 (0) 1293 573530, Facsimile: +44 (0) 1293 573855, E-mail: andrew.sanderson@srg.caa.co.uk

# United Kingdom Civil Aviation Authority

# AIRWORTHINESS DIRECTIVE

## AD No: G-2004-0018

Issue Date: 22 July 2004

This AD is issued by the UK CAA acting for and on behalf of the European Aviation Safety Agency as the Primary Aviation Authority (ICAO Annex 8 Authority of State of Design) for the affected product(s).

Approved by the European Aviation Safety Agency under approval number 2004-7766 on 16 July 2004.

In accordance with Article 9(7)(b) of the Air Navigation Order 2000 as amended the following action required by this Airworthiness Directive (AD) is mandatory for applicable aircraft registered in the United Kingdom.
No person may operate an aircraft to which an AD applies except in accordance with the requirements of that AD unless otherwise agreed with the Authority of the State of Registry.

| Type Approval Holders Name: | Type/Model Designation(s): |
|---|---|
| **BAE SYSTEMS (OPERATIONS) LIMITED** | **BRITISH AEROSPACE REGIONAL AIRCRAFT JETSTREAM SERIES 3100** |

**Type Certificate Data Sheet No:** BA15

**Superseded/ Revised ADs:** None

### ATA 51 - STRUCTURES - INSPECTION - INTRODUCTION OF NEW AND REVISED INSPECTIONS FOR FATIGUE DAMAGE

**Manufacturer(s):** Scottish Aviation Ltd, Jetstream Aircraft Ltd, British Aerospace (Regional Aircraft) Ltd, British Aerospace (Operations) Ltd, BAE Systems (Operations) Ltd.

**Applicability:** All British Aerospace Regional Aircraft Jetstream Series 3100 aeroplane, certificated in any category.

**Reason:** The results of the formal review of the Jetstream 3200 wing fatigue test and aircraft life investigation have been read across to the Jetstream 3100 aircraft. In conjunction, an extensive review of the results of the Jetstream 3100 fatigue test has been completed and has identified the need to introduce additional safety related inspections.

**Effective Date:** 5 August 2004

**Compliance/Action:** From the effective date of this AD, perform the inspections at the thresholds and intervals specified in BAE Systems Service Bulletin 51-JA030544, Revision 1, STRUCTURES – Introduction of New and Revised Inspections for Fatigue Damage, dated 25 May 2004 or later EASA approved revision. If any damage is found, repairs must be performed in accordance with the aircraft structural repair manual or other approved repair scheme.

For the inspection task defined in BAE Systems Service Bulletin 51-JA030544, Revision 1, Appendix 1, Paragraph M, Part 14 (Inspection of Window Pans), attention is drawn to the fact that the Service Bulletin in the original issue contained a typographical error. This may have resulted in confusion as to the level of inspection required. If a detailed visual inspection was performed with the windows removed then full credit can be taken for accomplishment of the initial inspection. If a detailed visual inspection was performed with the windows installed the clarified non destructive inspection task stated in BAE Systems Service Bulletin 51-JA030544, Revision 1, Appendix 1, Paragraph M, Part 14, must performed before 1 July 2005. Thereafter, all subsequent Window Pan inspections are to be accomplished on or before the repeat interval stated in BAE Systems Service Bulletin 51-JA030544, Revision 1 or later EASA approved revision.

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Credit may be taken for the remaining inspections previously accomplished in accordance with BAE Systems Service Bulletin 51-JA030544, Original issue, where the inspection task is unchanged by BAE Systems Service Bulletin 51-JA030544, Revision 1.

Notes: New requirements introduced by SB 51-JA030544, Revision 1, are stated in Paragraph M – Approval, Appendix 2, Part 1. For the tasks defined in SB 51-JA030544, Revision 1, Appendix 1, Paragraph M, Parts 14 and 15, where the initial inspection interval is stated as 25,800 landings or 10 years, the requirement: whichever occurs first, is to apply. Where the Repeat inspection interval is stated as: 4400 landings or 2 years, the requirement: which ever occurs first, is to apply. Where the inspection interval is stated as: 4400 landings or D check, this is to be read as: 4400 landings or 2 years whichever occurs first.

**Reference Publications:** BAE Systems Service Bulletin 51-JA030544, Revision 1, may be obtained from Project Management Group, Customer Information Department, BAE Systems (Operations) Ltd, Prestwick International Airport, Ayrshire, KA9 2RW, Scotland. Telephone: +44 (0) 1292 675207 Facsimile: +44 (0) 1292 675704 E-mail: RApublications@baesystems.com

**Remarks:** Enquiries regarding this Directive should be referred to Mr A Sanderson, Civil Aviation Authority, Aircraft Certification Section, Safety Regulation Group, Aviation House, Gatwick Airport South, West Sussex, RH6 0YR, United Kingdom. Telephone: +44 (0) 1293 573530, Facsimile: +44 (0) 1293 573855, E-mail: andrew.sanderson@srg.caa.co.uk

## BAC ONE-ELEVEN

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 0676 PRE 80 | 24–PM741 | *Electrical Power* – To introduce AEI Contactors LDG 100Y21C in lieu of LDG 100Y17C, in generator SSB and ground fan control circuit. | Applicable to 200, 300 and 400 Series. Compliance required as detailed in Service Bulletin. |
| 0677 PRE 80 | 28–PM924 | *Fuel* – To redesign Mark 41 re-fuel valve housing in centre section torque box to change material from Light Alloy to Stainless Steel. | Applicable to 200 Series. Compliance required as detailed in Service Bulletin. |
| 0678 PRE 80 | 55–A–PM1247 | *Stabilizers* – Tailplane – Cracking of lower surface stringers. | Applicable to 200 Series. Compliance required as detailed in Service Bulletin. Superseded by PM1247(c) to PM994. |
| 0679 PRE 80 | 27–A–PM1248 | *Flight Controls* – Rudder Feel Simulator Unit – Fatigue limitation. | Applicable to 200, 300 and 400 Series. Compliance required as detailed in Service Bulletin. Superseded by 27–PM1248. |
| 0680 PRE 80 | 23–PM1377 | *Communications* – To record Collins Radio Service Bulletin No. 17 on 618M Series VHF transceivers. | Applicable to 200 and 400 Series. Compliance required as detailed in Service Bulletin. |
| 0681 PRE 80 | 32–A–PM1469 | *Landing Gear* – Cracking of main landing gear torque link lugs. | Applicable to 200 Series. Compliance required as detailed in Service Bulletin. Superseded by PM1558(c) and PM1469(g). |
| 0682 PRE 80 | 34–PM1538 | *Navigation* – To introduce five second time delay in stall correction system. | Applicable to 200 and 400 Series. Compliance required as detailed in Service Bulletin. |
| 0683 PRE 80 | 27–A–PM1559 | *Flight Controls* – Elevator PCU Centralising Spring Pot – Sticking of spring pot and damage to special nut. | Applicable to 200, 300 and 400 Series. Compliance required as detailed in Service Bulletin. Superseded by PM 1559. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 0684 PRE 80 | 33–PM1706 | *Lights* – To revise design of freight hold light assemblies. | Applicable to 200, 300 and 400 Series. Compliance required as detailed in Service Bulletin. |
| 0685 PRE 80 | 27–A–PM1715 | *Flight Controls* – Rudder – Range of movement and operating jack eye ends. | Applicable to 200, 300, 400, 475 and 500 Series. Compliance required as detailed in Service Bulletin. Superseded by 27–PM1715(a)(b)(c) or (d). |
| 0686 PRE 80 | 27–PM1715 | *Flight Controls* – To introduce rudder jacks giving ±21° rudder movement and to revise torque shaft stops. | Applicable to 200, 300 and 400 Series. Compliance required as detailed in Service Bulletin. |
| 0687 PRE 80 | 49–A–PM1773 | *Airborne Auxiliary Power* – APU – Fuel leakage at atomiser housing. | Applicable to 200, 300 and 400 Series. Compliance required as detailed in Service Bulletin. Superseded by PM1773. |
| 0688 PRE 80 | 32–PM1793 | *Landing Gear* – To provide strengthened guards left and right sides of nosewheel bay. | Applicable to 200, 300 and 400 Series. Compliance required as detailed in Service Bulletin. |
| 0689 PRE 80 | 32–A–PM1810 | *Landing Gear* – Nose landing gear – retraction with shock absorber strut not fully extended. | Applicable to 200, 300 and 400 Series. Compliance required as detailed in Service Bulletin. Superseded by 32–PM1810, 32–PM1793 and 32–PM1913. |
| 0690 PRE 80 | 32–PM1810 | *Landing Gear* – To revise the test instructions for the nose undercarriage. | Applicable to 200, 300 and 400 Series. Compliance required as detailed in Service Bulletin. |
| 0691 PRE 80 | 32–PM1913 | *Landing Gear* – To add steel reinforcing strip and cleat on nosewheel accumulator guard to prevent guard melting due to friction loads incurred when the oleo is retracted in a collapsed state with wheels spinning. | Applicable to 200 Series. Compliance required as detailed in Service Bulletin. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 0692 PRE 80 | 27–A–PM1928 | *Flight Controls* – Flap secondary transmission shaft joint. | Applicable to 200, 300 and 400 Series. Compliance required as detailed in Service Bulletin. Superseded by PM1928(a)(b), PM2720(a) or (b) or PM2928(f)(g) or PM2757, PM2720(c). |
| 0693 PRE 80 | 36–A–PM1994 | *Pneumatic* – Integrated air system – Electrical power distribution. | Applicable to 200 Series. Compliance required as detailed in Service Bulletin. Superseded by 36–PM1994. |
| 0694 PRE 80 | 36–PM1994 | *Pneumatic* – To revise distribution of air conditioning and anti-icing systems. | Applicable to 200, 300 and 400 Series. Compliance required as detailed in Service Bulletin. |
| 0695 PRE 80 | 53–A–PM2107 | *Fuselage* – Fuselage structure – Chafing of engine mounting frame at Station 778. | Applicable to 200 Series. Compliance required as detailed in Service Bulletin. Superseded by 53–PM2107. |
| 0696 PRE 80 | 53–PM2107 | *Fuselage* – To cut away vertical flange of roof head-liner to clear flange of forward engine frame. | Applicable to 200, 300 and 400 Series. Compliance required as detailed in Service Bulletin. |
| 0697 PRE 80 | 27–A–PM2245 | *Flight Controls* – Flap carriage link assembly. | Applicable to 200, 300 and 400 Series. Compliance required as detailed in Service Bulletin. Superseded by 27–PM2245. |
| 0698 PRE 80 | 27–PM2273 | *Flight Controls* – To improve functioning of elevator control spring pot assembly in hot and cold soak conditions. | Applicable to 200, 300 and 400 Series. Compliance required as detailed in Service Bulletin. |
| 0699 PRE 80 | 35–A–PM2320 | *Oxygen* – Crew Oxygen masks. | Applicable to 201, 207, 208, 211 and 301 Series. Compliance required as detailed in Service Bulletin. Superseded by 32–PM2320. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 0700 PRE 80 | 35–PM2320 | *Oxygen* – To record Walter Kidde Mod. 6044. Introduction of improved oxygen masks. | Applicable to 200 and 300 Series. Compliance required as detailed in Service Bulletin. |
| 0701 PRE 80 | 24–PM2334 | *Electrical Power* – To allow split system breaker to be supplied from either generator control panel supply in the event of loss of DC essential bus-bar. | Applicable to 200, 300 and 400 Series. Compliance required as detailed in Service Bulletin. |
| 0702 PRE 80 | 31–PM2418 | *Instruments* – To add resistors in pitch circuit to flight recorder. | Applicable to 300 and 400 Series. Compliance required as detailed in Service Bulletin. |
| 0703 PRE 80 | 32–A–PM2437 | *Landing Gear* – Nose and main undercarriage lock jacks – Belleville washers. | Applicable to 200, 300 and 400 Series. Compliance required as detailed in Service Bulletin. Superseded by 32–PM2437. |
| 0704 PRE 80 | 27–A–PM2469 | *Flight Controls* – Flap jack screws/carriage rollers – clearance. | Applicable to 300 and 400 Series. Compliance required as detailed in Service Bulletin. Superseded by 27–PM2469(a) or (b) or (b)(c)(d) or (e) and (f) or (g). |
| 0705 PRE 80 | 32–A–PM2496 | *Landing Gear* – Nosewheel steering jack – gland nut. | Applicable to 200 Series. Compliance required as detailed in Service Bulletin. Superseded by 32–PM2496. |
| 0706 PRE 80 | 53–A–PM2510 | *Fuselage* – Keel member forward saddle bracket structure – failure. | Applicable to 300 and 400 Series. Compliance required as detailed in Service Bulletin. |
| 0707 PRE 80 | 36–PM2545(a) | *Pneumatic* – To replace 'Engle and Gibbs' overheat switch by 'Graviner'. | Applicable to 200, 300, 400 and 500 Series. Compliance required as detailed in Service Bulletin. 21–PM2780 is an acceptable alternative. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 0708 PRE 80 | 55/57–A–PM2597 | *Stabilizers* – Flying control surfaces and tabs. | Applicable to 200, 300 and 400 Series. Compliance required as detailed in Service Bulletin. |
| 0709 PRE 80 | 54–A–PM2649 | *Nacelles/Pylons* – Loss of engine wing access panels LH and RH (Access to integrated air system PRVs). | Applicable to 200, 300 and 400 Series. Compliance required as detailed in Service Bulletin. Superseded by 54–PM2649. |
| 0710 PRE 80 | 27–A–PM2650 | *Flight Controls* – Emergency elevator control system. | Applicable to 200 Series. Compliance required as detailed in Service Bulletin. |
| 0711 PRE 80 | 28–A–PM2701 | *Fuel* – To provide a secondary stop to the Thompson Ramo Fuel booster pump installation in the centre fuel tank. | Applicable to 211, 212, 301, 401, 402 and 410 Series. Compliance required as detailed in Service Bulletin. Superseded by 28–PM2701. |
| 0712 PRE 80 | 28–PM2701 | *Fuel* – To provide a secondary stop to Thompson fuel booster pump installation in centre tank. | Applicable to 200, 300 and 400 Series. Compliance required as detailed in Service Bulletin. |
| 0713 PRE 80 | 55–A–PM2706 | *Stabilizers* – Replacement of the attachment pin fitted to the lower beak rib stabilizer pivot assembly. | Applicable to 200, 300 and 400 Series. Compliance required as detailed in Service Bulletin. Superseded by 55–PM2706. |
| 0714 PRE 80 | 55–A–PM2707 | *Stabilizers* – Re-inforcement of fin top rib actuator fitting. | Applicable to 200, 300 and 400 Series. Compliance required as detailed in Service Bulletin. Superseded by 55–PM2707. |
| 0715 PRE 80 | 55–PM2707 | *Stabilizers* – To reinforce fin rib actuator fitting. | Applicable to 200, 300 and 400 Series. Compliance required as detailed in Service Bulletin. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 0716 PRE 80 | 34–PM2709 | *Navigation* – To provide additional support clips and tie the electrical cables to the connector shelves of the stick push static inverter panel. | Applicable to 200, 300 and 400 Series. Compliance required as detailed in Service Bulletin. |
| 0717 PRE 80 | 55–A–PM2730 | *Stabilizers* – Cracking of fin ribs and stringer cleats. | Applicable to 200 Series only. Compliance required as detailed in Service Bulletin. |
| 0718 PRE 80 | 27–A–PM2757 | *Flight Controls* – Flap Secondary Transmission – Corrosion of bearing support housing. | Applicable to 200, 300 and 400 Series. Compliance required as detailed in Service Bulletin. |
| 0719 PRE 80 | 29–A–PM2758 | *Hydraulic Power* – Thermal relief valve failure – No. 2 auxiliary hydraulic power system. | Applicable to 200 Series (Post Modification PM1653 aircraft only). Compliance required as detailed in Service Bulletin. |
| 0720 PRE 80 | 29–PM2758 | *Hydraulic Power* – To introduce BAC choke valve AB 48A1427 in lieu of Lockheed NRV AIR 91178 and delete Lockheed thermal relief valve AIR 91186/2. | Applicable to 200 Series (Post Modification PM1653 aircraft only). Compliance required as detailed in Service Bulletin. |
| 0721 PRE 80 | 34–PM2784 | *Navigation* – To revise stall warning (stick push) circuit to prevent a single oleo relay failure invalidating the time delay in both shake and push system. | Applicable to 200, 300 and 400 Series. Compliance required as detailed in Service Bulletin. |
| 0722 PRE 80 | 34–A–PM2789 | *Navigation* – Airspeed and mach number indicators – sticking of pointer. | Applicable to 215, 401, 402, 410, 407, 408, 409, 412 and 320L Series. Compliance required as detailed in Service Bulletin. Superseded by 34–PM2789. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 0723 PRE 80 | 34–PM2789 | *Navigation* – To record Kollsman Service Bulletin 180. To obviate fouling of indicating pointer on airspeed and mach number indicator. | Applicable to 400 Series. Compliance required as detailed in Service Bulletin. |
| 0724 PRE 80 | 35–A–PM2795 | *Oxygen* – To record Walter Kidde Mods. to oxygen mask facepiece. (To introduce Silicone SY 40 in lieu of Hycathane 300/2021). | Applicable to 203, 204, 212, 304, 401, 402, 407, 408, 409, 410 and 412 Series, where the installation of a drop-out oxygen system is a requirement. Compliance required as detailed in Service Bulletin. |
| 0725 PRE 80 | 76–A–PM2837 | *Engine Controls* – Engine throttle handle – broken reverse thrust plunger assembly. | Applicable to 200, 300 and 400 Series. Compliance required as detailed in Service Bulletin. Superseded by 76–PM2837. |
| 0726 PRE 80 | 76–PM2837 | *Engine Controls* – To redesign plunger unit of reverse thrust selection mechanism in throttle handles. | Applicable to 200, 300 and 400 Series. Compliance required as detailed in Service Bulletin. |
| 0727 PRE 80 | 24–PM2865 | *Electrical Power* – To transfer supply for standby Gyro Horizon from No. 2 AC Main bus-bar to AC essential bus-bar. | Applicable to 400 Series. Compliance required as detailed in Service Bulletin. |
| 0728 PRE 80 | 49–PM2891 | *Airborne Auxiliary Power* – To introduce separate control for the APU start contactor. | Applicable to 200, 300 and 400 Series. Compliance required as detailed in Service Bulletin. |
| 0729 PRE 80 | 32–A–PM2898 | *Landing Gear* – Main Landing Gear – Lower sidestay pin retaining bolt. | Applicable to 200, 300 and 400 Series (Post Modification PM1558 Part C aircraft only). Compliance required as detailed in Service Bulletin. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 0730 PRE 80 | 28–PM2914 | *Fuel* – To revise fuel system joint at Station 630 bulkhead left hand and right hand. | Applicable to 200 Series. Compliance required as detailed in Service Bulletin. |
| 0731 PRE 80 | 27–PM2946 | *Flight Controls* – To revise rudder bar locking spring retainer to improve resistance to application of high hand loads. | Applicable to 200, 300 and 400 Series. Compliance required as detailed in Service Bulletin. |
| 0732 PRE 80 | 26–A–PM2966 | *Fire Protection* – Auxiliary Power Unit Fire Extinguisher – Failure – Engine Fire Extinguisher Failure. | Applicable to 200, 300 and 400 Series except 203 and 212. Compliance required as detailed in Service Bulletin. |
| 0733 PRE 80 | 27–A–PM2992 | *Flight Controls* – Flap drive screw and nut assemblies. | Applicable to 200, 300, 400, 475 and 500 Series. Compliance required as detailed in Service Bulletin. |
| 0734 PRE 80 | 27–A–PM3034 | *Flight Controls* – Flap Secondary Transmission Shaft – Failure. | Applicable to 300 and 400 Series. Compliance required as detailed in Service Bulletin. |
| 0735 PRE 80 | 32–A–PM3069 | *Landing Gear* – Nose undercarriage – Retraction Jack Piston Head. | Applicable to 200 Series. Compliance required as detailed in Service Bulletin. |
| 0736 PRE 80 | 34–PM3083 | *Navigation* – To revise fin mounted pitot tapping to flight recorder to obviate possible collection of condensation. | Applicable to 400 Series. Compliance required as detailed in Service Bulletin. |
| 0737 PRE 80 | 30–A–PM3092 | *Ice and Rain Protection* – Windscreen heating circuit – Failures of the auto-transformer. | Applicable to 200, 300 and 400 Series. Compliance required as detailed in Service Bulletin. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 0738 PRE 80 | 30–PM3092 | *Ice and Rain Protection* – To revise value of main windscreen bleed resistors, introduce capacitors into circuit and delete bleed resistors from side screen heating circuit. | Applicable to 200, 300, 400 and 500 Series. Compliance required as detailed in Service Bulletin. |
| 0739 PRE 80 | 49–A–PM3122 | *Airborne Auxiliary Power* – Auxiliary power unit operation. | Applicable to 200, 300 and 400 Series. Compliance required as detailed in Service Bulletin. |
| 0740 PRE 80 | 27–A–PM3290 | *Flight Controls* – Rudder and elevator controls – Artificial feel system. | Applicable to 200, 300 and 400 Series. Compliance required as detailed in Service Bulletin. |
| 0741 PRE 80 | 49–A–PM3313 | *Auxiliary Power Unit* – 'Feltmetal' Jet – Pipes. | Applicable to 200, 300 and 400 Series. Compliance required as detailed in Service Bulletin. |
| 0742 PRE 80 | 49–PM3313 | *Airborne Auxiliary Power* – To revise the material of APU Jet pipe from 'Feltmetal' type 430 to 'Feltmetal' type 347. | Applicable to 200, 300, 400 and 500 Series. Compliance required as detailed in Service Bulletin. |
| 0743 PRE 80 | 52–PM3329 | *Doors* – To introduce micro switch to safety hook, and fit two green safety lights on passenger/ service doors. Improve operation, door warning switch assemblies. | Applicable to 200, 300 and 400 and 500 Series. Compliance required as detailed in Service Bulletin. |
| 0744 PRE 80 | 29–PM3345 | *Hydraulic Power* – To introduce $^{5}/_{16}$" diameter feel unit hydraulic return pipes in lieu of $^{1}/_{4}$" diameter. | Applicable to 200 Series. Compliance required as detailed in Service Bulletin. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 0745 PRE 80 | 27–PM3371 | *Flight Controls* – To record Hobson Mod. HCA402 (Introduction of Vortex Restrictors). | Applicable to 200, 300, 400 and 500 Series. Compliance required as detailed in Service Bulletin. |
| 0746 PRE 80 | 27–PM3372 | *Flight Controls* – To provide feel system indication. | Applicable to 200, 300, 400 and 500 Series. Compliance required as detailed in Service Bulletin. |
| 0747 PRE 80 | 32–A–PM3509 | *Landing Gear* – Nose landing gear sustaining ram – Cracks in vicinity of ram axle lugs. | Applicable to 300, 400, 475 and 500 Series. Compliance required as detailed in Service Bulletin. |
| 0748 PRE 80 | 27–PM3536 | *Flight Controls* – To review elevator control spring pot assembly to improve fail-safe characteristics. | Applicable to 200, 300, 400 and 500 Series. Compliance required as detailed in Service Bulletin. |
| 0749 PRE 80 | 27–A–PM3550 | *Flight Controls* – Flap signalling mechanism. | Applicable to 200, 300, 400 and 500 Series. Compliance required as detailed in Service Bulletin. |
| 0750 PRE 80 | 27–PM3550 | *Flight Controls* – To reduce friction at the flap input guide on the flap control unit and add a spring to give a ‘Flaps Up’ bias. | Applicable to 200, 300, 400 and 500 Series. Compliance required as detailed in Service Bulletin. |
| 0751 PRE 80 | 49–A–PM3579 | *Airborne Auxiliary Power* – Auxiliary power unit, leaking fuel pipe, connecting low pressure filter to APU. | Applicable to 200, 300 and 400 Series. Compliance required as detailed in Service Bulletin. |
| 0752 PRE 80 | 53–A–PM3620 | *Fuselage* – Keel member forward saddle bracket failure. | Applicable to 200 Series. Compliance required as detailed in Service Bulletin. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 0753 PRE 80 | 52–A–PM3682 | *Doors* – Service door – Suspect side member material thickness. | Applicable to 200, 300 and 400 Series. Compliance required as detailed in Service Bulletin. |
| 0754 PRE 80 | 52–A–PM3701 | *Doors* – Ventral airstairs – Starboard hinge bolt – insecurity. | Applicable to 200, 300, 400 and 500 Series. Compliance required as detailed in Service Bulletin. |
| 0755 PRE 80 | 57–A–PM3793 | *Wings* – Aileron tab – Filler and Mod. plate assembly. | Applicable to 200, 300, 400 and 500 Series. Compliance required as detailed in Service Bulletin. |
| 0756 PRE 80 | 27–A–PM3917 | *Flight Controls* – Rudder control – Introduction of a time delay unit into the rudder feel warning circuit. | Applicable to 200, 300, 400 and 500 Series. Compliance required as detailed in Service Bulletin. |
| 0757 PRE 80 | 27–PM3917 | *Flight Controls* – To introduce diamond 'H' time delay unit to rudder feel warning circuit. | Applicable to 200, 300, 400 and 500 Series. Compliance required as detailed in Service Bulletin. |
| 0758 PRE 80 | 27–A–PM3945 | *Flight Controls* – Elevator switch coupling – Drive pin. | Applicable to 200, 300, 400, 475 and 500 Series. Compliance required as detailed in Service Bulletin. |
| 0759 PRE 80 | 32–PM4056 | *Landing Gear* – Anti skid system – To record Dunlop Mod. C1240 to Hytol Control Box (Introduction of 42–157–1 in lieu of 42–157). | Applicable to 500 Series. Compliance required as detailed in Service Bulletin. |
| 0760 PRE 80 | 33–A–PM4169 | *Lights* – Flight deck roof centre electrical panel – Fire prevention. | Applicable to 200, 300, 400 and 500 Series. Compliance required as detailed in Service Bulletin. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 0761 PRE 80 | 33–PM4169 | *Lights* – To revise centre roof panel electrical bonding and structure, oxygen system roof furnishing panels, electric loom supports and radio panel lighting CB rating. | Applicable to 200, 300, 400 and 500 Series. Compliance required as detailed in Service Bulletin. |
| 0762 PRE 80 | 49–A–PM4260 | *Airborne Auxiliary Power* – Auxiliary power unit – To prevent shut down when under negative 'G' conditions. | Applicable to 200, 300, 400 and 500 Series. Compliance required as detailed in Service Bulletin. |
| 0763 PRE 80 | 30–PM4306 | *Ice and Rain Protection* – To introduce alternative revisions to the heated static plate. | Applicable to 401AK type only. Compliance required as detailed in Service Bulletin. |
| 0764 PRE 80 | 23–A–PM4346 | *Communications* – HF antenna mast to antenna tuning unit lead in cable. | Applicable to 200, 300, 400 and 500 Series fitted with HF Radio equipment. Compliance required as detailed in Service Bulletin. |
| 0765 PRe 80 | 21–PM4350 | *Air Conditioning* – To record Normalair Modification 351TC to 12–525350 and 13–525350 cold-air units. Addition of containment guard. | Applicable to 200, 300 and 400 Series. Compliance required as detailed in Service Bulletin. |
| 0766 PRE 80 | 22–A–PM4367 | *Auto-Pilot* – Auto-pilot rudder channel. | Applicable to 500 Series. Compliance required as detailed in Service Bulletin. |
| 0767 PRE 80 | 25–PM4402 | *Equipment/Furnishings* – To record Mayday Equipment Modification MD/M/CAL/1001 Issue 1 to the MD/CAL/Mark 1 Lifejacket. | Applicable to 400 and 500 Series. Compliance required as detailed in Service Bulletin. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 0768 PRE 80 | 73–PM4406 | *Engine Fuel and Control* – To record Rolls-Royce modification to ensure clearance of ferrobestos shrouds on CASC units. | Applicable to 200, 400 and 500 Series. Compliance required as detailed in Service Bulletin. |
| 0769 PRE 80 | 57–A–PM4407 | *Wings* – Taper bolts securing flap beam main attachment brackets. | Applicable to 200, 300 and 400 Series. Compliance required as detailed in Service Bulletin. |
| 0770 PRE 80 | 25–A–PM4458 | *Equipment/Furnishings* – 115 Volts DC – Razor socket outlet. | Applicable to 200 and 400 Series fitted with a razor socket supply transformer RD 10590. Compliance required as detailed in Service Bulletin. |
| 0771 PRE 80 | 25–PM4458 | *Equipment/Furnishings* – To revise razor socket electrical supply. | Applicable to 200 and 400 Series. Compliance required as detailed in Service Bulletin. |
| 0772 PRE 80 | 33–PM4477 | *Lights* – To provide increased electrical and mechanical protection and improved cooling of electrical dimmer panels. | Applicable to 200, 300, 400 and 500 Series. Compliance required as detailed in Service Bulletin. |
| 0773 PRE 80 | 49–A–PM4480 | *Airborne Auxiliary Power* – APU/starter motor circuit protection. | Applicable to 200, 300, 400 and 500 Series. Compliance required as detailed in Service Bulletin. |
| 0774 PRE 80 | 49–PM4480 | *Airborne Auxiliary Power* – To introduce 150 amp in lieu of 200 amp fuse for APU start motor. | Applicable to 200, 300, 400 and 500 Series. Compliance required as detailed in Service Bulletin. |
| 0775 PRE 80 | 32–PM4538 | *Landing Gear* – To provide indication when the undercarriage selection lever is not in its gated position. | Applicable to 200, 300, 400 and 500 Series. Compliance required as detailed in Service Bulletin. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 0776 PRE 80 | 57–A–PM4621 | *Flight Controls* – Flap forward inboard pick up assembly – Failure of spigot. | Applicable to 200, 300, 400, 475 and 500 Series. Compliance required as detailed in Service Bulletin. |
| 0777 PRE 80 | 24–PM4641 | *Electrical Power* – To record Rotax Mod. SP7174 – Introduction of undervolt detector unit U3619/2 in lieu of U3619/1 or U3619. | Applicable to 200, 300, 400 and 500 Series. Compliance required as detailed in Service Bulletin. |
| 0778 PRE 80 | 27–A–PM4642 | *Flight Controls* – Flap secondary drive shafts – End float in tackside support bearing assemblies. | Applicable to 200, 300, 400 and 500 Series. Compliance required as detailed in Service Bulletin. |
| 0779 PRE 80 | 49–A–PM4714 | *Airborne Auxiliary Power* – Auxiliary power unit – Fire in jet pipe. | Applicable to 200, 300, 400 and 500 Series. Compliance required as detailed in Service Bulletin. |
| 0780 PRE 80 | 32–PM4779 | *Landing Gear* – To record Lockheed modification No. 6339 to landing gear control valve – Introduction of AIR 91142/8 in lieu of AIR 91142/7. | Applicable to 200, 300, 400, 475 and 500 Series. Compliance required as detailed in Service Bulletin. |
| 0781 PRE 80 | 25–PM4785 | *Equipment/Furnishings* – To provide cover over controls at rear toilet bulkhead in way of Steward's seat structure. | Applicable to 200, 300, 400, 475 and 500 Series. Compliance required as detailed in Service Bulletin. |
| 0782 PRE 80 | 52–PM4855 | *Doors* – To introduce revised roller retaining spigots. | Applicable to 200, 400, and 500 Series. Compliance required as detailed in Service Bulletin. The embodiment of this Service Bulletin renders the compliance of Alert Service Bulletin 52–A–PM4855 no longer necessary. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 0783 PRE 80 | 32–A–PM4865 | *Landing Gear* – Main landing gear downlock links – possibility of fouling. | Applicable to 200, 300, 400 and 500 Series. 475 Series not affected. Compliance required as detailed in Service Bulletin. |
| 0784 PRE 80 | 24–PM4879 | *Electrical Power* – To upgrade DC essential sub-bus circuit breaker from 15 amp to 25 amp. | Applicable to 200, 300, 400, 475 and 500 Series. Compliance required as detailed in Service Bulletin. |
| 0785 PRE 80 | 73–PM4890 | *Engine Fuel and Control* – To record Rolls-Royce Mod. 4371 (Fuel pump HP Aluminium bronze rotor with carbon piston liners (Lucas Mod. CP3189)). | Applicable to 200, 300, 400, 475 and 500 Series. Compliance required as detailed in Service Bulletin. |
| 0786 PRE 80 | 28–PM4900 | *Fuel* – To record flight refuelling Mod. 8882 to lightweight motorised valves (Introduction of improved tab washer). | Applicable to 200, 300, 400, 475 and 500 Series. Compliance required as detailed in Service Bulletin. |
| 0787 PRE 80 | 57–A–PM4948 | *Wings* – Cracks – flap track attachment brackets. | Applicable to 200, 300, 400, 475 and 500 (including 510) Series. Compliance required as detailed in Service Bulletin. |
| 0788 PRE 80 | 23–A–PM4990 | *Communications* – HF Aerial wire installation. | Applicable to 200, 300, 400, 475 and 500 Series fitted with 'CHELTON' HF Aerials. Compliance required as detailed in Service Bulletin. |
| 0789 PRE 80 | 24–PM4992 | *Electrical Power* – To introduce revised Rotax static invertors. | Applicable to 200, 300, 400, 475 and 500 Series. Compliance required as detailed in Service Bulletin. |
| 0790 PRE 80 | 27–A–PM5065 | *Flight Controls* – Flap primary transmission system – Torque loading and locking of ring nuts. | Applicable to 200, 300, 400, 475 and 500 Series. Compliance required as detailed in Service Bulletin. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 0791 PRE 80 | 32–A–PM5070 | *Landing Gear* – nose landing gear sustaining ram – crack in the vicinity of the ram axle lugs. | Applicable to 200 Series only. Compliance required as detailed in Service Bulletin. |
| 0792 PRE 80 | 24–A–PM5086 | *Electrical Power* – Constant speed drive and starter – damage to pipes. | Applicable to 200, 300, 400, 475 and 500 Series except models 203AE and 212AR. Compliance required as detailed in Service Bulletin. Plessey Alert Service Bulletin No. CSD 24–A120 also refers. |
| 0793 PRE 80 | 32–A–PM5102 | *Landing Gear* – Handbrake control valve – Failure of filter housing. | Applicable to 200, 300 and 402AP Series. Compliance required as detailed in Service Bulletin. |
| 0794 PRE 80 | 35–A–PM5124 | *Oxygen* – Passenger oxygen system – Chafing of pipes. | Applicable to 200, 300, 400, 475 and 500 Series. Compliance required as detailed in Service Bulletin. |
| 0795 PRE 80 | 27–A–PM5130 | *Flight Controls* – Flap secondary gear-box – Internal corrosion. | Applicable to 200, 300, 400 and 510ED Series. Compliance required as detailed in Service Bulletin. |
| 0796 PRE 80 | 21–PM5139 | *Air Conditioning* – To strengthen stop on discharge valve manual operating mechanism. | Applicable to 200, 300, 400, 475, 500 and 510 Series. Compliance required as detailed in Service Bulletin. |
| 0797 PRE 80 | 27–A–PM5152 | *Flight Controls* – Flap selector lever – Locking of lug attachment screws. | Applicable to 416EK, 475 and 500 Series. Compliance required as detailed in Service Bulletin. |
| 0798 PRE 80 | 27–PM5160 | *Flight Controls* – To revise wiring of Stall Protection system to reduce the possibility of inadvertent operation during take-off. | Applicable to 200, 300, 400, 475, 500 and 510 Series. Compliance required as detailed in Service Bulletin. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 0799 PRE 80 | 24–PM5187 | *Electrical Power* – To introduce revised Lucas Aerospace static invertors. | Applicable to 200, 300, 400, 475 and 500/510 Series. Compliance required as detailed in Service Bulletin. |
| 0800 PRE 80 | 32–A–PM5191 | *Landing Gear* – Nose landing gear – up/down lock jacks – spring discs. | Applicable to 200, 300, 400, 475 and 500 Series. Compliance required as detailed in Service Bulletin. |
| 0801 PRE 80 | 32–PM5193 | *Landing Gear* – Anti-skid system – to revise landing gear control circuit to anti-skid control shield. | Applicable to 500 and 510 Series. Compliance required as detailed in Service Bulletin. |
| 0802 PRE 80 | 27–PM5197 | *Flight Controls* – To introduce angle of airflow sensor 2566A–231 incorporating internal stops in lieu of sensor 2566A–23. | Applicable to 200, 300, 400, 475, 500 and 510 Series aircraft with model 2566A–23 units. Compliance required as detailed in Service Bulletin. |
| 0803 PRE 80 | 55–A–PM5208 | *Stabilisers* – Inspection of horizontal stabiliser pivot support beam structure. | Applicable to 200, 300, 400, 475 and 500 Series. Compliance required as detailed in Service Bulletin. |
| 0804 PRE 80 | 49–A–PM5217 | *Airborne Auxiliary Power* – Auxiliary power unit – oil dilution. | Applicable to 200, 300, 400, 475 and 500 Series. Compliance required as detailed in Service Bulletin. |
| 0805 PRE 80 | 29–A–PM5219 | *Hydraulic Power* – Limitations upon use of alternative low density hydraulic fluid. | Applicable to 200, 300, 400, 475 and 500 Series. Compliance required as detailed in Service Bulletin. |
| 0806 PRE 80 | 28–A–PM5220 | *Fuel* – Thompson Ramo Wooldridge/Plessey fuel booster pump – Inspection for leakage and for overheating of electrical connection. | Applicable to 200, 300, 400, 475 and 500 Series aircraft with the exception of model 201AC and 207AJ. Compliance required as detailed in Service Bulletin. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 0807 PRE 80 | 71–PM5226 | *Power Plant* – To record Rolls-Royce Modification No. 5268 (Engine Drain Tubes – Valves and Fittings – Combustion system overboard drain tube repositioned to give downhill run). | Applicable to 475, 500 and 510 Series. Compliance required as detailed in Service Bulletin. |
| 0808 PRE 80 | 29–PM5228 | *Hydraulic Power* – To record Sperry Vickers Service Bulletin 29–30 to variable displacement pumps Series AS 61698 and AS 61699 and 29–29 to Series AS 66698 and AS 66699 (To introduce flushed faced housing assembly inspection plug). | Applicable to 200, 300, 400, 500, 510 Series except 475 Series and any other aircraft which are to a pre PM5116 modification standard. Compliance required as detailed in Service Bulletin. |
| 0809 PRE 80 | 22–PM5258 | *Auto-Pilot* – To record Sperry Gyroscope Modification 10 to the attitude director display amplifier Part No. 19875–0. | Applicable to 510ED Series. Compliance required as detailed in Service Bulletin. |
| 0810 PRE 80 | 25–PM274 | *Equipment/Furnishings* – Passenger and service door. To obviate the possibility of incorrect assembly of RFD escape slides and to ensure non interchangeability between passenger and service door slides. | Applicable to 200, 400, 475 and 500 Series. Compliance required as detailed in Service Bulletin. |
| 0811 PRE 80 | 25–A–PM5274 | *Equipment/Furnishings* – To prevent incorrect assembly and inadvertent interchange of inflatable escape slides between passenger and service doors. | Applicable to 200, 300, 400, 475 and 500 Series. Compliance required as detailed in Service Bulletin. |
| 0812 PRE 80 | 27–A–PM5294 | *Flying Controls* – Elevator centralising spring pot assembly – incorrect shear pin. | Applicable to 200, 300, 400, 475 and 500 Series. Compliance required as detailed in Service Bulletin. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 0813 PRE 80 | 72–PM5306 | *Engine* – To introduce Rolls-Royce Mod. No 4540 (HP Compressor – stages 2 to 5 rotor discs with increased thickness neck and diaphragm). | Applicable to 200, 300 and 400 Series. Compliance required as detailed in Service Bulletin. |
| 0814 PRE 80 | 72–PM5307 | *Engine* – To introduce Rolls-Royce Mod. No 4592 (HP Compressor – stages 2 to 5 rotor discs with increased thickness neck and diaphragm). | Applicable to 475, 500 and 510 Series. Compliance required as detailed in Service Bulletin. |
| 0815 PRE 80 | 22–PM5309 | *Auto-pilot* – To record Smiths Mod. 12 to the radio switching unit (type A) Code No 62 SUE/4. | Applicable to 510ED Series. Compliance required as detailed in Service Bulletin. |
| 0816 PRE 80 | 27–A–PM5310 | *Flight Controls* – Aileron control rod failure. | Applicable to 200, 300, 400, 475 and 500 Series. Compliance required as detailed in Service Bulletin. |
| 0817 PRE 80 | 34–A–PM5324 | *Navigation* – VOR/ILS System – VOR/LOC Antenna. | Applicable to 200, 300, 400, 475 and 500 Series fitted with the Dorne and Margolin VOR/LOC antenna balanced loop assembly. Compliance required as detailed in Service Bulletin. |
| 0818 PRE 80 | 32–A–PM5335 | *Landing Gear* – Nose landing gear free fall mechanism. | Applicable to 200, 300, 400, 475 and 500 Series. Compliance required as detailed in Service Bulletin. |
| 0819 PRE 80 | 27–A–PM5341 | *Flying Controls* – Flap secondary drive shafting – Failure. | Applicable to 200, 300, 400, 475 and 500 Series. Compliance required as detailed in Service Bulletin. |
| 0820 PRE 80 | 57–A–PM5381 | *Wings* – Flaps – cracks in skins and structures. | Applicable to 200, 300, 400, 475 and 500 Series. Compliance required as detailed in Service Bulletin. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 0821 PRE 80 | 35–A–PM5394 | *Oxygen* – Routeing of flexible hoses. | Applicable to 200, 300, 400, 475 and 500 Series. Compliance required as detailed in Service Bulletin. |
| 0822 PRE 80 | 27–A–PM5407 | *Flight Controls* – Rudder feel simulator – 'Wiffle tree' lever inspection. | Applicable to 200, 300, 400, 475 and 500 Series. Compliance required as detailed in Service Bulletin. |
| 0823 PRE 80 | 53–A–PM5425 | *Fuselage* – Cracking of windscreen glazing frame. | Applicable to 200, 300 and 400 Series Pre Modification PM2857 Part (a), PM3346 or PM5525 standard. Compliance required as detailed in Service Bulletin. |
| 0824 PRE 80 | 31–PM5428 | *Instruments* – Flight Data Recording – to improve Sperry Sadas FDR record dolls-eye circuit integrity. | Applicable to 200, 300 and 500 Series. Compliance required as detailed in Service Bulletin. |
| 0825 PRE 80 | 38–A–PM5439 | *Water/Waste* – Water pump – Inspection of electrical connectors and wiring. | Applicable to 200 Series (except 204 and 217). Compliance required as detailed in Service Bulletin. |
| 0826 PRE 80 | 52–A–PM5448 | *Doors* – Rear passenger door – cracks in skins and structure. | Applicable to 200, 300, 400, 475 and 500 Series fitted with rear passenger door. Compliance required as detailed in Service Bulletin. |
| 0827 PRE 80 | 32–PM5473 | *Landing Gear* – Nose undercarriage – To introduce adjustable operating levers for toggle links switch box. | Applicable to 200, 300, 400, 475, 500 and 510 Series. Compliance required as detailed in Service Bulletin. |
| 0828 PRE 80 | 32–A–PM5492 | *Landing Gear* – Main landing gear – Pintles – fatigue cracks. | Applicable to 200, 300, 400 and 500 Series. Compliance required as detailed in Service Bulletin. |
| 0829 PRE 80 | 32–A–PM5497 | *Landing Gear* – Main landing gear – Forestays – Low hardness value of forgings. | Applicable to 475 and 500 Series. Compliance required as detailed in Service Bulletin. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 0830 PRE 80 | 35–PM5541 | *Oxygen* – To introduce non-return valve without sintered bronze filter in oxygen charge lines. | Applicable to 200, 300, 400, 475, 500 and 510 Series. Compliance required as detailed in Service Bulletin. This SB is satisfied by the accomplishment of Campaign Wire 35–CW–PM5541. |
| 0831 PRE 80 | 22–A–PM5546 | *Auto-Pilot* – ILS Time Constant Unit – Glide slope and localiser beam offsets. | Applicable to 475 and 500 Series except Category 2 aircraft Model 510. Compliance required as detailed in Service Bulletin. |
| 0832 PRE 80 | 53–A–PM5632 | *Fuselage* – Inspection of lower fuselage skin in area covered by the forward and rear underwing fairings. | Applicable to 200, 300, 400, 475 and 500 Series. Compliance required as detailed in Service Bulletin. |
| 0833 PRE 80 | 49–A–PM5699 | *Airborne Auxiliary Power* – Auxiliary power unit – turbine wheel separation. | Applicable to 200, 300, 400, 475 and 500 Series Post Modification PM4540. Compliance required as detailed in Service Bulletin. |
| 0834 PRE 80 | 32–A–PM5700 | *Landing Gear* – Main landing gear – Down lock jacks – Spring discs. | Applicable to 200, 300, 400, 475 and 500 Series. Compliance required as detailed in Service Bulletin. |
| 0835 PRE 80 | 52–A–PM5703 | *Doors* – Passenger and service doors – Inner handles and end fittings – cracking. | Applicable to 200, 300, 400, 475 and 500 Series Pre Modification PM5703. Compliance required as detailed in Service Bulletin. |
| 0836 PRE 80 | 32–PM5716 | *Landing Gear* – To introduce longer support bolt on undercarriage selector mounting assembly. | Applicable to 476, 479, 481, 485 and 488 Serial Nos. as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 0837 PRE 80 | 35–A–PM5723 | *Oxygen* – Incompatibility between fixed socket and flow selector and mask hose connector. | Applicable to 200, 300, 400, 475 and 500 Series except 510ED. Compliance required as detailed in Service Bulletin. |
| 0838 PRE 80 | 31–CW–PM5742 | *Instruments* – Inspection of wiring routed to blind flying panel transillution panel. | Applicable to 400 Series except 410AQ. Compliance required as detailed in Campaign wire. |
| 0839 PRE 80 | 31–A–PM5742 | *Instruments* – Blind flying panels – Inspection of transilluminated panel lighting wiring. | Applicable to 400 Series except 410AQ. Compliance required as detailed in Service Bulletin. |
| 0840 PRE 80 | CAA Airworthiness Notice No. 81 | Emergency power supply for electrically operated gyroscopic bank and pitch indicators (Artificial Horizons). | Applicable to all Series. Should have been embodied by 1 January 1974. |
| 0841 PRE 80 | Maintenance Planning Guide | Mandatory Life Limitations. | The limitations listed in the Maintenance Planning Guide are mandatory for aircraft on the United Kingdom Register. |
| 014–07–80 | 53–A–PM 5726 | Structural inspection of high-time aircraft – Inspection of fuselage longitudinal skin joints. | Applicable to 200, 300, 400, 475 and 500 Series. Compliance required as detailed in Service Bulletin. |
| 010–08–80 | 27–A–PM5732 | *Flight Controls* – Inspection of lift dumper operating rod turnbarrel for corrosion. | Applicable to 300, 400, 475 and 500 Series all types except 301 and 320. Compliance required as detailed in Alert Service Bulletin. |
| 017–04–81 | 53–A–PM5805 | *Fuselage* – Number one flap beam spigot failure. | Applicable to 200, 300, 400, 475 and 500 Series all types. Compliance required as detailed in Alert Service Bulletin. |
| 011–07–81 | 55–A–PM5827 | *Stabilizers* – Corrosion and cracks in tailplane lower machined skin. | Applicable to 200, 300, 400, 475 and 500 Series all types of Modification PM 1573 Standard. Compliance required as detailed in Alert Service Bulletin. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 004–12–81 | 25–PM–5818 | *Equipment/Furnishings* – To add safe pressure label to escape chute stowage boxes. | Applicable to 200, 400 and 500 Series fitted with RFD escape slides on the passenger and service doors. Compliance required as detailed in Service Bulletin. |
| 001–02–82 | 53–CW–PM 5837 | *Wings* – Cracks in rear spar web of centre section torque box. | Cancelled and superseded by AD 001–05–82. |
| 007–03–82 | 56–A–PM 5836 | *Windows* – PPG Industries Windscreens – Increasing bus to bus resistance. | Applicable to 200, 300, 400, 475 and 500 Series all types. Compliance required as detailed in Service Bulletin. |
| 005–04–82 | 51–A–PM 5830 | *Structural Integrity Audit* – Special inspection requirements for long term operation – (Supplemental Inspection Document). | Applicable to 200, 300, 400, and 500 Series all types. Compliance required as detailed in Service Bulletin. |
| 001–05–82 | 53–A–PM5837 | *Fuselage* – Cracks in rear spar web of centre section torque box. | Applicable to 200, 300, 400, 475 and 500 Series. Compliance required as detailed in Service Bulletin. |
| 006–12–82 | 32–CW–PM5872<br>32–A–PM5872 | *Landing gear* – Inspection of nose landing gear special bolt assembly Part No AB 44A1275. | Applicable to all Series. Compliance required as detailed in Campaign Wire. |
| 001–05–83 | 57–PM 5856 | *Wings* – To introduce cut-out in aileron stub fairing on outboard flap track fairing. | Applicable to 200, 300, 400 and 500 Series. Compliance required as detailed in Service Bulletin. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 002–05–83 | 25–PM 5859 | *Equipment/Furnishings* – To record Teleflex Morse Ltd Service Bulletin No 25–00–185429 (Introduction of D 73766/002 inertia reel assembly to crew seat harness.) | Applicable to 200, 300, 400 and 500 Series. Compliance required as detailed in Service Bulletin. AD 011–10–82 in the Instruments and Equipment Section also refers. |
| 026–06–83 | 32–CW–PM5876<br>32–A–PM5876 | *Landing gear* – Nose landing gear – Up/down lock jack. | Applicable to 200, 300, 400, 475 and 500 Series, all types. Compliance required as detailed in Service Bulletin. |
| 003–07–83 | 25–PM–5840 | *Equipment/Furnishings* – To add 'Safe Pressure/ Temperature' label to escape chute stowage boxes. | Applicable to all aircraft as detailed in Service Bulletin. Compliance as detailed in Service Bulletin. |
| 011–10–83 | 27–CW–PM 5890<br>27–A–PM 5890 | *Flight Controls* – To avoid asymmetric lift dump. | Applicable to all 400, 475 and 500 Series and Type 304 AX aircraft. Compliance required as detailed in Service Bulletin. |
| 003–12–83 | 21–A–PM 5863 | *Air Conditioning* – Cold-air unit overheat protection. | Applicable to all aircraft as detailed in Service Bulletin. Compliance as detailed in Service Bulletin. |
| 004–12–83 | 55–A–PM 5873 | *Stabilisers* – Cracks in reinforcing plate attached to tailplane centre section top skin. | Applicable to all 200, 300, 400, 475 and 500 Series. Compliance as detailed in Alert Service Bulletin. |
| 007–07–84 | 57–A–PM5896 | *Wings* – Main landing gear support structure – cracks in rear pintle support beam (manacle beam). | Applicable to Series 200, 300, 400, 475 and 500, all Types. Compliance required as detailed in Alert Service Bulletin. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 007–10–84 | 25–PM 5906 | *Equipment/Furnishings* – To introduce modified inflatable escape slides R.F.D. (Godalming), to passenger and service doors. | Applicable to models/types as detailed in SB. Compliance required as detailed in SB. |
| 010–11–85 | 57–CW–PM6000<br>57–A–PM6000 | *Wings* – Main landing gear support structure – Failure of main support beam (manacle beam). | Applicable to Series 200, 400, 475 and 500 to post Mod. PM3070 and pre Mod. PM5928. Compliance required as detailed in Alert Service Bulletin. |
| 010–12–85 | 36–CW–PM5920<br>36–A–PM5920 | *Pneumatic* – Primary temperature control. | Applicable to 475 and 500 Series at Post Mod. PM5507 standard. Compliance required as detailed in Alert Service Bulletin. |
| 008–04–86 | 53–A–PM5918 | *Fuselage* – Keel beam – Cracks in lateral diaphragms and saddle brackets members. | Applicable to 200, 300, 400 and 500 Series, all types. Compliance required as detailed in Alert Service Bulletin. |
| 007–06–86 | 21–CW–PM5930<br>21–A–PM5930 | *Air Conditioning* – Electrical smoke or fire procedures. | Applicable to 200, 300, 400, 475 and 500 Series, all types. Compliance required as detailed in Alert Service Bulletin. |
| 002–09–86 | 53–A–PM5931 | *Fuselage* – Aft attendant's seat support structure – Cracks in mounting brackets. | Applicable to 200, 300, 400, 475 and 500 Series, all types. Compliance required as detailed in Alert Service Bulletin. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 023–11–86 | 32–A–PM5946 | *Landing Gear* – Nose landing gear housing – Cracking of retraction jack attachment arm lugs. | Applicable to all Series, all types. Compliance required as detailed in Alert Service Bulletin. |
| 003–12–86 | 25–PM 5943 | *Equipment/Furnishings* – To record R.F.D. Modification No 2194 (Introduction of an automatic inflation operating cable of increased length for R.F.D. escape slide type AES12B and AES12C.) | Applicable to Series/types as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. R.F.D. Aviation Service Bulletin No. 25–50 also refers. |
| 008–12–86 | 53–A–PM5922 | *Fuselage* – Fuselage inspection requirements for extended operation at cabin pressure differential up to a maximum of 8.2 pounds per square inch. | Applicable to 200/300/400 Series to Modification PM 2840 and PM 3187 or PM 4886 and 475/500 Series to Modification PM 5418. Excluding aircraft to Modification PM 5282 (Cabin Freight Door). Compliance required as detailed in Service Bulletin.<br>NOTE: Classification of the Service Bulletin was to be changed from mandatory to Optional. This action was not taken and on further review the mandatory status is retained. |
| 004–09–87 | 52–CW–PM5448 | *Doors* – Rear passenger door – Cracks in horizontal members. | Applicable to all 300, 400, 475, 500 Series and 200 Series except types 203 AE and 212 AR. Compliance required as detailed in Campaign Wire. |
| 008–11–87 | 53–A–PM5964 | *Fuselage* – Fuselage frame joint station 178 – Cracks in crown area. | Applicable to 200, 300, 400, 475 and 500 Series, all types. Compliance required as detailed in Service Bulletin. |
| 014–11–87 | 24–PM5254 | *Electrical Power* – To introduce Smiths instrument transformer 715 SUE/1 in place of 213 MV. | Applicable to Series/types as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. |
| 010–03–88 | 49–PM5956 | *Airborne Auxiliary Power* – To record Garrett Service Bulletin GTCP85–49–5689 (incorporate turbine shroud containment augmentation ring) on APU Model GTCP85–115CK. | Applicable to Series/types as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. FAA AD 87–24–11 also refers. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 001–05–88 | 49–A–PM5955 | *Airborne Auxiliary Power* – Plenum overheat detection. | Applicable to 200, 300, 400, 475 and 500 Series, all types. Compliance required as detailed in Alert Service Bulletin. |
| 011–08–88 | 32–A–PM5967 | *Landing Gear* – Nosewheel steering runaway. | Applicable to 300, 400, 475 and 500 Series, all types. Compliance required as detailed in Alert Service Bulletin. |
| 012–08–88 | 76–A–PM5978 | *Engine Controls* – Thrust reverser cable failure. | Applicable to 200, 300, 400, 475 and 500 Series, all types. Compliance required as detailed in Alert Service Bulletin. |
| 009–09–88 | 52–PM2343 | *Doors* – To introduce a restraining link on the passenger door stabilizer arm to obviate foul with doorway structure. | Applicable to Series/types as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin not later than 31 March 1989. |
| 005–02–89 | 51–A–PM5971 | *Structure* – Structure integrity inspection requirements for designated aircraft. | Applicable to Type 561 RC aircraft Constructors Nos 407, 408 and 409. Compliance required as detailed in Alert Service Bulletin. |
| 025–05–89 | 21–A–PM5984 | *Air Conditioning* – Smoke and fumes in aircraft. | Applicable to 200, 300, 400, 475 and 500 Series, all types. Compliance required as detailed in Alert Service Bulletin. |
| 004–08–89 | 27–A–PM5384 | *Flying Controls* – Tailplane trim gearbox – Water ingress. | Applicable to 200, 300, 400, 475 and 500 Series, all types pre. Mod. PM 5384. Compliance required as detailed in Alert Service Bulletin. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 009–10–89 | 27–A–PM5871 | *Flying Controls* – Cracking of L53 elevator lower control levers in fin. | Applicable to 200, 300, 400, 475 and 500 Series, all types excluding 561 RC Build numbers 404 and subsequent. Compliance required as detailed in Alert Service Bulletin. |
| 003–12–89 | 5–A–PM5995 | *Time Limits* – Aircraft general – structural maintenance inspection and modification review. Requirements arising from the ageing aircraft task unit activity. | Applicable to 200, 300, 400, 475 and 500 series, all types. Compliance required as detailed in Alert Service Bulletin. |
| 024–04–90 | 53–A–PM5985 | *Fuselage* – Cracks in flight deck side glazing frame (DV window aperture). | Applicable to 200, 300, 400, 475 and 500 Series, all types. Compliance required as detailed in Alert Service Bulletin. |
| 025–04–90 | 27–A–PM6005<br>27–PM6005 | *Flying Controls* – To introduce modified stall protection system static inverters incorporating capacitor bank for frequency oscillator. | Applicable to 200, 300, 400, 475 and 500 Series, all types. Compliance with Alert Service Bulletin 27–A–PM6005 is required at repetitive intervals. Modification action required by Service Bulletin 27–PM6005 terminates the repetitive requirements of Alert Service Bulletin 27–A–PM6005 and compliance is required not later than 30 June 1992. |
| 006–05–90 | 53–A–PM5994 | *Fuselage* – Cracks in structural members in flight deck canopy area. | Applicable to 200, 300, 400, 475 and 500 Series, all types. Compliance required as detailed in Alert Service Bulletin. |
| 003–08–90 | 53–A–PM5991 | *Fuselage* – Cracks in machined attachment angles and auxiliary beams on the outboard pressure floor at station 570 (670 for 500 series). | Applicable to 200, 300, 400, 475 and 500 Series, all types. Compliance required as detailed in Alert Service Bulletin. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 010–11–90 | 53–A–PM5990 | *Fuselage* – Forward pressure floor panel – Cracking of skin and cleats. | Applicable to 200, 300, 400, 475 and 500 Series aircraft all types, pre-modification PM5629. Compliance required as detailed in Alert Service Bulletin. |
| 021–11–90 | 5–A–PM5987 | *Time Limits* – Aircraft General – Corrosion Control Programme. | Applicable to 200, 300, 400, 475 and 500 Series, all types. Compliance required as detailed in Alert Service Bulletin. |
| 018–06–91 | 27–PM6005 | *Flight Controls* – To introduce modified stall protection system static inverters incorporating capacitor bank for frequency oscillator. | Applicable to aircraft as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. |
| 019–06–91 | 36–A–PM6016<br>36–PM6016 | *Pneumatics* – Re-design of stub duct failure circuit to ensure verification of possible dormant contacts. | Applicable to 475 and 500 Series to modification PM4684 or PM5587 standard. Compliance with Alert Service Bulletin 36–A–PM6016 requires repetitive inspections. Modification action required by Service Bulletin 36–PM6016 terminates the repetitive inspections of Alert Service Bulletin 36–A–PM6016 and compliance is required not later than 31 December 1992. |
| 007–10–91 | 53–A–PM5989 | *Fuselage* – Forward passenger and service door aperture, skin cracking. | Applicable to 200, 300, 400, 475 and 500 Series, all types. Compliance required as detailed in Alert Service Bulletin. |
| 007–04–92 | 27–A–PM6023 | *Flight Controls* – Corrosion of aileron control bearings. | Applicable to 200, 300, 400, 475 and 500 Series, all types. Compliance required as detailed in Alert Service Bulletin. |
| 008–04–92 | 27–A–PM6007 | *Flight Controls* – Spoiler torque shaft – Corrosion. | Applicable to 200, 300, 400, 475 and 500 Series, all types. Compliance required as detailed in Alert Service Bulletin. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 011–10–92 | 57–A–PM5992 | *Wings* – Cracks in lower surface and leading edge fixed ribs 6, 10 and 14. | Applicable to 200, 300, 400, 475 and 500 Series, all types. Compliance required as detailed in Alert Service Bulletin. |
| 021–01–93 | 53–A–PM5993 | *Fuselage* – Fuselage frames at stations 178 and 213.5 – Cracks at floor level adjacent to forward passenger doorway. | Applicable to 200, 300, 400, 475 and 500 Series, all types pre modifications PM5445 and PM5713. Compliance required as detailed in Alert Service Bulletin. |
| 002–04–94 | 27–A–PM6025 | *Flight Controls* – Cracking of levers and brackets manufactured from L53 material. | Applicable to 200, 300, 400, 475 and 500 Series, all types. Compliance required as detailed in Alert Service Bulletin. |
| 007–04–94 | 49–PM6029 | *Airborne Auxiliary Power* – To record Allied Signal Service Bulletin GTCP85–49–5700 and Allied Signal Service Bulletin GTCP85–49–A6706. | Applicable to 200, 300, 400, 475 and 500 Series aircraft. Compliance required as detailed in Service Bulletin. |
| 006–05–94 | 76–A–PM6031 | *Engine Controls* – Failure of thrust reverser control cables in stub wing. | Applicable to 200, 300, 400, 475 and 500 Series aircraft. Compliance required as detailed in Alert Service Bulletin. |
| 004–04–95 | 53–A–PM6032 | *Fuselage* – Engine mounting beams – Cracking of lugs. | Applicable to 200, 300, 400, 475 and 500 Series, all types. Compliance required as detailed in Alert Service Bulletin. |
| 010–04–95 | 21–A–PM5984 | *Air Conditioning* – Smoke and fumes in the aircraft. | AD number cancelled, mandatory requirement covered by AD 025–05–89. |
| 008–05–95 | 27–A–PM6034 | *Flight Controls* – Lift dumper operating mechanism rod eye ends. | Applicable to all 400, 475 and 500 Series aircraft and type 304AX. Compliance required as detailed in Alert Service Bulletin. |
| 003–11–95 | 21–PM5984 | *Air Conditioning* – Introduction of flap valve microswitch for additional cold air unit overheat protection. | Applicable to 200, 300, 400, 475 and 500 Series all types. Compliance required as detailed in Service Bulletin. |
| 009–11–95 | 53–A–PM6036 | *Fuselage* – Main Landing Gear A-frame attachment fittings – Inspection for cracks. | Applicable to 200, 300, 400, 475 and 500 Series all types. Compliance required as detailed in Alert Service Bulletin. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 004–03–96 | 53–A–PM6035 | *Fuselage* – Cracks in nose landing gear (NLG) trunnion fittings. | Applicable to 200, 300, 400, 475 and 500 Series, all types. Compliance required as detailed in Alert Service Bulletin. |
| 003–10–96 | 55–A–PM5953 | *Stabilisers* – Elevator torsion bar corrosion. | Applicable to 200, 300, 400, 475 and 500 Series aircraft, all types fitted with elevators to Pre-Modification PM 1468 standard. Compliance required as detailed in Service Bulletin. |
| 007–02–97 | 78–PM6039 | *Exhaust* – Thrust reverser – Selector mechanism – Introduction of retention spring and vibration damper. | Mandatory status of Service Bulletin removed at Revision 1 therefore the AD is now cancelled. |
| 003–08–98 | 27–A–PM6041 | *Flight Controls* – Cracking of flap control lever manufactured from L53 alloy. | Applicable to 200, 300, 400, 475 and 500 Series aircraft. Compliance required as detailed in Alert Service Bulletin. |
| 004–08–98 | 38–A–PM6044 | *Water/Waste* – Toilet servicing panels – Inspect caps and valves for leaks. | Applicable to 200, 300, 400, 475 and 500 Series aircraft. Compliance required as detailed in Alert Service Bulletin. |
| 006–08–98 | 49–PM6051 | *Auxiliary Power Unit* – Allied Signal model GTCP85–115CK – To record Allied Signal Alert Service Bulletin GTCP85–49–A7189. | Applicable to 200, 300, 400, 475 and 500 Series aircraft. Compliance required as detailed in Service Bulletin, |
| 002–09–98 | 76–A–PM6043 | *Engine Controls* – Reverse thrust – Rigging check of control pulleys. | Applicable to 200, 300, 400, 475 and 500 Series aircraft. Compliance required as detailed in Alert Service Bulletin. |
| 005–11–98 | 78–PM6047 | *Exhaust* – Thrust reverser – Introduction of a combined selector sequence valve with revised locking spring and spring sleeve. | Applicable to 200, 300, 400, 475 and 500 Series aircraft. Compliance required as detailed in Service Bulletin. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 004–02–99 | 5–A–PM6033 | *Time Limits* – Aircraft general – Assessment of embodied repairs. | Applicable to 200, 300, 400, 475 and 500 Series aircraft. Compliance required as detailed in Alert Service Bulletin. |
| 005–02–99 | 51–A–PM6040 | *Structures* – General – Inspection following review of the Structural Repair Manual. | Applicable to 200, 300, 400, 475 and 500 Series aircraft. Compliance required as detailed in Alert Service Bulletin. |
| 011–02–2000 | 32–PM6054 | *Landing Gear* – Landing gear brake accumulator replacement. | Applicable to 401AK and 410AQ aircraft. Compliance required as detailed in Service Bulletin. |
| 004–07–2000 | 22–CW–PM6056 | *Auto Flight* – Inspection of Sperry attitude director type F Part No. 226603–0100. | Cancelled and superseded by AD 004–11–2000. |
| 004–11–2000 | 22–A–PM6056 | *Auto-Pilot* – Attitude director indicator – Sperry Part No. 226603–0100. | Applicable to 510ED aircraft. Compliance required as detailed in Alert Service Bulletin. |
| 002–04–2001 | 52–A–PM6053 | *Fuselage* – 120 inches cabin freight door installation – Inspection requirements. | Applicable to 409AY, 485GD and 487GK aircraft post mod PM5282. Compliance required as detailed in Alert Service Bulletin. |

# United Kingdom Civil Aviation Authority

# AIRWORTHINESS DIRECTIVE

## AD No: G-2004-0012

Issue Date: 21 June 2004

This AD is issued by the UK CAA acting for and on behalf of the European Aviation Safety Agency as the Primary Aviation Authority (ICAO Annex 8 Authority of State of Design) for the affected product(s).

Approved by the European Aviation Safety Agency under approval number on 2004-6418 on 16 June 2004.

In accordance with Article 9(7)(b) of the Air Navigation Order 2000 as amended the following action required by this Airworthiness Directive (AD) is mandatory for applicable aircraft registered in the United Kingdom.
No person may operate an aircraft to which an AD applies except in accordance with the requirements of that AD unless otherwise agreed with the Authority of the State of Registry.

Type Approval Holders Name:

**AIRBUS UK LTD**

Type/Model Designation(s):

**BAC ONE-ELEVEN**

**Type Certificate Data Sheet No:** BA3 applicable to 475 and 500 Series.

**Superseded/ Revised ADs:** None

**ATA 28 – FUEL SYSTEM – REVISED OPERATING LIMITATIONS AND MAINTENANCE PRACTICES**

**Manufacturer(s):** British Aircraft Corporation Ltd, British Aircraft Corporation (Operations) Ltd, British Aerospace Ltd, I.Av.B. (Intreprinderea De Avioane Bucuresti)/Romaero under licence from British Aerospace Ltd.

**Applicability:** Model BAC One-Eleven 200, 300, 400, 475 and 500 Series aeroplanes, certificated in any category.

**Reason:** Airbus UK has completed their review of the BAC One-Eleven fuel system required by SFAR 88 and CAA Airworthiness Notice 55. Following the review, Airbus UK has made application to the CAA for partial exemption from the full provisions of the Airworthiness Notice. A number of specific changes to operating and maintenance procedures are required to enhance safety and maintain the continued airworthiness of the BAC One-Eleven fleet.

**Effective Date:** 8 July 2004

continued on next page

**Compliance/Action:** Within 3 months after the effective date of this Airworthiness Directive (AD), accomplish the following tasks in accordance with paragraphs a, b and c of this AD:

a) Insert in the approved BAC One-Eleven Aircraft Flight Manual the applicable Flight Manual Amendment specified in Table 2 of Airbus UK Alert Service Bulletin (ASB) 28-A-PM6057, dated 10 May 2004 or later EASA approved revision.

b) Perform the maintenance tasks at the initial and repeat intervals specified in Table 1 of Airbus UK Alert Service Bulletin 28-A-PM6057, or later EASA approved revision. For aircraft operating less than 1250 hours per year accomplish the maintenance tasks at the intervals specified in ASB 28-A-PM6057 Table 1 column 2 or column 3, whichever occurs earlier.

c) Revise the Master Minimum Equipment List to incorporate BAC One-Eleven CAA Master Minimum Equipment List revision 4, dated 1 March 2004.

Note: Full compliance with Airbus UK BAC One-Eleven Alert Service Bulletin 28-A-PM6057 is necessary in order to fulfil the conditions associated with of the partial exemption granted to the Type Certificate Holder against JAA Fuel Tank Safety policy letter, reference 04/00/02/07/03-L024, dated 03 February 2003. Owners/Operators are also reminded that any defects identified as a result of the inspections required by the ASB should be reported to the Type Certificate Holder.

**Reference Publications:** Alert Service Bulletin 28-A-PM6057 may be obtained from Mr. M Stanbrook, BAC 1-11 Customer Support Department, Airbus UK Limited, New Filton House, Filton, Bristol BS99 7AR, United Kingdom.

The One-Eleven CAA MMEL can be downloaded in PDF format from the CAA Internet Site at http://www.caa.co.uk/publications.

**Remarks:** Enquires regarding this proposed Airworthiness Directive should be referred to Mr. N Williams, Civil Aviation Authority, Certification and Approvals Department, Safety Regulation Group, Aviation House, Gatwick Airport South, West Sussex, RH6 0YR,United Kingdom. Phone: +44 (0)1293 573292 Fax: +44 (0)1293 573976, e-mail neil.williams@srg.caa.co.uk

## DE HAVILLAND DHC–1 CHIPMUNK SERIES AIRCRAFT

No CAA Type Certificate. Type Design Organisation – De Havilland Support Ltd.

NOTES:

1. The following list does not cover the conversion of the military mark T10 aircraft to the civil mark 22 or 22A. Application should be made to De Havilland Support Ltd, Building 213, Duxford Airfield CB2 4QR (Tel No. 01223 830090, Fax No. 01223 830085) for full details of the modification required to convert ex-military Chipmunk aircraft to the required civil standard.

2. Modification H210 and that part of H212 concerned with sealing the Horseshoe deflector plate were originally introduced to prevent fuel entering the fuselage via the access door in the fuselage underside.

   As these modifications were not incorporated in RAF Chipmunk aircraft and experience has shown that fuel has not as a consequence entered the fuselage those modifications are no longer classified as mandatory. That part of modification H212 requiring sealing of the vent fairing has been incorporated in RAF Chipmunk aircraft and the mandatory classification still applies.

   Similarly Modification H217 was not incorporated in RAF Chipmunk aircraft and as a result of satisfactory operational experience is no longer classified as mandatory.

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 2794 PRE 80 | Mod No. H181 | Introduction of improved method of mounting fuel filter. | See DH Technical News Sheet CT (C1) No. 111. |
| 2795 PRE 80 | Mod No. H188 | Introduction of fuel feed pipe in tungum in lieu of aluminium between the fuel cock and fuel filter. | See DH Technical News Sheet CT (C1) No. 111. |
| 2796 PRE 80 | Mod No. H207 | Introduction of balanced type vents. | See DH Technical News Sheet CT (C1) No. 117. Applicable also to Canadian built machines on the UK register. |
| 2797 PRE 80 | Mod No. H209 | Introduction of flexibly mounted aerial. | See DH Technical News Sheet CT (C1) No. 106. |
| 2798 PRE 80 | Mod No. H212 Part A | Sealing of the Vent fairing to prevent possible entry of fuel draining from vent pipes into fuselage after flying inverted. | |
| 2799 PRE 80 | Mod No. H231 | Provision of Anti Spinning Strakes. | Mandatory only if cleared for the Performance of Aerobatics. Applicable also to Canadian built machines on the UK register. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 2800 PRE 80 | Mod No. H259 | Cockpit Fire Extinguisher – To make provision for and introduce fire extinguisher 27N/299 in lieu of 27N/12 and bracket 27N/149 in lieu of 27N/13. | Applicable to types 10, 20, 21, 22 and 22A. |
| 2801 PRE 80 | Mod No. H323 | Introduction of 'Aerobatics and Spins Prohibited' label in cockpits. | See Technical News Sheet CT (C1) No. 171. Mandatory for aircraft which do not have modification H231 embodied. |
| 2802 PRE 80 | Mod No. H324 | Introduction of 'Spin Recovery' advisory label in cockpits. | See Technical News Sheet CT (C1) No. 171. Mandatory for aircraft which have modification H231 embodied. |
| 2803 PRE 80 | TNS 131 | Engine throttle and mixture control rods. | Compliance required as detailed in Technical News Sheet. |
| 2804 PRE 80 | TNS 138 | Mandatory Life Limitations. | The limitations listed in the Technical News Sheet are mandatory for aircraft on the United Kingdom Register. |
| 2805 PRE 80 | TNS 154 | Fuselage assembly. | Compliance required as detailed in Technical News Sheet. |
| 2806 PRE 80 | TNS 161 | Wing to fuselage attachment links. | Compliance required as detailed in Technical News Sheet. |
| 2807 PRE 80 REV 1 | TNS 165 | English production Chipmunk – Wing assembly – Undercarriage mounting casting. | Compliance required as detailed in Technical News Sheet. |
| 007–09–85 | TNS 175 | English production Chipmunk – Fuselage centre-section tie bar. | Compliance required as detailed in Technical News Sheet. |
| 008–09–85 | TNS 176 | English production Chipmunk – Tailplane attachment brackets. | Cancelled and superseded by AD 014–11–97. |
| 009–09–85 | TNS 180 | English production Chipmunk – Engine mounting frame attachment points in front fuselage. | Compliance required as detailed in Technical News Sheet. |
| 005–05–90 | TNS 183 | English production Chipmunk – Fuselage rear bulkhead. | Compliance required as detailed in Technical News Sheet. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 021–08–91 | TNS 186 | English production Chipmunk – Tail unit assembly. | Compliance required as detailed in Technical News Sheet. |
| 001–06–93 | TNS 189 | English production Chipmunk – Main undercarriage – Examination of shock absorber strut plunger tube. | Compliance required as detailed in Technical News Sheet. |
| 003–08–94 | TNS 190 | English production Chipmunk – Engine mounting frames – Examination of mounting frame joints. | Compliance required as detailed in Technical News Sheet. |
| 004–02–95 | TNS 194 | English production Chipmunk – Main undercarriage – Examination of Piston tube. | Compliance required as detailed in Technical News Sheet. |
| 001–03–95 | TNS 184 | English production Chipmunk – Flap operating system – Cable failure. | Technical News Sheet re-classified as Information therefore AD is cancelled. |
| 006–03–97 | TNS 200 | Re-classification of existing modifications to Mandatory status. | Compliance required as detailed in Technical News Sheet. |
| 007–03–97 | TNS 201 | Introduction of isolation switch to aircraft fitted with electric start. | Compliance required as detailed in Technical News Sheet. |
| 014–11–97 | TNS 176 | English production Chipmunk – Airframe – Tail unit assembly. | Compliance required as detailed in Technical News Sheet. |

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**DE HAVILLAND DH60, DH80, DH82, DH83, DH85, DH87, DH94 AND QUEEN BEE SERIES AIRCRAFT**

No CAA Type Certificate. Type Design Organisation – De Havilland Support Ltd.

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 2731 PRE 80 | Mod. No. 125 ) See TNS 5 | Introduction of aileron sprocket chain guides and reduction of floor stop slot length. | Applicable to DH82 aircraft.<br>Compliance required before issue or renewal of a Certificate of Airworthiness. |
| 2732 PRE 80 | Mod. No. 134 ) See TNS 5 | To seal the aileron gear box and improve inspection facilities. | Applicable to DH82 aircraft.<br>Compliance required before issue or renewal of a Certificate of Airworthiness. |
| 2733 PRE 80 | Mod. No. 138 ) See TNS 5 | To prevent splitting of aileron control box side members. | Applicable to DH82 aircraft.<br>Compliance required before issue or renewal of a Certificate of Airworthiness. |
| 2734 PRE 80 | TNS 19 | Inspection of pins attaching universal joint to undercarriage compression leg. | Applicable to DH82 aircraft.<br>Should have been complied with by 15 April 1962. |
| 002–04–83<br>Revision 1 | – | Installation of anti-spinning strakes. | Applicable to DH82 aircraft.<br>Effective from the issue date of this Directive revision which is 12 April 2001.<br>(1) Aircraft fitted with anti-spin strakes are cleared for normal erect spinning and aerobatics in all C of A Categories.<br>(2) Aircraft not fitted with strakes:<br>On initial issue of C of A or if strakes are removed, aerobatics and spinning not permitted unless a check flight has been completed by CAA Flight Department. In addition, if the aircraft is subject to a major rebuild e.g. wing change, then a further C of A Test Flight may be required. |

Note: This revision supersedes and cancels Airworthiness Information Leaflet AD/IL/0139.

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 002–10–97 | TNS 28 | Datum bolts. | Applicable to DH60 and DH82 aircraft. Compliance required as detailed in Technical News Sheet. |
| 006–10–97 | TNS 29 | Fuselage – Lateral tie rods – Fracture at wing joint fittings. | Applicable to DH60, DH82, DH82A, Queen Bee and DH83 Moth aircraft. Compliance required as detailed in Technical News Sheet. |
| 002–03–98 | TNS 32 Issue 2 | Flight limitations. | Applicable to DH60, DH80, DH82, DH83, DH85, DH87, DH94 and Queen Bee series aircraft. Compliance required as detailed in Technical News Sheet. |
| 007–03–99 | TNS 33 | Cockpit safety harness installation – Integrity and lifing. | Applicable to DH60, DH60G, DH60M, DH60X, DH82, DH82A, Queen Bee, DH83 and DH94 series aircraft. Compliance required as detailed in Technical News Sheet. |
| 008–03–99 | TNS 34 | Introduction of locking device for fuel on/off cock operating lever. | Applicable to DH82, DH82A Tiger Moth and Queen Bee aircraft. Compliance required as detailed in Technical News Sheet. |
| 002–10–2000 | TNS 37 | Introduction of increased strength seat harness transverse cable. | Applicable to DH60 all variants, DH82, DH82A and Queen Bee aircraft. Compliance required as detailed in Technical News Sheet. |

**DE HAVILLAND DH89 RAPIDE SERIES AIRCRAFT**

No CAA Type Certificate. Type Design Organisation – De Havilland Support Ltd.

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 2735 PRE 80 | Rapide Mod. 1 (Dominie Mod. 65) | Introduction of a screen on the windscreen wiper to eliminate compass interference. | As an alternative to this modification a cockpit notice must be fitted, restricting the use of the wiper to the period during take off and landing. |
| 2736 PRE 80 | Rapide Mod. 2 (Dominie Mod. 63) | Anti-vibration strut on mainplane bracing – improved attachment of clip. | |
| 2737 PRE 80 | Rapide Mod. 5 (Dominie Mod. 69) | Introduction of fuel drain pipe from induction manifold. | To be embodied with Gipsy Mod. No. 1152. |
| 2738 PRE 80 | Rapide Mod. 9 | Introduction of Battery Master Switch. | BEA Mod. E–5–4 is an acceptable alternative. |
| 2739 PRE 80 | Rapide Mod. 10 | Introduction of fuse in negative lead to radio. | |
| 2740 PRE 80 | Rapide Mod. 15 | To introduce bracing for rear diagonal struts and strengthened undercarriage radius rods. | Applicable immediately on Rapide Series 4 or Rapide Series 5 aircraft. |

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**DE HAVILLAND DH104 DOVE SERIES AIRCRAFT**

No CAA Type Certificate. Type Design Organisation – De Havilland Support Ltd.

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 2367 PRE 80 | 253 | *Electrical Power* – To introduce two pole wiring for lights and immersed fuel pumps. | Applicable to Series 1 and 2 aircraft. Compliance required as detailed in modification leaflet. |
| 2368 PRE 80 | 381 | *Fire Protection* – Re-positioning of crash operated inertia switch. | Applicable to all Series aircraft. Compliance required as detailed in modification leaflet.<br>NOTE: The installation covered by modification 862 and 1090 are acceptable alternatives. |
| 2369 PRE 80 | 524 | *Power Plant* – To introduce mild steel engine mounting pick-up fittings in lieu of alclad, and tighter limits in bearing hole. | Applicable to all Series aircraft. Compliance required as detailed in modification leaflet. |
| 2370 PRE 80 | 538 | *Fuselage* – To introduce strengthened bottom boom for centre section spar. | Applicable to Series 1 and 2 aircraft. Compliance required as detailed in modification leaflet. |
| 2371 PRE 80 | 574 | *Fuselage* – To introduce ice shield for ADF and VHF whip aerials. | Applicable to all Series aircraft. Compliance required as detailed in modification leaflet. |
| 2372 PRE 80 | 651 | *Fuselage* – To introduce flexibly mounted VHF whip aerials when mounted on the canopy. | Applicable to all Series aircraft. Compliance required as detailed in modification leaflet. |
| 2373 PRE 80 | 652 | *Fuselage* – To introduce flexibly mounted VHF whip aerial when mounted on the cabin roof. | Applicable to all Series aircraft. Compliance required as detailed in modification leaflet. |
| 2374 PRE 80 | 653 | *Fuselage* – To introduce flexibly mounted ADF whip aerial when mounted on the canopy. | Applicable to all Series airacraft. Compliance required as detailed in modification leaflet. |
| 2375 PRE 80 | 655 | *Electrical Power* – To provide supply for fire extinguisher circuit from battery side of ground-flight switch. | Applicable to all Series aircraft. Compliance required as detailed in modification leaflet. |
| 2376 PRE 80 | 686 | *Wings* – To introduce new wing root attachment bolts and shims in wing root joints. | Applicable to all Series aircraft. Compliance required as detailed in modification leaflet. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 2377 PRE 80 | 753 | *Fuselage* – To introduce smaller washer on flexibly mounted whip aerials. | Applicable to all Series aircraft. Compliance required as detailed in modification leaflet. |
| 2378 PRE 80 | 765 | *Flight Controls* – To introduce H.T. steel pins for locking stud on aileron differential pulley spindle. | Applicable to all Series aircraft. Compliance required as detailed in modification leaflet. |
| 2379 PRE 80 | 779 | *Fuselage* – To introduce H.T. steel bottom boom for centre section spar. | Applicable to all Series aircraft. Compliance required as detailed in modification leaflet. |
| 2380 PRE 80 | 780 | *Wings* – To introduce H.T steel bottom boom section in wing main spar. | Applicable to all Series aircraft. Compliance required as detailed in modification leaflet. |
| 2381 PRE 80 | 786 | *Fuselage* – To introduce improvements to whip aerial installation. | Applicable to all Series aircraft with Modifications 651 or 652 or 653 embodied. Compliance required as detailed in modification leaflet. |
| 2382 PRE 80 | 868 | *Landing Gear* – Introduction of revised locking lever on main undercarriage. | Applicable to all Series aircraft. Compliance required as detailed in modification leaflet. |
| 2383 PRE 80 | 879 | *Instruments* – Oil pressure and temperature gauges – To change attitude in instrument panel. | Applicable to all Series aircraft. Compliance required as detailed in modification leaflet.<br>NOTE: Not required when Modification 990 or 1231 are embodied. |
| 2384 PRE 80 | 967 | *Flight Controls* – Aileron lever – To introduce a forging in lieu of a casting. | Applicable to all Series aircraft. Compliance required as detailed in modification leaflet. TNS 151 refers. |
| 2385 PRE 80 | 978 | *Landing Gear* – Introduction of revised locking lever and jack attachment lever on nose undercarriage. | Applicable to all Series aircraft. Compliance required as detailed in modification leaflet. |
| 2386 PRE 80 | 982 | *Flight Controls* – Introduction of modified locking to flap datum hinge. | Applicable to all Series aircraft. Compliance required as detailed in modification leaflet. |
| 2387 PRE 80 | 1067 | *Fuselage* – Introduction of Aluminium Copper Alloy DTD 298 Castings in lieu of Magnesium Alloy DTD 289. | Applicable to all Series aircraft. Compliance required as detailed in modification leaflet. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 2388 PRE 80 | 1260 | *Auto-Pilot* – To introduce modified elevator servo Part No. 19355–0 incorporating Sperry pressure relief valve Part No. 19287–05. | Applicable to all Series aircraft fitted with AL.1A or AL.3 auto-pilot. Compliance required as detailed in modification leaflet. |
| 2389 PRE 80 | 1261 | *Auto-Pilot* – To introduce modified elevator servo Part No. 19356–0 incorporating Sperry pressure relief valve Part No. 19287–05. | Applicable to Series 1, 2, 5, 6, 7 and 8 aircraft fitted with AL30 auto-pilot. Compliance required as detailed in modification leaflet. |
| 2390 PRE 80 | 1298 | *Wings* – To introduce improved protective treatment on wing lower main joint. | Applicable to all Series aircraft. Compliance required as detailed in modification leaflet. |
| 2391 PRE 80 | 1723 | *Landing Gear* – To introduce adjusting screw Part No. 4U567 in lieu of adjusting screw Part No. 4U493 on nose and main under-carriage radius rod assemblies. | Applicable to all Series aircraft. Compliance required as detailed in modification leaflet. TNS 231 refers. |
| 2392 PRE 80 | TNS 119 | *Fuselage* – Centre section lower spar boom and wing lower spar boom – Safe lives. | Applicable to all Series aircraft. Compliance required as detailed in TNS. |
| 2393 PRE 80 | TNS 125 | *Wings* – Inspection of main spar booms. | Applicable to all Series aircraft. Compliance required as detailed in TNS. |
| 2394 PRE 80 | TNS 134 | *Wings* – Inspection of main spar joints. | Applicable to all aircraft up to and including Serial No. 04465 which have not had Modification 870 embodied. Compliance required as detailed in TNS. |
| 2395 PRE 80 | TNS 158 | *Engine Oil* – Recalibration of oil tank dipstick. | Applicable to aircraft fitted with an oil tank on which Modification PP173 is embodied. Compliance required as detailed in TNS. |
| 2396 PRE 80 | TNS 163 | *Fire Protection* – Inspection of power plant fire extinguisher system spray pipes. | Applicable to all Series aircraft. Compliance required as detailed in TSN. |
| 2397 PRE 80 | TNS 168 | *Wings* – Inspection of wing to fuselage lower main root joint. | Applicable to all Series aircraft fitted Gipsy Queen 70 Series engines. Compliance required as detailed in TNS. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 2398 PRE 80 | TNS 171 | *Flight Controls* – Inspection of aileron cables in the control column. | Applicable to all Series aircraft. Compliance required as detailed in TNS. |
| 2399 PRE 80 | TNS 178 | *Wings* – Inspection of lower root joint fittings. | Applicable to all Series aircraft. Compliance required as detailed in TNS. |
| 2400 PRE 80 | TNS 186 | *Electrical Power* – Inspection of main earth post. | Applicable to all Series aircraft. Compliance required as detailed in TNS. |
| 2401 PRE 80 | TNS 187 | *Flight Controls* – Inspection of elevator and rudder trim tab connecting rod assembly eye ends. | Applicable to all Series aircraft. Compliance required as detailed in TNS. |
| 2402 PRE 80 | TNS 190 | *Power Plant* – Inspection of engine mounting frames. | Applicable to all Series aircraft. Compliance required as detailed in TNS. |
| 2403 PRE 80 | TNS 195 | *Fire Protection* – Inspection of fire extinguisher system air intake nozzle. | Applicable to all Series aircraft. Compliance required as detialed in TNS. |
| 2404 PRE 80 | TNS 196 | *Fire Protection* – Inspection of engine fire extinguisher system. | Applicable to all Series aircraft. Compliance required as detailed in TNS. |
| 2405 PRE 80 | TNS 214 | *Pneumatic* – Inspection of emergency air bottles. | Applicable to all Series aircraft and spare bottles held in stores. Compliance required as detailed in TNS. |
| 2406 PRE 80 | TNS 216 | *Flight Controls* – Inspection of flap datum hinge assembly. | Applicable to all Series aircraft. Compliance required as detailed in TNS. |
| 2407 PRE 80 | TNS 217 | *Wings* – Inspection of lower front main attachment fittings. | Applicable to all Series aircraft. Compliance required as detailed in TNS. |
| 2408 PRE 80 | TNS 218 | *Flight Controls* – Inspection of flap datum hinge assembly. | Applicable to all Series aircraft. Compliance required as detailed in TNS. |
| 2409 PRE 80 | TNS 219 | *Flight Controls* – Inspection of rudder control pedal reversal lever. | Applicable to all Series aircraft. Compliance required as detailed in TNS. |
| 2410 PRE 80 | TNS 222 | *Doors* – Inspection of emergency escape hatches. | Applicable to all Series aircraft. Compliance required as detailed in TNS. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 2411 PRE 80 | TNS 223 | *Pneumatic* – Replacement of main air reservoir assemblies. | Applicable to all Series aircraft. Compliance required as detailed in TNS. |
| 2412 PRE 80 | TNS 226 | *Nacelles/Pylons* – Inspection of engine mounting pick-up positions. | Applicable to all Series aircraft. Compliance required as detailed in TNS. |
| 2413 PRE 80 | TNS 227 | *Electrical Power* – Loss of generated power. | Applicable to all Series aircraft. Compliance required as detailed in TNS.<br>NOTE: Compliance is accepted as providing an equivalent level of safety to the requirements of Airworthiness Notice No. 82. |
| 2414 PRE 80 | TNS 228 | *Power Plant* – Inspection of left-hand engine mounting frame. | Applicable to all Series aircraft. Compliance required as detailed in TNS. |
| 2415 PRE 80 | TNS 229 | *Power Plant* – Inspection of engine mounting stay struts. | Applicable to all Series aircraft. Compliance required as detailed in TNS. |
| 2416 PRE 80 | TNS 230 | *Fuselage* – Inspection of centre section spar lower boom drag bracing member. | Applicable to all Series aircraft. Compliance required as detailed in TNS. |
| 2417 PRE 80 | TNS 232 | *Landing Gear* – Inspection of nose undercarriage inner casing. | Applicable to all Series aircraft. Compliance required as detailed in TNS. |
| 2418 PRE 80 | TNS 237 | *Fuselage* – Inspection of centre section main spar top boom. | Applicable to all Series aircraft. Compliance required as detailed in TNS. |
| 2419 PRE 80 | TNS 238 | *Fuselage* – Inspection of centre section main spar top boom (Pre-Modification 779). | Applicable to all Series aircraft (Pre-Modification 779). Compliance required as detailed in TNS. |
| 2420 PRE 80 | TNS 240 | *Structure* – Aircraft life extension. | Applicable to Series 1 to Series 8 aircraft and their variants. Compliance required as detailed in TNS. |
| 2421 PRE 80 | TNS 244 | *Power Plant* – Inspection of engine mounting frame front engine support spigots. | Applicable to all Series aircraft. Compliance required as detailed in TNS. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 008–05–87 | TNS 245 | Wings – Aileron mass balance weight assemblies – Internal corrosion. | Applicable to all Series aircraft. Compliance required as detailed in TNS. |
| 002–11–88 | TNS 246 | *Flight Controls* – Flap jack to flap attachment pin. | Applicable to all Series aircraft. Compliance required as detailed in TNS. |

## DE HAVILLAND DH114 HERON SERIES AIRCRAFT

No CAA Type Certificate. Type Design Organisation – De Havilland Support Ltd.

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 2614 PRE 80 | 57 | *Communications* – Introduction of a weak link in the fixed aerial wire. | Applicable to Series 1 aircraft. Should have been embodied by 31 December 1954. |
| 2615 PRE 80 | 86 | *Communications* – Introduction of flexiibly mounted VHF and ADF whip aerials when mounted on canopy. | Applicable to Series 1B and 2 aircraft. Should have been embodied by 31 December 1957. |
| 2616 PRE 80 | 103 | *Communications* – Introduction of flexibly mounted VHF whip aerial when mounted on cabin roof. | Applicable to all aircraft. Should have been embodied by 31 December 1954. |
| 2617 PRE 80 | 213 | *Landing Gear* – Introduction of strengthened nosewheel shock absorber. | Applicable to all aircraft. Should have been embodied by 31 January 1955. |
| 2618 PRE 80 | 250 | *Pneumatic* – Introduction of modified flap selector valve. | Applicable to all aircraft. Should have been embodied by 31 December 1955. |
| 2619 PRE 80 | 286 | *Flight Controls* – Reinforcement of spar of inner flaps. | Applicable to all aircraft. Should have been embodied by 1 June 1954. |
| 2620 PRE 80 | 311 | *Fuel* – Introduction of shortened retaining cable on fuel tank filler caps. | Applicable to all aircraft unless Modification 219 is embodied. Should have been embodied by 30 June 1954. |
| 2621 PRE 80 | 350 | *Fuel* – Introduction of modified wing tank filler neck packing plate to improve sealing efficiency. | Applicable to all aircraft unless Modification 219 is embodied. Should have been embodied by 30 June 1954.<br>NOTE: Modification 352 is alternative to Modification 350 and is not applicable if Modification 219 is embodied. |
| 2622 PRE 80 | 342 | *Vacuum* – Introduction of guard for A.S.I. drain taps in forward luggage compartment. | Applicable to all aircraft. Should have been embodied by 31 December 1954. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 2623 PRE 80 | 365 | *Fuselage* – Reinforcing of rear false spar to fuselage side. | Applicable to all aircraft. Should have been embodied by 31 October 1954. |
| 2624 PRE 80 | 373 | *Communications* – Introduction of smaller washer on flexibly mounted whip aerials. | Applicable to all aircraft with whip aerials fitted. Should have been embodied by 31 October 1955. |
| 2625 PRE 80 | 475 | *Flight Controls* – Introduction of H.T.S. pin for locking stud on aileron differential pulley spindle. | Applicable to all aircraft. Should have been embodied by 31 December 1954. |
| 2626 PRE 80 | 485 | *Wings* – Introduction of safety device on wing leading edge toggle fasteners. | Applicable to all aircraft. Should have been embodied by 31 December 1956. |
| 2627 PRE 80 | 492 | *Fuselage* – Introduction of H.T. steel bottom boom for centre section spar. | Applicable to all aircraft. Compliance required as detailed in Technical News Sheet No. F2. |
| 2628 PRE 80 | 514 | *Communications* – Introduction of improvements to flexibly mounted whip aerials. | Applicable to aircraft fitted with whip aerials. Should have been embodied by 31 October 1955. |
| 2629 PRE 80 | 520 | *Wings* – Introduction of H.T. steel bottom boom section. | Applicable to all aircraft. Compliance required as detailed in Technical News Sheet No. W4.<br>NOTE: Modification 524 covers this work for aircraft Serial No. 10903. |
| 2630 PRE 80 | 527 | *Wings* – Reinforcing of bottom skin aft of wheel well. | Applicable to all Series 2 aircraft. Compliance required as detailed in Technical News Sheet No. W4. |
| 2631 PRE 80 | 662 | *Wings* – Replacement of existing cast aileron operating lever with a forged lever. | Applicable to all aircraft. Compliance required as detailed in Technical News Sheet No. W3. |
| 2632 PRE 80 | 753 | *Flight Controls* – Improvement to rudder leading edge. | Applicable to all Series 1 aircraft without Modification 203 embodied. Should have been embodied by 31 December 1955. |
| 2633 PRE 80 | 758 | *Flight Controls* – Introduction of reinforcing plate to elevator main spar at root rib. | Applicable to all aircraft. Should have been embodied by 31 March 1956. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 2634 PRE 80 | 760<br>or<br>929 | *Landing Gear* – Introduction of strengthened nose leg inner casing.<br>Introduction of strengthened nose leg inner casing incorporating an improved method of locating towing bobbins. | Applicable to all aircraft. Compliance required as detailed in Technical News Sheet No. U1.<br>Should have been embodied by 30 June 1957. |
| 2635 PRE 80 | 810 | *Wings* – Provision for stop plates for toggle fasteners at wing leading edges. | Applicable to all aircraft. Should have been embodied by 31 December 1956. |
| 2636 PRE 80 | 811 | *Wings* – Introduction of stronger toggle fastener access doors and limiting chains. | Applicable to aircraft with Modification 469 or Modifications 469 and 815 or 154 embodied. Should have been embodied by 31 December 1956. |
| 2637 PRE 80 | 887<br>or<br>919 | *Flight Controls* – Introduction of modified rudder trim tab connecting rod.<br>Introduction of non-linear rudder tab. | Applicable to all aircraft. Should have been embodied by 30 November 1956.<br>Acceptable to Series 2 aircraft as an alternative to Modification 887 provided that fork Part No. 14TR.311 is fitted concurrently. |
| 2638 PRE 80 | 931 | *Wings* – Introduction of packing plate between steel position of the wing spar boom and the wing skin reinforcing plate. | Applicable to aircraft prior to Serial No. 14083. Compliance required as detailed in Technical News Sheet No. W.4. |
| 2639 PRE 80 | 1093 | *Landing Gear* – Introduction of revised locking lever and jack attachment lever. | Applicable to Series 2 aircraft. Compliance required as detailed in Technical News Sheet No. U.13. |
| 2640 PRE 80 | 1303 | *Flight Controls* – Introduction of an improved method of locking bolts at flap hinge rib 7. | Applicable to all aircraft. Compliance required as detailed in Technical News Sheet No. W.16. |
| 2641 PRE 80 | 1320 | *Propellers* – Introduction of propeller feathering unit type PFD 3001 in lieu of PFD 2205. | Applicable to Series 2 aircraft with Modification 220 embodied. |
| 2642 PRE 80 | 1498 | *Wings* – Introduction of special bolt Part No. 14W.5835 in lieu of special bolt Part No. 4W.1121 for attachment of flap jack shackles in wing. | Applicable to all aircraft. Compliance required as detailed in Technical News Sheet No. CF.7. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 2643 PRE 80 | 1536 | *Landing Gear* – Introduction of H.T.S. jack attachment bolts 14–2U.631 in lieu of mild steel bolt 14.2U.229. | Applicable to Series 2 aircraft. Compliance required as detailed in Technical News Sheet No. U.8. |
| 2644 PRE 80 | 1592 | *Landing Gear* – Introduction of a down lock operating lever and upper stabiliser casting in an improved material. | Applicable to Series 2 aircraft. Compliance required as detailed in Technical News Sheet No. U12. Part 'A' should have been embodied by 31 December 1970 for aircraft post Modification 608. |
| 2645 PRE 80 | 1609 | *Landing Gear* – Introduction of a damper ram with improved damping characteristics for main undercarriage. | Applicable to Series 2 aircraft. Compliance required as detailed in Technical News Sheet No. U15. |
| 2646 PRE 80 | 1610 | *Landing Gear* – Introduction of nose undercarriage radius rod adjusting screw in an improved material. | Applicable to Series 2 aircraft. Compliance required as detailed in Technical News Sheet No. U16. |
| 2647 PRE 80 | CF.6 | *Flight Controls* – Inspection of aileron cables in the control column. | Applicable to all aircraft. Should have been complied with by 31 August 1960. Repeat inspection on any occasion when aileron cables in the control column have been disturbed. |
| 2648 PRE 80 | CF.10 | *Flight Controls* – Inspection of eye end on trim tab connecting rod. | Applicable to all aircraft. Compliance required as detailed in Technical News Sheet. |
| 2649 PRE 80 | CF.13 | *Flight Controls* – Inspection of flap datum hinge assembly. | Applicable to all aircraft. Compliance required as detailed in Technical News Sheet. |
| 2650 PRE 80 | CF.14 | *Flight Controls* – Inspection of flap datum hinge assembly. | Applicable to all aircraft. Compliance required as detailed in Technical News Sheet. |
| 2651 PRE 80 | CF.15 | *Flight Controls* – Inspection of rudder control pedal reversal lever. | Applicable to all aircraft. Compliance required as detailed in Technical News Sheet. |
| 2652 PRE 80 | E.3 | *Power Plant* – Inspection of engine mounting frames. | Applicable to all aircraft. Compliance required as detailed in Technical News Sheet. |
| 2653 PRE 80 | E.8 | *Power Plant* – Inspection of engine mounting stay struts. | Applicable to all aircraft. Compliance required as detailed in Technical News Sheet. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 2654 PRE 80 | F.2 | *Fuselage* – Safe life of fuselage centre section lower spar boom. | Applicable to all aircraft. Compliance required as detailed in Technical News Sheet. |
| 2655 PRE 80 | F.15 | *Fuselage* – Inspection of fin attachment brackets. | Applicable to all aircraft. Compliance required as detailed in Technical News Sheet. |
| 2656 PRE 80 | F16 | *Fuselage* – Inspection of emergency escape hatches. | Applicable to all aircraft. Compliance required as detailed in Technical News Sheet. |
| 2657 PRE 80 | F17 | *Fuselage* – Inspection of fuselage keel frame at wing rear spar pick up position. | Applicable to all aircraft. Compliance required as detailed in Technical News Sheet. |
| 2658 PRE 80 | F18 | *Fuselage* – Inspection of centre section spar lower boom drag bracing member. | Applicable to all aircraft. Compliance required as detailed in Technical News Sheet. |
| 2659 PRE 80 | F19 | *Fuselage* – Inspection of centre section main spar top boom. | Applicable to all aircraft. Compliance required as detailed in Technical News Sheet. |
| 2660 PRE 80 | F20 | *Fuselage* – Inspection of centre section main spar bottom boom. | Applicable to all aircraft without Modification 492 embodied. Compliance required as detailed in Technical News Sheet. |
| 2661 PRE 80 | F21 | *Fuselage* – Replacement of tailplane upper pick-up eyebolt in bulkhead 7. | Applicable to all aircraft. Compliance required as detailed in Technical News Sheet. |
| 2662 PRE 80 | M6 | *Fire Protection* – Inspection of engine fire extinguisher system air intake nozzle. | Applicable to all aircraft. Compliance required as detailed in Technical News Sheet. |
| 2663 PRE 80 | M9 | *Structure* – Aircraft life extension. | Applicable to Series 2 aircraft. Compliance required as detailed in Technical News Sheet. |
| 2664 PRE 80 | M11 | *Structures* – Aircraft life extension. | Applicable to Series 1B aircraft. Compliance required as detailed in Technical News Sheet. |
| 2665 PRE 80 | N4 | *Electrical Power* – Inspection of main earth posts. | Applicable to all aircraft. Compliance required as detailed in Technical News Sheet. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 2666 PRE 80 | N6 | *Electrical Power* – Loss of generated electrical power. | Applicable to all aircraft. Compliance required as detailed in Technical News Sheet.<br>Note: Compliance is accepted as providing an equivalent level of safety to the requirements of Airworthiness Notice No. 82. |
| 2667 PRE 80 | S6 | *Pneumatic* – Replacement of emergency air bottles. | Applicable to all aircraft. Should have been complied with by 31 December 1970. |
| 2668 PRE 80 | S7 | *Pneumatic* – Replacement of main air reservoirs. | Applicable to all aircraft. Should have been complied with by 1 June 1972. |
| 2669 PRE 80 | U13 | *Landing Gear* – Replacement of nose undercarriage locking lever and jack attachment lever. | Applicable to all aircraft. Should have been complied with by 1 March 1971. |
| 2670 PRE 80 | U15 | *Landing Gear* – Modification to main undercarriage damper ram. | Applicable to Series 2 aircraft. Should have been complied with by 30 April 1974. |
| 2671 PRE 80 | U16 | *Landing Gear* – Replacement of nose undercarriage radius rod adjusting screw. | Applicable to Series 2 aircraft. Should have been complied with by September 1973. |
| 2672 PRE 80 | U17 | *Landing Gear* – Inspection of nose undercarriage inner casing. | Applicable to all aircraft. Compliance required as detailed in Technical News Sheet. |
| 2673 PRE 80 | W3 | *Wings* – Replacement of aileron lever Part No. 14WA-199. | Applicable to all aircraft without Modification 662 embodied. Should have been complied with by 31 May 1970. |
| 2674 PRE 80 | W4 | *Wings* – Safe life of wing lower spar boom. | Applicable to all aircraft. Compliance required as detailed in Technical News Sheet. |
| 2675 PRE 80 | W6 | *Wings* – Inspection of wing spar booms. | Applicable to aircraft Series Nos up to and including 14093 and Serial Nos 14098 which have not had Modification 843 embodied. Compliance required as detailed in Technical News Sheet. |
| 2676 PRE 80 | W9 | *Wings* – Inspection of wing to fuselage lower main root joints. | Applicable to all aircraft. Compliance required as detailed in Technical News Sheet. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 2677 PRE 80 | W10 | *Wings* – Inspection of wing rear false spar web. | Applicable to all aircraft which have not had Modification 1454 embodied. Should have been complied with by 31 December 1961. |
| 2678 PRE 80 | W15 | *Wings* – Inspection of wing strap for engine mounting pick up. | Applicable to all aircraft. Compliance required as detailed in Technical News Sheet. |
| 2679 PRE 80 | W16 | *Wings* – Replacement of bolts at flap hinge bracket and inspection of fork joints and reinforcing brackets. | Applicable to all Aircraft. Compliance required as detailed in Technical News Sheet. |
| 2680 PRE 80 | W17 | *Wings* – Inspection of wing to fuselage front lower attachment fittings. | Applicable to all aircraft. Compliance required as detailed in Technical News Sheet. |
| 009–05–87 | W19 | *Wings* – Aileron mass balance weight assemblies – Internal corrosion. | Applicable to all aircraft. Compliance required as detailed in Technical News Sheet. |
| 001–11–88 | CF–20 | *Flight Controls* – Flap jack to flap attachment pin. | Applicable to all aircraft. Compliance required as detailed in Technical News Sheet. |

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## DH 104 RILEY DOVE SERIES 1 AND 2

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 2741 PRE 80 | Riley Aeronautics Corporation Service Letter No. 65–3 | The pneumatic compressor drives must be to the standards of Installation Drawing R.00459. | Applicable to all DH 104 Riley Dove Series 1 and 2. Should have been embodied on receipt of Riley Service Letter 65–3 dated 29 December 1965. |
| 2742 PRE 80 | Sir Robert McAlpine Riley Dove Service Bulletin No. 104–2. | Fatigue Life Limitation of wing Spars after conversion and incorporation of Mod. 780. | Applicable to all DH 104 Riley Dove 1 and 2.<br>NOTE The spar life must be calculated in accordance with the formula specified in Service Bulletin 104–2. |
| 2743 PRE 80 | 253 | To introduce two-pole wiring for cabin lights and immersed fuel pumps in order to prevent compass deviation when these two services are in use. | |
| 2744 PRE 80 | 381 | Re-positioning of crash-operated inertia switch. | See Technical News Sheet CT (104) No. 146. The installation covered by Modifications 862 and 1090 is an acceptable alternative. |
| 2745 PRE 80 | 524 | To introduce Engine Mounting Pick-up Fittings Parts Nos. 4.W.4697 and 4.2.4699 made of Mild Steel Plate. | See Technical News Sheet Series CT (104) No. 65. |
| 2746 PRE 80 | *574 | To introduce Ice Shield on VHF and ADF Whip Aerials. | |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 2747 PRE 80 | *651 | To introduce flexibly mounted VHF Whip Aerials when mounted on the canopy. | |
| 2748 PRE 80 | *652 | To introduce flexibly mounted VHF Whip Aerial when mounted on the cabin roof. | |
| 2749 PRE 80 | *653 | To introduce flexibly mounted ADF Whip Aerial when mounted on the canopy. | |
| 2750 PRE 80 | 655 | To provide supply for fire extinguisher circuit from battery side of ground-flight switch. | |
| 2751 PRE 80 | *753 | To introduce smaller washer on flexibly mounted Whip Aerials. | See Technical News Sheet CT (104) No. 109. |
| 2752 PRE 80 | 765 | To introduce HTS pins for locking stud on Aileron Differential Pulley Spindle. | See Technical News Sheet CT (104) No.114. |
| 2753 PRE 80 | 779 | To introduce steel centre section bottom boom. | See Technical News Sheet CT (104) No. 199. |
| 2754 PRE 80 | 780 | To introduce high tensile steel section in the wing main spar bottom boom. | |
| 2755 PRE 80 | *786 | To introduce improvements to flexibly mounted Whip Aerials. | See Technical News Sheet CT (104) No. 109. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 2756 PRE 80 | 868 )<br>978 ) | Main and Nose undercarriage locking and Jack attachment levers. | Compliance required as detailed in Technical News Sheet CT (104) No. 155.<br>*Mod. 868:* (a) Aircraft prior to Serial No. 04463 should have been embodied by 1 April 1959.<br>(b) Aircraft Serial Nos. 04463 to 04477 inclusive should have been embodied by 30 September 1959.<br>*Mod. 978:* Should be embodied by 1 March 1971. |
| 2757 PRE 80 | *1260 | To introduce modified elevator Servo Pt. No. 19355 – O incorporating Sperry Pressure Relief Valve Pt. No. 19287–05. | Applicable to all aircraft fitted with Sperry Pilot Aids AL. 1A. AL.3 or AL.30. Should have been embodied by 30 April, 1960. Tech. News Sheet CT (104) No. 164 refers. |
| 2758 PRE 80 | *1261 | To introduce modified elevator Servo Pt. No. 19356 – O incorporating Sperry Pressure Relief Valve, Pt. No. 19287–07. | |
| 2759 PRE 80 | 1298 | Wing Lower Main Spar Root Joints – To introduce improved protective treatment. | Compliance required as detailed in Tech. News Sheet CT (104) No. 168. |
| 2760 PRE 80 | TNS 125 | *Wings* – Inspection of main spar booms. | Compliance required as detailed in TNS. |
| 2761 PRE 80 | TNS 134 | *Wings* – Inspection of main spar joints. | Compliance required as detailed in TNS. Applicable only to aircraft up to and including Serial No. 04465 which have not had Modification 870 embodied. |
| 2762 PRE 80 | *TNS 164 | *Auto-Pilot* – Limitations of use. | Compliance required as detailed in TNS. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 2763 PRE 80 | TNS 171 | *Flight Controls* – Inspection of aileron cables in the control column. | Compliance required as detailed in TNS. |
| 2764 PRE 80 | TNS 178 | *Wings* – Inspection of lower root joint fittings. | Compliance required as detailed in TNS. |
| 2765 PRE 80 | TNS 151 | *Flight Controls* – Aileron lever – To introduce a forging in lieu of a casting. | Compliance required as detailed in TNS. |
| 2766 PRE 80 | TNS 186 | *Electrical Power* – Inspection of main earth post. | Compliance required as detailed in TNS. |
| 2767 PRE 80 | TNS 187 | *Flight Controls* – Inspection of elevator and rudder trim tab connecting rod assembly eye ends. | Compliance required as detailed in TNS. |
| 2768 PRE 80 | TNS 214 | *Pneumatic* – Inspection of emergency air bottles. | Compliance required as detailed in TNS. |
| 2769 PRE 80 | TNS 216 | *Flight Controls* – Inspection of flap datum hinge assembly. | Compliance required as detailed in TNS. |
| 2770 PRE 80 | TNS 217 | *Wings* – Inspection of lower front main attachment fittings. | Compliance required as detailed in TNS. |
| 2771 PRE 80 | TNS 218 | *Flight Controls* – Inspection of flap datum hinge assembly. | Compliance required as detailed in TNS. |
| 2772 PRE 80 | TNS 219 | *Flight Controls* – Inspection of rudder control pedal reversal lever. | Compliance required as detailed in TNS. |

*Denotes if applicable

## DOUGLAS DC–3 AND DAKOTA

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 2840 PRE 80 | 1095 | To move ground supply relay to new position and introduction of a warning lamp on the port doorway side member at Stn 86. | Compliance required as detailed in Modification Leaflet. |
| 2841 PRE 80 | 1097 | To strengthen wing root fillet ribs and attachments. Modification may be detected by an extra thickness of metal (20 SWG) between the fillet and the wing skin. | Compliance required as detailed in Modification Leaflet. |
| 2842 PRE 80 | 1099 | To obviate failure of the flap operating shaft. | Compliance required as detailed in Modification Leaflet. |
| 2843 PRE 80 | 1106 | Improved universal joint in the fuel selector valve control. | Compliance required as detailed in Modification Leaflet. |
| 2844 PRE 80 | 1107 | To improve the fuel tank filler neck seal. | Compliance required as detailed in Modification Leaflet. |
| 2845 PRE 80 | S688 | To provide six additional 2 BA nuts and bolts on access panel, adjacent to exhaust pipe expansion joint. | Compliance required as detailed in Modification Leaflet. |
| 2846 PRE 80 | S694 | Introduction of Starter Relay Failure Warning Lights. | Compliance required as detailed in Modification Leaflet. |
| 2847 PRE 80 | S599 | Introduction of flameproof hose. | Compliance required as detailed in Modification Leaflet. The following Mods are acceptable alternatives: BOAC Mod. P12755 or P22218, BEAC Mod. P–1–4 Skyways Mod. S371 Airtech Mod. AT101. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 2848 PRE 80 | S607 | Fireproofing of firewall. | Compliance required as detailed in Modification Leaflet. The following Mods. are acceptable alternatives: BOAC Mod. P12575 BEAC Mod. P–35–2 Skyways Mod. S359 Airtech Mod. AT103. |
| 2849 PRE 80 | S617 | Flameproofing of fast feathering circuits. | Compliance required as detailed in Modification Leaflet. The following Mods are acceptable alternatives: BOAC Mod. P12757 BEAC Mod. P–35–2 Skyways Mod. S359 Airtech Mod. AT103. |
| 2850 PRE 80 | S622 | Installation of fire extinguisher system. | Compliance required as detailed in Modification Leaflet. The following Mods. are acceptable alternatives: BOAC Mod. P22082 BEAC Mod. U–4–5 Skyways Mod. S331. Airtech Mod. AT104. |
| 2851 PRE 80 | S646 or S652 | Installation of fire warning light. | Compliance required as detailed in Modification Leaflet. The following Mods. are acceptable alternatives: BOAC Mod. P22082 BEAC Mod. E–32–4 Skyways Mod. S331, Airtech Mod. AT105. |
| 2852 PRE 80 | S760 | Provision of flexible sleeving inside engine electrical conduits to prevent chafing. | Compliance required as detailed in Modification Leaflet. An alternative modification acceptable to the CAA may be embodied. |
| 2853 PRE 80 | Douglas Service Bulletin DC3 No. 239 | Modification of the engine hydraulic pump selection system. | Compliance required as detailed in Modification Leaflet. The following modifications are acceptable as alternatives: Transair TRA/M/109 or British Airways BEA No. H–4–21. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 2854 PRE 80 | CAA EMERGENCY AD No. 001/7/78 | Flap Operating Systems. | Compliance required as detailed in CAA Emergency Directive. |
| 2855 PRE 80 | – | Inspection of fuel vapour return lines. | Following a fire in the air believed to have been caused by a leaking rubber hose joint in the fuel vapour return line situated adjacent to electrical equipment, all Dakota aircraft should now have been examined to ascertain that no rubber hose and clip type joints occurred in the fuel system pipe lines in the wheel bay including the vapour vent return line. Any such hose and clip joints in the wheel bay should have been eliminated by the substitution of all metal joints. |
| 2856 PRE 80 | CAA Letter ACC/1214 dated 14–4–67 | Before the CAA will issue or renew Certificates of Airworthiness for Dakota (Douglas C47) aircraft the following requirements must be fulfilled:<br>1 (a) Dakota 3 Aircraft must be fitted with Pratt and Whitney S1C3G, R1830–49, –57, –82, –92 or –96 engines.<br>(b) Dakota 4 Aircraft must be fitted with Pratt and Whitney S3C4G, S4C4G, R1830–43, –43A, –67, –90C or 90D engines.<br>(c) All these engines must have installed a reduction gear of 16.9.<br>Reduction gear nameplates or housings must be marked '16/9' to denote the gear ratio and 'R' to indicate rigid or 'D' to indicate non-rigid (spline coupled). Engine log books must also be annotated but only overhaul organisations may mark the gear housings.<br>(d) Propeller blades 6477A–0 and interchangeable blades 6277–0 must not be used with hub 23E50 if rigid type reduction gears are installed. | |

*Continued overleaf*

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|

2856 PRE 80 (continued)

(e) Propeller blades 6153–18, 6353–18, 6229–18 and 6429–18 may be used with propeller hub 23E50 and a Placard is required 'Avoid continuous operation between 1900 and 2050 rev/min'. If rigid type reduction gears are fitted an additional placard is required – 'Avoid continuous operation between 1500 and 1650 rev/min and avoid take-off operation between 2450 and 2700 rev/min'.

See also FAA Aircraft Data Sheet A669 for other propeller blade and hub combinations and limitations.

2 On Dakota 4 Aircraft installed with Pratt and Whitney S4C4G or R1830–90C engines, the 2 speed supercharger gear controls must be positively locked for operation in low gear only. This should be done by a tiebar on the rear cover of the engine, the disconnection of the engine controls in the power plant bay, and a note at the supercharger control in the cockpit. Approval is granted only in certain aerial work circumstances to use this control.

3 Dakota 5 Aircraft are fitted with R1830–94 engines and are certified in the Private Category only.

4 Dakota 6 are similar to Dakota aircraft having R1830–90D or 90C engines, undercarriage doors, Goodyear single disc brakes, and quicker undercarriage retraction. Also Paddle blade type propeller Hamilton 23E50–473–6519–18.

5 At conversion from military to civil use the outer wing and centre section lower surface attachment angles and doublers must be changed to the standards of AD66–18–2 irrespective of the total hours flown by the aircraft.

6 The non-ram air intake system, if installed must be made inoperative by positively locking the intake door in the closed position and rivetting a blanking plate over the control lever quadrant to prevent inadvertent operation, in accordance with Douglas Drawing 5115226 or equivalent Forward facing filtered air intakes are not approved by the FAA. See also Item 18.

*Continued*

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|

2856 PRE 80 (continued)

7 A satisfactory windscreen wiper must be installed.

8 All aircraft must be fitted with oil cooler air exit shutters unless the aircraft has been otherwise modified to an approved scheme.

9 A vacuum gauge must be installed in the instrument vacuum system.

10 To comply with current Air Navigation Order, the following must be provided for Transport Category (Passenger) Standard.

(i) Emergency lighting in the passenger compartment, usually three inertia and manual control lights will be sufficient depending on the interior layout.

(ii) Method of illumination of the leading edges of the mainplanes for ice observation at night.

(iii) Flashing navigation lights to be fitted giving the correct angular range of light.

(iv) Torches.

(v) First Aid Kits and manuals.

(vi) Means of indicating to the passengers that seat belts must be fastened and smoking prohibited.

(vii) Exits and Emergency Exits must be marked; external marking must be easily visible from the ground.

(viii) The aircraft, flight and navigation instrumentation must be checked for compliance.

*Continued overleaf*

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|

2856 PRE 80 (continued)

(ix) Break-in points must be marked on the fuselage (ARB Specification No. 7) usually two points will be sufficient.

(x) Spare electrical fuses to 10% of each value or 3, whichever is most, must be provided.

(xi) Safety harness for the pilots installed to an approved scheme.

11 The undercarriage must be in accordance with Douglas Service Bulletin No. 242 as supplemented by Douglas Service Bulletin No. 261 and tyres of 12 ply rating or over must be fitted.

12 When AN4/7A and AN4/10A bolts are used for mainplane attachments they must be torque loaded to 135 to 150 in/lb. The only British equivalent bolts are A25–4E, –5E and –6E and these must be torque loaded to 130 to 135 in/lb. American and British bolts must not be mixed on any one aircraft and similar type stiff nuts must be used being assembled dry.

13 Oil hoppers should be removed from oil tanks to an approved modification.

14 Several types of fire warning lights may be fitted in the cockpit if a hinged night hood is fitted or if a rotary dimmer switch is fitted; these must be wire locked in 'day' position using fusewire.

15 The cabin lining, upholstery, etc. should be fire resistant (ARB Specification No. 8). The seating layout must be approved by the Authority and suitable cabin fire extinguishers must be provided.

16 Early type wing tips having stringers in the top surface of $^{1}/_{2}$ x $^{7}/_{16}$ x .040 must be reworked to Douglas Service Bulletin No. 215 Supplement No. 1 of 30–11–43 and Douglas Service Letter of 19–10–43. The later types have stringers of $^{7}/_{8}$ x $^{1}/_{2}$ x .051 and these are satisfactory.

*Continued*

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 2856 PRE 80 (continued) | | 17 The Radio Station must comply with CAA requirements. | |
| | | 18 The selector mechanism for the carburettor 'Hot Air' supply must be rearranged, if necessary, to operate in the following manner, and placarded accordingly:<br>FORWARD – RAM AIR<br>AFT – HOT AIR | |

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## EDGAR PERCIVAL EP9 – LANCASHIRE PROSPECTOR TYPE EP9

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 2773 PRE 80 | Mod. No. 50 | Incorporation of an external drain to engine fuel pump. | Edgar Percival Service Bulletin No. 2 refers. |
| 2774 PRE 80 | Mod. No. 54 | Introduction of 'Stick Shaker' type of stall warning device. | Lancashire Aircraft Service Bulletin No. 11 refers. |
| 2775 PRE 80 | Mod. No. 78 | Engine installation – improved cooling. | Edgar Percival Service Letter refers. |
| 2776 PRE 80 | Mod. No. 81 | Modified Tailplane Strut Attachment Brackets. | Edgar Percival Service Bulletin No. 6 refers. |
| 2777 PRE 80 | Mod. No. 105 | To replace 'KSB 05 Stall Detector' by 'Safe Flight Stall Detector Type 164'. | Should have been embodied by 1 July 1961. |
| 2778 PRE 80 | Mod. No. 108 | Elevator Trim Control. | Should have been embodied by 31 March 1961. Lancashire Aircraft Service Bulletin No. 12 refers. |
| 2779 PRE 80 | – | Inspection of fuselage structure. | Lancashire Aircraft Service Bulletin No. 15 refers. |

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**FLS AEROSPACE (LOVAUX) OA7 OPTICA SERIES AIRCRAFT**
**(including Optica aircraft manufactured by Brooklands Aerospace, Optica Industries and Edgley aircraft)**

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 001–12–88 | OA7/SB/0040 | Engine pod mounting feet – Inspection and rectification. | Applicable to all aircraft. Compliance and requirement as detailed in Service Bulletin. |
| 011–03–89 | OA7/SB/0013 | Flap switch – Replacement of guard and switch. | Applicable to aircraft Serial Nos. OA7–005 through OA7–010. Compliance and requirement as detailed in Service Bulletin. |
| 012–03–89 | OA7/SB/0014 | Nosewheel bungee – Inspection and rework. | Applicable to aircraft Serial Nos. OA7–005 through OA7–010. Compliance and requirement as detailed in Service Bulletin. |
| 013–03–89 | OA7/SB/0018 | Fuel tanks calibration – Revision of tolerances in maintenance manual. | Applicable to all aircraft. Compliance and requirement as detailed in Service Bulletin. |
| 014–03–89 | OA7/SB/0021 | Aileron spring box – Addition of maintenance procedure. | Applicable to all aircraft. Compliance and requirement as detailed in Service Bulletin. |
| 015–03–89 | OA7/SB/0028 | Alternator RF filter leads – Mounting revision. | Applicable to aircraft Serial Nos. OA7–005 through OA7–010. Compliance and requirement as detailed in Service Bulletin. |
| 016–03–89 | OA7/SB/0030 | Engine oil breather pipe – Replacement. | Applicable to aircraft Serial Nos. OA7–005 through OA7–012. Compliance and requirement as detailed in Service Bulletin. |
| 017–03–89 | OA7/SB/0029 | Flight Manual – Issue of General Revision 1. | Applicable to aircraft Serial Nos. OA7–005 through OA7–010. Compliance and requirement as detailed in Service Bulletin. |
| 018–03–89 | OA7/SB/0037 | Electrical wiring – Inspection and restraint. | Applicable to all aircraft. Compliance and requirement as detailed in Service Bulletin. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 019–03–89 | OA7/SB/0038 | Elevator trim system – Addition of secondary locking and fairlead in port tail fin. | Applicable to aircraft Serial Nos. OA7–003, OA7–010 and OA7–016. Compliance and requirement as detailed in Service Bulletin. |
| 020–03–89 | OA7/SB/0039 | Alternator master switch – Insulation of terminals. | Applicable to aircraft Serial Nos. OA7–003 through OA7–016. Compliance and requirement as detailed in Service Bulletin. |
| 004–05–90 | OA7/SB/0042 | Fan (propeller) assembly – Inspection. | Applicable to all aircraft. Compliance and requirement as detailed in Service Bulletin. |
| 015–08–93 | B2/MSB/1 | Flying control system bellcrank assemblies. | Applicable to aircraft up to and including Constructors No. OA7–021. Compliance and requirement as detailed in Service Bulletin. |
| 007–01–94 | B2/MSB/5 | Landing Gear – Nose undercarriage leg retention. | Applicable to aircraft up to and including Constructors No. OA7–022. Compliance and requirement as detailed in Service Bulletin. |
| 007–03–94 | OA7/SB/0003 | Elevator – Rebalancing and revision of maintenance procedure. | Applicable to aircraft Serial Nos. OA7–005 through OA7–008. Compliance and requirement as detailed in Service Bulletin. |
| 008–03–94 | OA7/SB/0010 | Exhaust support – Inspection and rectification. | Applicable to aircraft Serial Nos. OA7–005 through OA7–008. Compliance and requirement as detailed in Service Bulletin. |
| 009–03–94 | OA7/SB/0016 | Aileron spring box – Inspection and rectification and change to maintenance schedule. | Applicable to aircraft Serial Nos. OA7–005 through OA7–009. Compliance and requirement as detailed in Service Bulletin. |
| 010–03–94 | OA7/SB/0040 | Engine pod mounting feet – Inspection and rectification. | Applicable to all aircraft. Compliance and requirement as detailed in Service Bulletin. |
| 010–08–94 | B2/MSB/006 | Fan shaft extension. | Applicable to aircraft fitted with the Hoffmann fan and fan shaft extension up to and including Serial No. 022. Compliance and requirement as detailed in Service Bulletin. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 009–10–96 | B2/SB/007 | Replacement of fuel injector linkages. | Applicable to all aircraft. Compliance and requirement as detailed in Service Bulletin. |

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## HAWKER SIDDELEY 748

### Constructors Numbers 1534 to 1807 inclusive

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 0050 PRE 80 | 727 (SB 61–3) | *Propellers* – Introduction of cable retaining clips to uniterselmet cables at the plugs for the propeller control unit and auto feathering switch. | Applicable to Series 1 and 2 aircraft. Compliance required as detailed in Service Bulletin. |
| 0051 PRE 80 | 729 (SB 22–1) | *Auto-Pilot* – Introduction of safety stop on elevator servo motor mounting. | Applicable to Models 101, 103, 204 and 205. Compliance required not later than 15 August 1963. |
| 0052 PRE 80 | 735 (SB 27–12) | *Flight Controls* – Improvements to control surface lock circuit. | Applicable to Series 1 and 2 aircraft. Compliance required as detailed in SB.<br>Note: This modification cancels the instruction contained in SB A27/7. |
| 0053 PRE 80 | 862 (SB 61–2) | *Propellers* – Introduction of packing washer on propeller control unit plugs. | Applicable to Series 1 and 2 aircraft. Compliance required not later than 1 September 1963. |
| 0054 PRE 80 | 938 (SB 32–13) | *Landing Gear* – Main undercarriage cross beam and radius rod – Introduction of a strengthened retraction jack pin. | Applicable to Series 1 and 2 aircraft. Compliance required as detailed in Service Bulletin. |
| 0055 PRE 80 | 956 (SB 27–16) | *Flight Controls* – Rudder circuit – To increase the clearance between the rudder spring tab and tail cone. | Applicable to Series 1 and 2 aircraft. Compliance required not later than 1 August 1964. |
| 0056 PRE 80 | 975 (SB 57–3) | *Wings* – Bonding of access panels to wing structure. | Applicable to Series 1 and 2 aircraft. Compliance required not later than 1 October 1964. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 0057 PRE 80 | 1061 (SB 55–3) | *Stabilizers* – Introduction of re-designed tailplane construction joint plates. | Applicable to Models 105 and 205 aircraft, tailplanes and construction joint plates held as spares. Compliance required as detailed in Service Bulletin. |
| 0058 PRE 80 | 1109 (SB 55–4) | *Stabilizers* – Introduction of extra rivets in tailplane construction joint. | Applicable to Series 1 and 2 aircraft. Compliance required not later than 1 January 1965. |
| 0059 PRE 80 | 1216 (SB 53–13) | *Fuselage* – Inspection and modification to Former 18F. | Applicable to Series 1 and Model 205 aircraft. Compliance required as detailed in Service Bulletin. |
| 0060 PRE 80 | 1242 (SB 53–15) | *Fuselage* – Introduction of reinforcing plates around navigators window. | Applicable to Model 206 aircraft. Compliance required not later than 1 April 1965. |
| 0061 PRE 80 | 1281 (SB 32–17) | *Landing Gear* – Inspection and rectification of emergency landing gear system. | Applicable to Series 1 and 2 aircraft. Compliance required as detailed in Service Bulletin. |
| 0062 PRE 80 | 2250 (SB 57–13) | *Wings* – Introduction of glass fibre fence to replace light alloy fence located in the bottom of each wing. | Applicable to Series 1 and 2 aircraft. Compliance required not later than 30 April 1967. |
| 0063 PRE 80 | 2272 and 2413 (SB 31–5) | *Instruments* – Introduction of a turn and slip indicator on second pilot's instrument panel. | Applicable to Model 222 and 225 aircraft. Compliance required not later than 31 March 1967. |
| 0064 PRE 80 | 2414 (SB 31–6) | *Instruments* – Introduction of a turn and slip indicator on second pilot's instrument panel. | Applicable to Model 101, 106, 108 and 214 aircraft. Compliance required not later than 31 March 1967. |
| 0065 PRE 80 | 2449 (SB 27–33) | *Flight Controls* – Elevator – Introduction of restricting bracket on the elevator control lever | Applicable to Series 1 and 2 aircraft. Compliance required not later than 31 December 1967. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 0066 PRE 80 | 3264 (SB 35–8) | *Oxygen* – Contaminated hoses – Replacement of all items downstream of the contaminated hoses. | Applicable to Model 228 aircraft. Compliance required as detailed in Service Bulletin. |
| 0067 PRE 80 | 3400 (SB 52–47) | *Doors* – Emergency exit – To reposition connection to atmosphere for barometric lock. | Applicable to all Series aircraft with modification 1443, 3108 or 3119 embodied. Compliance required not later than 1 July 1970. |
| 0068 PRE 80 | 3741 (SB 76–14) | *Engine Controls* – Introduction of increased auto feather inhibit rev/min from 11,500 to 12,800 rev/min. | Applicable to all Series aircraft. Compliance required not later than 1 July 1971. |
| 0069 PRE 80 | 3826 (SB 27–54) | *Flight Controls* – Rudder and rudder trim circuits – Introduction of rudder neutral point two degrees to port and restriction of the rudder trim tab movement to starboard. | Applicable to Series 2A aircraft and Series 2 aircraft converted to Series 2A by the incorporation of modification 2644. Compliance required not later than 1 May 1971. |
| 0070 PRE 80 | 4046 (SB 32–45) | *Landing Gear* – Introduction of baulking device to ensure the nose leg to aircraft attachment pin is installed correctly. | Applicable to all Series aircraft. Compliance required not later than 31 July 1974. |
| 0071 PRE 80 | 4048 (SB 21–83) | *Air Conditioning* – Auxiliary heat exchanger fan control panel – Introduction of fuse protection for cables in AC fan control circuit. | Applicable to aircraft with modification 3108 or 3119 incorporated. Compliance required not later than 1 December 1971. |
| 0072 PRE 80 | 4078 (SB 61–17) | *Propellers* – Deletion of suppression diodes across the operating coils of relays 429 and 430 in the propeller warning horn circuit. | Applicable to all Series aircraft with modification 3322 incorporated. Compliance required not later than 1 December 1971. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 0073 PRE 80 | 4341 (SB 27–61) | *Flight Controls* – Rudder trim control screw jack – Introduction of an internal stop in lieu of external stop. | Applicable to Series 2A aircraft with modification 3826 incorporated. Compliance required not later than 31 July 1973. |
| 0074 PRE 80 | 4579 (SB 71–12) | *Power Plant* – Introduction of Rolls-Royce Dart Mk 531U engines. | Applicable to Series 2 aircraft fitted with Rolls-Royce Dart Mk 531 engines. Compliance required not later than 1 June 1974. |
| 0075 PRE 80 | 4609 (SB 61–18) | *Propellers* – Introduction of an electrical selection to the pitch coarsening solenoid when manually feathering a propeller. | Applicable to all Series aircraft. Compliance required not later than 1 April 1974. |
| 0076 PRE 80 | 4630 (SB 24–60) | *Electrical Power* – Emergency power supply for electrically operated gyro horizon. | Applicable to all aircraft without modification 3382. Compliance required not later than 1 January 1974. |
| 0077 PRE 80 | 4631 (SB 24–61) | *Electrical Power* – Emergency power supply for electrically operated gyro horizon. | Applicable to all aircraft with modification 3382. Compliance required not later than 1 January 1974. |
| 0078 PRE 80 | 4693 (SB 24–68) | *Electrical Power* – Emergency power supply for electrically operated gyro horizon. | Applicable to Model 244 aircraft only. Compliance required not later than 1 January 1974. |
| 0079 PRE 80 | 4852 (SB 24–67) | *Electrical Power* – Emergency power supply for electrically operated gyro horizon. | Applicable to Model 238 aircraft only. Compliance required not later than 1 January 1974. |
| 0080 PRE 80 | 4872 (SB 55–12) | *Stabilizers* – Introduction of reinforcing gusset plates on top and bottom surfaces of tailplane at elevator hinge ribs 126.00 and 187.00 and inspection/rectification of rivets at elevator hinge rib 54.00. | Applicable to Series 1, 2 and 2A aircraft. Compliance required not later than 30 September 1974. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 0081 PRE 80 | 4873 (SB 57–28) | *Wings* – Introduction of strengthened gusset plates on the aileron outboard and centre hinge structure at stations 440.336 and 495.098. | Applicable to Series 1, 2 and 2A aircraft. Compliance required not later than 31 July 1974. |
| 0082 PRE 80 | 4874 (SB 57–27) | *Wings* – Introduction of reinforcing straps on the top and bottom surface over the aileron spar at the outboard hinge position. | Applicable to Series 1, 2 and 2A aircraft. Compliance required not later than 31 July 1974. |
| 0083 PRE 80 | 4875 (SB 57–26) | *Wings* – Introduction of reinforcing plates on starboard rear diaphragm. | Applicable to Series 1, 2 and 2A aircraft. Compliance required not later than 31 December 1974. |
| 0084 PRE 80 | 4934 (SB 71–15) | *Power Plant* – Introduction of Rolls-Royce Dart Mk 533–2 engines. | Applicable to Series 2 aircraft fitted with Rolls-Royce Dart Mk 531 or 531U engines. Compliance required not later than 1 December 1974. |
| 0085 PRE 80 | 4935 (SB 71–16) | *Power Plant* – Introduction of Rolls-Royce Dart Mk 534–2 engines. | Applicable to Series 2A aircraft fitted with Rolls-Royce Dart Mk 432–2L or 532–2S engines. Compliance required not later than 30 April 1975.<br>Note: Either SB 71–16 or 71–17 to be incorporated on Series 2A aircraft, not SB 71–16 and 71–17. |
| 0086 PRE 80 | 4936 (SB 71–17) | *Power Plant* – Introduction of Rolls-Royce Dark Mk 535–2 engines. | Applicable to Series 2A aircraft fitted with Rolls-Royce Dark Mk 532–2L or 532–2S engines. Compliance required not later than 30 April 1975.<br>Note: Either SB 71–16 or 71–17 to be incorporated on Series 2A aircraft, not SB 71–16 and 71–17. |
| 0087 PRE 80 | 5342 and 4935 (SB 71–18) | *Power Plant* – Introduction of Rolls-Royce Dart Mk 534–2 engines and conversion from Series 2 to Series 2A aircraft. | Applicable to Model 238 Serial Nos. 1623 and 1624 only. Compliance required not later than 31 March 1976. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 0088 PRE 80 | 5730 (SB 31–20) | *Instruments* – Introduction of additional earth bonding from the Sperry FLight Data recording unit drive unit and cassette to airframe. | Applicable to Models 238 and 244 Serial Nos. as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. |
| 0089 PRE 80 | 6112 (SB 27–75) | *Flight Controls* – Introduction of a steel spindle in the aileron control quadrant assembly located between rib stations 323 and 332. | Applicable to all Series aircraft. Compliance required as detailed in Service Bulletin. |
| 0090 PRE 80 | 6121 (SB 24–89) | *Electrical Power* – Centre Busbar Panel – Introduction of a duplicate connection from the centre busbar to the circuit breaker busbar. | Applicable to all aircraft Serial Nos. as detailed in Service Bulletin. To be embodied on all aircraft not fitted with modification 2792 within 1500 flight hours or before the 30 June 1979, whichever occurs first. |
| 0091 PRE 80 | 6129 (SB 31–22) | *Instruments* – Alternative route for the flight data recorder 115 volt supply. | Applicable to all aircraft with Plessey Type PV1584 flight data recording system. Compliance required not later than 31 September 1979. |
| 0092 PRE 80 | 6318 (SB 21–105) | *Air Conditioning* – Auto pressurisation – To increase the rating of the resistors of the time delay and pulsing unit in the closed field circuit of the spill valve actuator. | Applicable to all Series aircraft with Auto Pressurisation as detailed in Service Bulletin. Compliance required not later than 31 December 1979. |
| 0093 PRE 80 | 6370 (SB 11–3) | *Placards* – Introduction of revised airspeed limitations label. | Applicable to Series 2A aircraft Serial Nos. as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. |
| 0094 PRE 80 | 6371 (SB 11–2) | *Placards* – Introduction of revised airspeed limitations label. | Applicable to Series 2 and 2A aircraft except those Serial Nos. as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 0095 PRE 80 | 6519 (SB 61–31) | *Propellers* – Inspection of sealed relays (Type 7CZ105648/1 or /2) in propeller control circuit and the introduction of modification 6519. | Applicable to Series 1, 2 and 2A aircraft. Compliance required as detailed in Service Bulletin. |
| 0096 PRE 80 | 23–37 | *Communication* – HF Installation – Inspection of cable (base of aerial to tuning unit) – Provision of condensate drain path in aerial mast to atmosphere. | Applicable to all Series aircraft fitted with Chelton HF Antenna aerials. Compliance required as detailed in Service Bulletin. |
| 0097 PRE 80 | 24–25 | *Electrical Power* – Inspection of connections at Plessey circuit breakers 7CZ/106664/50B at the centre busbar and port and starboard generator panels. | Applicable to Series 1 and 2 aircraft. Compliance required not later than 1 December 1967. |
| 0098 PRE 80 | A24–26 | *Electrical Power* – Inspection of flap motor supply fuse No. 164 for correct fitment. | Applicable to Series 1 and 2 aircraft. Compliance required as detailed in Service Bulletin. |
| 0099 PRE 80 | 25–157 | *Equipment/Furnishings* – Inspection of floor lashing fittings. | Applicable to all aircraft Serial Nos. as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. |
| 0100 PRE 80 | A26–6 | *Fire Protection* – Inspection/rectification to ensure clearance exists between the baffle plates on nacelle access panels and the body of the Graviner fire extinguisher in the engine nacelle. | Applicable to all aircraft with modification 2881 or 2882 embodied. Compliance required as detailed in Service Bulletin. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 0101 PRE 80 | A27–7 | *Flight Controls* – Inspection of elevator control lever assembly. | Applicable to Series 1 and 2 aircraft. Compliance required as detailed in Service Bulletin.<br>NOTE: When modification 735 is incorporated the instruction contained in this bulletin no longer apply. |
| 0102 PRE 80 | 27–15 | *Flight Controls* – Trim circuit chains – Locking of chain nuts. | Applicable to Series 1 and 2 aircraft. Compliance required not later than 1 December 1963. |
| 0103 PRE 80 | A27–62 | *Flight Controls* – Inspection at the rudder centre hinge position to ensure that adequate clearance exists. | Applicable to Series 1, 2 and 2A aircraft. Compliance required as detailed in Service Bulletin. |
| 0104 PRE 80 | HS748–A27–76 | *Flight Controls* – Checks, inspection and adjustments to control system gust locks. | Cancelled and superseded by ASB HS748–A27–128 (CAA AD 008–12–96) |
| 0105 PRE 80 | 28–7 | *Fuel System* – Disconnection of fuel tank vent pipe. | Applicable to Series 2 – Model 206 and 212 aircraft. Compliance required as detailed in Service Bulletin. |
| 0106 PRE 80 | 28–8 | *Fuel System* – Inspection for damage in the form of cracks at weld seam on cross feed pipes between the cross feed cocks and the connectors at Rib Station 34.071. | Applicable to Series 1 and 2 aircraft pre-modification 718. Compliance required as detailed in Service Bulletin. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 0107 PRE 80 | 28–23 | *Fuel System* – Inspection/rectification to ensure correct operation of the internal refuelling restrictor valve in wing integral tanks. | Applicable to Series 1 and 2 aircraft. Compliance required as detailed in Service Bulletin. |
| 0108 PRE 80 | 29–23 | *Hydraulic Power* – Inspection of main hydraulic pressure manifold block in starboard nacelle hydraulic bay. | Applicable to Series 1, 2 and 2A aircraft. Compliance required as detailed in Service Bulletin. |
| 0109 PRE 80 | A32–9 | *Landing Gear* – Security of removable hub Part No. UC302312 on nose landing gear axle assembly. | Applicable to Series 1 and 2 aircraft. Compliance required as detailed in Service Bulletin. |
| 0110 PRE 80 | 32–12 | *Landing Gear* – Inspection of main undercarriage cross beam. | Applicable to Series 1 and 2 aircraft. Compliance required as detailed in Service Bulletin. |
| 0111 PRE 80 | 34–10 | *Navigation* – Inspection of all angled wave guides in the weather radar installation. | Applicable to Series 1 and 2 aircraft with weather radar fitted. Compliance required as detailed in Service Bulletin. |
| 0112 PRE 80 | 34–57 | *Navigation* – Inspection for damage of pitot pressure pipe from the starboard pitot head to the port centre instrument panel. | Applicable to all Models less 206. Compliance required as detailed in Service Bulletin. |
| 0113 PRE 80 | 52–21 | *Doors* – Inspection of fit of emergency exit panels in fuselage. | Applicable to all Models. Compliance required as detailed in Service Bulletin. |
| 0114 PRE 80 | A52–82 | *Doors* – Inspection of overwing emergency exit panels operating mechanism, fitting and locking from inside of aircraft. | Applicable to all Series aircraft. Compliance required as detailed in Service Bulletin. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 0115 PRE 80 | 53–16 | *Fuselage* – Introduction of fatigue life for nose landing gear retraction jack mounting bolts. | Applicable to Series 1 and 2 aircraft. Compliance required as detailed in Service Bulletin. |
| 0116 PRE 80 | 53–18 | *Fuselage* – Introduction of fatigue life for nose landing gear retraction jack mounting brackets. | Applicable to Series 1 and 2 aircraft. Compliance required as detailed in Service Bulletin. |
| 0117 PRE 80 | 53–43 | *Fuselage* – Inspection of two areas adjacent to the large freight door aperture where an insufficient number of rivets may have been fitted. | Applicable to Models as detailed in Service Bulletin. Compliance required not later than 31 December 1978. |
| 0118 PRE 80 | 54–7 | *Nacelles* – Inspection of jack mounting bracket. | Mandatory status of Service Bulletin removed at Revision 3, therefore AD is cancelled. The requirement of the Service Bulletin is now contained in the Supplementary Structural Inspection Document, CAA AD 010–09–85 (SB HS748–12–11) also refers. |
| 0119 PRE 80 | 54–25 | *Nacelles* – Inspection for corrosion and protection of engine subframe and replacement of tubular struts where necessary. | Applicable to all Series aircraft. Compliance required as detailed in Service Bulletin. |
| 0120 PRE 80 | 55–11 | *Stabilizers* – Inspection of elevator outer hinge structure. | Mandatory status of Service Bulletin removed at Revision 1, therefore AD is cancelled. The requirement of the Service Bulletin is now contained in the Supplementary Structural Inspection Document, CAA AD 010–09–85 (SB HS748–12–11) also refers. |
| 0121 PRE 80 | 55–19 | *Stabilizers* – Inspection of joint between tailplane centre torsion box and outer tailplanes. | Mandatory status of Service Bulletin removed at Revision 2, therefore AD is cancelled. The requirement of the Service Bulletin is now contained in the Supplementary Structural Inspection Document, CAA AD 010–09–85 (SB HS748–12–11) also refers. |
| 0122 PRE 80 | 57–6 | *Wings* – Fitting of additional rivets to reinforcing angle between rib stations 386.366 and 404.366. | Applicable to Models 206 and 208 aircraft Serial Nos. as detailed in Service Bulletin. Compliance required not later than 1 July 1965. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 0123 PRE 80 | 57–25 | *Wings* – Inspection of aileron outer hinge bracket structure. | Mandatory status of Service Bulletin removed at Revision 1, therefore AD is cancelled. The requirement of the Service Bulletin is now contained in the Supplementary Structural Inspection Document, CAA AD 010–09–85 (SB HS748–12–11) also refers. |
| 0124 PRE 80 | 57–34 | *Wings* – Structure – revised inspection requirements (from Rib 70 to the inboard side of Rib 134). | Mandatory status of Service Bulletin removed at Revision 8, therefore AD is cancelled. The requirement of the Service Bulletin is now contained in the Supplementary Structural Inspection Document, CAA AD 010–09–85 (SB HS748–12–11) also refers. |
| 0125 PRE 80 | 57–46 | *Wings* – Inspections at Rib 134. 366, Port and Starboard. | Superseded by Service Bulletin 57/75. |
| 0126 PRE 80 | 57–48 | *Wings* – Inspections at Rib 134. 366, Port and Starboard. | Superseded by Service Bulletin 57/75. |
| 0127 PRE 80 | 57–55 | *Wings* – Structure – Revised inspection requirements (from inboard edge of butt straps at Rib '0' through to Rib 16). | Mandatory status of Service Bulletin removed at Revision 6, therefore AD is cancelled. The requirement of the Service Bulletin is now contained in the Supplementary Structural Inspection Document, CAA AD 010–09–85 (SB HS748–12–11) also refers. |
| 0128 PRE 80 | 57–59 | *Wings* – Structure – Inspection of the inboard main undercarriage pivot bracket forgings – Part Nos. 15a and 16a F11365 for cracks. | Mandatory status of Service Bulletin removed at Revision 2, therefore AD is cancelled. The requirement of the Service Bulletin is now contained in the Supplementary Structural Inspection Document, CAA AD 010–09–85 (SB HS748–12–11) also refers. |
| 0129 PRE 80 | 61–30 | *Propellers* – Changes to the propeller control electrical circuit wiring introduced by modification 5142 or 5445. | Applicable to all Series aircraft, Serial Nos. as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. |
| 0130 PRE 80 | 71–2 | *Power Plant* – Inspection for corrosion on engine mount frame support tubes. | Maintenance Manual Revision No. 233 (Series 1) and Revision No. 549 (Series 2) supersedes the instructions in the Service Bulletin. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 0131 PRE 80 | 76–1 | *Engine Controls* – Inspection of control cables for damage. | Applicable to all Series aircraft. Compliance required as detailed in Service Bulletin. |
| 0132 PRE 80 | 76–15 | *Engine Controls* – Inspection for cracks on auto feather inhibiting micro-switch operating levers, throttle and high pressure cock controls on the engine subframe. | Applicable to all Series aircraft. Compliance required as detailed in Service Bulletin. |
| 0133 PRE 80 | Dowty Rotol SB 32–8E | *Landing Gear* – Introduction of strengthened jack attachment pin to crossbeam and radius rod. | Entries moved to Instruments and Equipment Section |
| 0134 PRE 80 | Dowty Rotol SB 32–15E | *Landing Gear* – Introduction of new circlip and collar to retain the nose undercarriage axle. | |
| 0135 PRE 80 | Dowty Rotol SB 32–20E | *Landing Gear* – Introduction of a support plate for retraction jack pin on main undercarriage crossbeam and radius rod units. | |
| 0136 PRE 80 | Dowty Rotol SB 32–28E | *Landing Gear* – Life limitation of main undercarriage crossbeam, plate and pin. | |
| 0137 PRE 80 | Dowty Rotol SB 32–43E | *Landing Gear* – Introduction of new sub-assembly of hub and bush to the axle assembly of nose undercarriage. | |
| 0138 PRE 80 | Dowty Rotol SB 32–49E | *Landing Gear* – Introduction of a strengthened main undercarriage crossbeam and radius rod. | |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 0139 PRE 80 | Dowty Rotol SB 32–56E | *Landing Gear* – Inspection for cracks in nose undercarriage axles after repair. | |
| 0140 PRE 80 | Dowty Rotol SB 32–75E | *Landing Gear* – Inspection of nose undercarriage axles. | |
| 0141 PRE 80 | Dowty Rotol SB 32–78E | *Landing Gear* – Main undercarriage retraction jack – Inspection of eye-end fitting. | |
| 0142 PRE 80 | Dowty Rotol SB 32–84E | *Landing Gear* – Inspection of main undercarriage retraction jack improved eye-end fittings. | Entries moved to Instruments and Equipment Section. |
| 0143 PRE 80 | Dowty Rotol SB 32–85E | *Landing Gear* – Inspection of main undercarriage cross beam and radius rod jack attachment pins. | |
| 0144 PRE 80 | Dowty Rotol SB 32–91E | *Landing Gear* – Inspection of nose undercarriage jack shuttle valve retaining bolt. | |
| 0145 PRE 80 | Airworthiness Notice No. 81 | Emergency power supply for electrically-operated gyroscopic bank and pitch indicators (Artificial Horizon). | Applicable to all Series aircraft. Compliance required not later than 1 January 1974. |
| 0146 PRE 80 | Maintenance Schedule | Mandatory Life Limitations. | The limitations listed in the Maintenance Schedule are mandatory for aircraft on the United Kingdom Register. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 005–07–80 | 57–62 | *Wings* – Inspection of rib – Stringer bracket fasteners, wing bottom surface at Rib 224. 366 and at stringer 4 and 6 at all ribs on each side of wing access panels W3 to W12 except W10. | Applicable to Series 2 and 2A aircraft. Compliance required as detailed in Service Bulletin. |
| 006–07–80 | 57–63 | *Wings* – Structure – Inspection of rib – Stringer bracket fasteners, wing bottom surface Rib 16.071 and Stringers numbered 9, 10, 11 and 12. | Applicable to Series 1, 2 and 2A aircraft. Compliance required as detailed in Service Bulletin. |
| 012–09–80 | 11–4 | *Required Placards* – Introduction of revised airspeed limitations label – Modification 6444. | Applicable to Series 2A aircraft constructors No. 1716 and any other aircraft with Mod. 3177 or 4557 incorporated and Mod. 3179 or its equivalent. Compliance required as detailed in Service Bulletin. |
| 042–12–80 | 71–22 | Introduction of flight manual Particular Amendment No. P/3 and General Amendment No. G/5. | Applicable to Series 2A aircraft with Dart Mk 532–2L engines and with flight manual Doc. No. A0.1.10. Compliance required as detailed in Service Bulletin. |
| 052–04–81 | 21/106 | *Air Conditioning* – Auto Pressurisation – To delete the delaying resistors in the time delay and pulsing unit in the 'CLOSED' field circuit of the spill valve actuator. | Applicable to all HS 748 aircraft with Mod. 2743 or Mod. 5263 incorporated. Compliance required not later than 31 December 1981. |
| 053–04–81 | 34/102 | *Navigation* – Wiring Changes to the Sperry Horizontal Situation Indicator RD444 installation. | Applicable to HS 748 constructors numbers 1736 and 1737. Compliance required on embodiment of Mandatory requirements of Sperry Newsletter 23–1979–02. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 002–06–81 | 34/103 | *Navigation* – Wiring changes to the Sperry Horizontal Situation Indicators – RD 444 Installation. | Applicable to all HS 748 aircraft with Sperry Horizontal Situation Indicators RD 444 – Except Model 287. Compliance required as detailed in Service Bulletin. |
| 008–07–81 | A52–90 | *Doors* – Rear Port Passenger, Rear Starboard Baggage, Forward Freight and Large Rear Freight Door. | Applicable to all Series Aircraft. Compliance required as detailed in Service Bulletin. |
| 009–07–81 | Dunlop ASB 32–A930 | *Landing Gear* – Brake Unit – Unapproved rotor segments. | Applicable to all Series aircraft. Compliance required as detailed in Service Bulletin. BAe Service Bulletin 32–66 also refers. |
| 004–09–81 | 52–79 | *Doors* – Large Freight Door – Introduction of a steel channel on the centre door tracks and fuselage tracks of the large freight door. | Applicable to all Model Nos. as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. |
| 005–09–81 | 52–84 | *Doors* – Large Freight Door – Inspection of spigot mounting brackets on former 126A for excessive thickness shims under mounting brackets and introduction of increased diameter bolts at the centre spigot mounting bracket. | Applicable to aircraft Constructors Nos. as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. |
| 018–09–81 | 27–80 | *Flight Controls* – Aileron – Inspection of spring loaded assembly beneath pilot's floor at formers 292F–282F Port. | Applicable to all Series aircraft with Modification 4080 or 4308 embodied. Compliance required as detailed in Service Bulletin. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 010–10–81 | 27–81 | *Flight Controls* – Introduction of plate separators between port HP cock cables and control lock cables under cabin floor between stations 126F and 162F. | Applicable to all Series aircraft. Compliance required as detailed in Service Bulletin. |
| 013–10–81 | Alert Telex 2/81 | *Flight Controls* – Inspection of wirelocking on turnbuckles in the gust lock and HP cock circuits. | Applicable to all Series aircraft. Compliance required as detailed in Alert Telex within seven days of receipt. |
| 005–02–82 | 29–34 | *Hydraulics* – Introduction of an electrical latch – on facility for the port engine hydraulic by-pass valve. | Applicable to aircraft Constructors Nos. as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. |
| 008–07–82 | 52–94 | *Doors* – Introduction of a modified inner handle cam and wear indicator plate on the baggage door to prevent locking of the door from outside the aircraft and to indicate when cam replacement is necessary. | Applicable to all Series aircraft. Compliance required as detailed in Service Bulletin. |
| 009–07–82 | 52–95 | *Doors* – Introduction of a modified inner handle cam incorporating a wear indicator plate on passenger and crew/freight doors. | Applicable to all Series aircraft. Compliance required as detailed in Service Bulletin. |
| 010–07–82 | 52–97 | *Doors* – Introduction of decal warning labels on the interior trim of passenger, baggage and crew/freight doors. | Applicable to all Series aircraft. Compliance required as detailed in Service Bulletin. |
| 011–07–82 | 52–99 | *Doors* – Introduction of improved door aperture micro switch mountings and strikers on baggage and crew/freight doors. | Applicable to all large freight door aircraft except those with Modification 3133 or 3146. Compliance required as detailed in Service Bulletin. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 012–07–82 | 52–100 | *Doors* – Introduction of decal warning labels on the interior trim of the forward sliding portion of the large freight doors. | Applicable to all large freight door aircraft. Compliance required as detailed in Service Bulletin. |
| 001–01–83 | 52–106 | *Doors* – Introduction of a periodic inspection to confirm the integrity of the door sill and secondary lock mechanism micro switches of the crew/freight, passenger and baggage doors including large freight door where applicable. | Applicable to all Series aircraft. Compliance required as detailed in Service Bulletin. |
| 002–01–83 | 27–88 | *Flight Controls* – Gust locks – Introduction of new rudder control lever, elevator lock lever and aileron lock lever. | Applicable to all Series aircraft. Compliance required as detailed in Service Bulletin. |
| 003–01–83 | 27–92 | *Flight Controls* – Introduction of a stop to the cable guard assembly on the aileron tension regulator. | Applicable to all Series aircraft Post Mod. 1692. Compliance required as detailed in Service Bulletin. |
| 004–01–83 | 52–101 | *Doors* – Introduction of a life and an inspection of both the crew/freight door locking mechanism swivel levers. | Applicable to all Series aircraft. Compliance required as detailed in Service Bulletin. |
| 005–01–83 | 52–109 | *Doors* – Introduction of a minimum standard door unsafe audible warning system. | Applicable to all Series aircraft without Mod. 3379 incorporated except Model 235. Compliance required as detailed in Service Bulletin. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 008–01–83 | 23–44 | *Communications* – Port radio crate power supplies – Introduction of uprated power supply diodes for intercom and VHF communication systems. | Applicable to Model 378 aircraft Serial Nos. as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. |
| 009–01–83 | 52–110 | *Doors* – Introduction of a minimum standard door unsafe audible warning systems. | Applicable to Model 235 aircraft Serial Nos. as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. |
| 012–01–83 | 52–96 | *Doors* – Introduction of improved door aperture micro switch mountings and strikers. | Applicable to all Series aircraft except those with large freight doors and those with modifications 3133 or 3146 embodied. Compliance required no later than 31 December 1982. |
| 001–03–83 | 27–93 | *Flight Controls* – Introduction of a once only inspection of elevator connecting rod bell crank levers. | Applicable to all Series aircraft. Compliance required as detailed in Service Bulletin. |
| 002–03–83 | 53–49 | *Fuselage* – rear pressure bulkhead and fin attachment fitting inspection. | Applicable to all Series aircraft. Compliance required as detailed in Service Bulletin. |
| 001–10–83 | 27–98 | *Flight Controls* – Gust Locks – Introduction of a once only inspection to ensure correct drilling of torque tube Part No. 7.R.4246. | Applicable to all Series aircraft. Compliance required as detailed in Service Bulletin. |
| 002–10–83 | 57–75 | *Wings* – Structures – Inspection at Rib 134.366 and adjacent areas – Port and Starboard. | Mandatory status of Service Bulletin removed at Revision 4, therefore AD is cancelled. The requirement of the Service Bulletin is now contained in the Supplementary Structural Inspection Document, CAA AD 010–09–85 (SB HS748–12–11) also refers. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 005–01–84 | 27–99 | *Flight Controls* – Introduction of a once only inspection to ensure correct installation of intermediate cross shaft in the centre console. | Applicable to all HS 748 aircraft. Compliance in accordance with the Service Bulletin not later than the next Period 1 Inspection. |
| 014–05–84 | 33–29 | *Lights* – Emergency lighting – Introduction of wiring changes to ensure armed condition of power pack when power is removed from centre busbar. | Applicable to aircraft as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. |
| 008–07–84 | 52–115 | *Doors* – Overwing escape hatch – Introduction of steel operating shaft, modified secondary locking cam, secondary lock indicator flag and warning decal. | Applicable to all HS 748 aircraft. Compliance required as detailed in Service Bulletin. AD 011–09–85 also refers. |
| 002–08–84 | 57–81 | *Wings* – Removal of the central reinforcing straps fitted in repair Service Bulletins 57/31, 57/33 or previously subject to this Service Bulletin for inspection of the cracks which necessitated the repairs. | Mandatory status of Service Bulletin removed at Revision 3, therefore AD is cancelled. The requirement of the Service Bulletin is now contained in the Supplementary Structural Inspection Document, CAA AD 010–09–85 (SB HS748–12–11) also refers. |
| 003–08–84 | 57–82 | *Wings* – Removal of the central reinforcing straps fitted in repair Service Bulletin 57/32 or previously subject to this Service Bulletin for further inspection of the cracks which necessitated the repair. | Mandatory Status of Service Bulletin removed at Revision 3, therefore AD is cancelled. The requirement of the Service Bulletin is now contained in the Supplementary Structural Inspection Document, CAA AD 010–09–85 (SB HS748–12–11) also refers. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 008–10–84 | 24–104 | *Electrical Power* – Change field excitation of D.C. generator from centre busbar to battery busbar. | Applicable to aircraft models as detailed in SB. Compliance required as detailed in SB. |
| 009–04–85 | SB34–115 | *Navigation* – Introduction of standby horizon normal/emergency switch with associated battery busbar power supply. | Applicable to all aircraft as detailed in SB. Compliance required as detailed in SB. |
| 010–04–85 | SB34–116 | *Navigation* – To re-route electrical wiring to the standby horizon to enable the battery power supply to be independent of gyro isolation. | Applicable to all aircraft as detailed in SB. Compliance required as detailed in SB. |
| 011–04–85 | SB78–9 | *Exhaust* – Jet pipe – To introduce an inspection to ensure correct installation of the three retaining plate assemblies which secure the jet pipe to the jet pipe manifold. | Applicable to all aircraft as detailed in SB. Compliance required as detailed in SB. |
| 013–05–85 | SB 54–23 | *Nacelles* – Engine sub-frame – Advance information on the retirement lives of the engine. | Applicable to all HS 748 aircraft. Compliance required as detailed in SB. |
| 010–09–85 | SB 12–11 | *Servicing Procedures* – Introduction of the HS 748 mandatory Supplementary Structural Inspection Document. | Applicable to all HS 748 aircraft. Compliance required as detailed in SB. |
| 011–09–85 | SB 52–127 | *Doors* – Overwing escape hatch – Introduction of steel operating shaft – Modified secondary locking cam, secondary lock indicator flag and warning decal. | Applicable to all HS 748 aircraft. Compliance required as detailed in SB. AD 008–07–84 also refers. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 004–12–85 | SB 27–109 | *Flight Controls* – Rudder gust lock – Introduction of orientation of the spring strut rudder lock control, to prevent the possibility of a foul between the strut and the lower rudder hinge box. | Applicable to all HS748 aircraft. Compliance required as detailed in SB. |
| 008–02–86 | SB 29–42 | *Hydraulic Power* – Dunlop brake accumulator assembly Part No. AC14040 – To check that Dunlop Mandatory Service Bulletin 29/172 has been satisfied and ensure that Dunlop Mandatory Service Bulletin 29/175 (superseding SB 29/172) is complied with. Revised maintenance inspection procedures are introduced. | Applicable to all HS 748 aircraft, pre-modification 7205 (SB 29–40). Compliance required as detailed in SB. |
| 002–03–86 | SB 11–6 | *Required Placards* – To replace floor load limitation labels Part No. 679SS6065 with revised labels Part No. 55SS6222. | Applicable to all HS 748 aircraft with modification 4080 embodied. Compliance required as detailed in SB. |
| 013–11–86 | SB A53–53 | *Fuselage* – To introduce a life to the nose landing gear jack support bracket bearing cap attachment studs and an interim inspection to ensure security of attachment of the assembly until replacement studs are fitted. | Applicable to all HS 748 aircraft post modification 1472 and pre modification 7513. Compliance required as detailed in SB. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 026–11–86 | SB 54–29 | *Nacelles/Pylons* – Introduction of an inspection of the engine subframe/wing attachment assembly for signs of abnormal movement and wear. | Applicable to all HS 748 aircraft. Compliance required as detailed in SB. |
| 007–02–87 | SB 11–7 | *Placards* – Introduction of pressurisation warning label to large freight door interior trim. | Applicable to HS 748 aircraft Serial Nos. as detailed in SB. Compliance required as detailed in SB. |
| 008–02–87 | SB 52–129 | *Doors* – To introduce a special inspection to ensure the correct operation of the large freight door locking mechanism and indication and to examine the pressure lock assemblies for signs of damage, distortion and wear. | Applicable to HS 748 aircraft Serial Nos. as detailed in SB. Compliance required as detailed in SB. |
| 006–03–87 | SB 27–110 | *Flight Controls* – Inspection of Walker and Schofield bearing retaining rings. | Applicable to all HS 748 aircraft. Compliance required as detailed in SB. |
| 003–04–87 | SB 55–24 | *Stabilizers* – Elevators – Introduction of a detailed inspection in the area of the outboard hinge (rib stns 180.00 to 193.00) on elevators which have previously been repaired at this location and to revise the inspection requirements in this area for all elevators. | Applicable to all HS 748 aircraft fitted with elevators Part Nos 1G3096 and 400G3096. Compliance required as detailed in SB. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 023–05–87 | SB 25–183 | *Equipment/Furnishings* – Introduction of a thermal fuse link, change of thermal insulation wiring cover and a thermostat knob restrictor to toilet water heater Part No H0800 – Mod 1. | Applicable to all HS 748 aircraft. Compliance required as detailed in SB. |
| 026–05–87 | SB 24–97 | *Electrical Power* – Introduction of undervoltage warning indicator on centre instrument panel. | Applicable to HS 748 aircraft as detailed in SB. Compliance required as detailed in SB not later than 10 December 1989. |
| 027–05–87 | SB 24–121 | *Electrical Power* – Introduction of Smiths 115/26 volt step down transformer Part No 715/SUE/1 in lieu of Part No 213MV1. | Applicable to all HS 748 aircraft Serial Nos up to and including 1799. Compliance required as detailed in SB not later than 1 January 1988. |
| 008–07–87 | SB 11–8 | *Placards* – Introduction of label Part No 183SS6222 in lieu of label 563SS6098 reference baggage loading. | Applicable to HS 748 aircraft Serial Nos as detailed in SB. Compliance required as detailed in SB not later than 1 January 1988. |
| 005–03–88 | SB 49–6 | *Auxiliary Power Unit* – Introduction of oil filling warning label for HS 748 nacelle mounted APU. | Applicable to all HS 748 aircraft with Mod No 1430 – Introduction of APU mounted on starboard nacelle. Compliance required as detailed in SB not later than 1 August 1988. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 008–08–88 | SB A55–25 | *Stabilizers* – Introduction of an internal structural inspection of the tailplane centre section torsion box, especially in the areas of rib 20 of both port and starboard tailplanes. | Applicable to all HS 748 aircraft. Compliance required as detailed in ASB. |
| 009–08–88 | SB 54–31 | *Nacelles/Pylons* – Introduction of an inspection and required rectification action to ensure the correct fitment of eye bolt Part No 14b.0.3975, to both port and starboard engine subframe assemblies. | Applicable to all HS 748 aircraft. Compliance required as detailed in SB. |
| 010–08–88 | SB A32–80 | *Undercarriage* – To check for correct installation of chain and pin assembly on port and starboard main undercarriage mechanism. | Applicable to all HS 748 aircraft. Compliance required as detailed in ASB. |
| 008–09–88 | SB 73–18 | *Power Plant* – Introduction of Rolls-Royce Dart Mod 1857 to Series 2B aircraft with Dart 535–2 or 536–2 engines. | Applicable to HS 748 aircraft as detailed in SB. Compliance required as detailed in SB. |
| 011–11–88 | SB 35–25 | *Oxygen* – Introduction of label to oxygen charge valve. | Applicable to HS 748 aircraft as detailed in SB. Compliance required as detailed in SB not later than 31 October 1989. |
| 015–11–88 | SB 27–114 | *Flight Controls* – Rudder spring tab – Introduction of revised tab stop bolt to reduce angular movement range of spring tab. | Applicable to HS 748 aircraft as detailed in SB. Compliance required as detailed in SB. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 016–11–88 | 24–123 | *Electrical Power* – Introduction of additional clipping position at forward port and starboard wing root connector break area to prevent cable chafing on inspection panel reinforcing ring. | Applicable to HS 748 aircraft Constructors Nos. 1800 and subsequent. Compliance required as detailed in SB not later than 31 March 1989. |
| 003–01–89 | 27–101 | *Flight Controls* – Introduction of elevator limit stops with improved cap. | Applicable to all HS 748 aircraft. Compliance required as detailed in SB not later than 30 September 1989. |
| 028–01–89 | A32–81 | *Landing Gear* – Introduction of a once only inspection of the landing gear selector lever assembly to check the security of attachment of the selector lever cam Part No. 4 R4688 to the shaft Part No. 5 R4688 and function check of the landing gear emergency lowering system. | Applicable to all HS 748 aircraft. Compliance required as detailed in ASB not later than 7 days from receipt. |
| 029–01–89 | 27–111 | *Flight Controls* – Flaps – Introduction of improvements to the position control system to eliminate possibility of stray positive faults on aircraft incorporating modification 6970. | Applicable to HS 748 aircraft Constructors Nos. 1784, 1785, 1786, 1800, 1801, 1802, 1803, 1804 and 1805. Compliance required as detailed in SB not later than 1 September 1989. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 004–02–89 | 53–55 | *Fuselage* – Introduction of fatigue lives and an inspection to pre-modification 1472 nose landing gear jack support beam Part No 48 D 11498. | Applicable to all HS 748 aircraft pre-modification 1472. Compliance required as detailed in SB. |
| 012–02–89 | 27–112 | *Flight Controls* – Flaps – Introduction of improvements to the position control system to eliminate the possibility of stray positive faults on aircraft not having modification 6970. | Applicable to all HS 748 aircraft except Constructors Nos 1784, 1785, 1786, 1800, 1801, 1802, 1803, 1804 and 1805. Compliance required as detailed in SB not later than 1 November 1989. |
| 008–03–89 | 24–119 | *Electrical Power* – Introduction of auto transfer from centre busbar to starboard busbar of power supply to No. 2 inverter when undervoltage protection system operates. | Applicable to HS 748 aircraft Constructors Nos. as detailed in SB. Compliance required as detailed in SB. |
| 008–07–89 | 30–34 | *Ice and Rain Protection* – Airfoil de-icing water separator assemblies, Part No. 44E06–1A, to introduce a once only inspection to ensure that the correct water separator filter elements are fitted. | Applicable to HS 748 aircraft post-modification 5850. Compliance required as detailed in SB. |
| 011–07–89 | 52–130 | *Doors* – Overwing escape hatch – Introduction of revision to operating lever/cam setting. | Applicable to HS 748 aircraft with modification 7176 embodied. Compliance required as detailed in SB not later than 20 September 1989. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 022–11–90 | 57/86 | *Wings* – Introduction of a once only inspection of flap tracks to ensure they have not been repaired in accordance with non-British Aerospace repair schemes. | Applicable to HS 748 aircraft. Compliance is required as detailed in Service Bulletin. |
| 009–12–90 | 32/83 | *Landing Gear* – Introduction of a once only inspection of the landing gear normal selection lever assembly and functional check of the landing gear emergency release system. | Applicable to HS 748 aircraft. Compliance is required as detailed in Service Bulletin. |
| 001–02–91 | 53/57 | *Fuselage* – To introduce an inspection of the nose landing gear retraction jack bracket attachment assembly and repair/replacement information as required. | Applicable to HS 748 aircraft as detailed in Service. Bulletin. Compliance is required as detailed in Service Bulletin. |
| 004–04–91 | 57/87 | *Wings* – To introduce a 'one-off' inspection of wing root joint straps (bottom surface) to check for incorrect fastener types. | Applicable to HS 748 aircraft. Compliance is required as detailed in Service Bulletin. |
| 017–04–91 | 52/135 | *Doors* – Introduction of return spring on door open retaining hook. | Applicable to HS 748 aircraft with Modifications 6377 and 6378 embodied. Compliance is required as detailed in Service Bulletin. |
| 018–04–91 | 27/119 | *Flight Controls* – To introduce a once only inspection of the aileron spring loading lever half clip assembly Part No. 8R5008 or 9R5006. | Applicable to HS 748 aircraft either post modification 4080 or post modification 4308 standard. Compliance is required as detailed in Service Bulletin. |
| 010–12–93 | 29/45 | *Hydraulic Power* – Introduction of improvements to hydraulic system high pressure filter mounting on aircraft with modification 1088 embodied. | Applicable to HS748 aircraft with modification 1088 embodied. Compliance required as detailed in Service Bulletin. |
| 011–12–93 | 32/94 | *Landing Gear* – Introduction of modified pressure switches to give improved low level brake warning, also new label to advise of new inflation pressures. | Applicable to all HS748 aircraft. Compliance is required as detailed in Service Bulletin. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 007–05–94 | HS748–53–59–Insp | *Nose Landing Gear* – Inspection/rectification of retraction jack mounting bracket bearing cap fasterners. | Applicable to HS748 aircraft with modification 7513 embodied. Compliance is required as detailed in Service Bulletin. |
| 008–05–94 | HS748–27–63 | *Flight Controls* – Introduction of aileron cable support block under the crew compartment floor. | Applicable to HS748 aircraft prior to constructors' No 1760 less constructors' Nos. 1723 to 1727 inclusive. Compliance is required as detailed in Service Bulletin. |
| 009–05–94 | HS748–27–70 | *Flight Controls* – Introduction of a modified aileron cable pulley guard at station 314.366 and rubbing strips at ribs 34.071, 43.071 and 52.071 on the port side and ribs 251.366 and 260.366 on the starboard side. | Applicable to HS748 aircraft without modification 5244 incorporated. Compliance is required as detailed in Service Bulletin. |
| 007–07–94 | HS748–A–32–95 | *Landing Gear* – Introduction of an inspection of the landing gear selector lever assembly to check the security of attachment of the selector lever cam Part No. 4R4688 to the shaft Part No. 5R4688. | Applicable to all HS748 aircraft. Compliance is required as detailed in Service Bulletin. |
| 002–09–94 | HS748–71–33 | *Power Plant* – Engine mount structure 'W' frame socket fittings – Examination of inspection hole. | Applicable to all HS748 aircraft. Compliance is required as detailed in Service Bulletin. |
| 007–11–95 | HS748–27–124 | *Flight Controls* – Aileron operating arm bracket failure – Inspection/Rectification. | Applicable to all HS748 aircraft. Compliance is required as detailed in Service Bulletin. |
| 005–02–96 | HS748–27–126 | *Flight Controls* – Inspection of cable tension regulators, gust locks and cable pressure seals. | Applicable to all HS748 aircraft. Compliance is required as detailed in Service Bulletin. |
| 002–04–96 | JS/CPCP/02 | Corrosion Prevention and Control Program. | Applicable to all HS748 aircraft. Compliance is required as detailed in Jetstream Aircraft document. |
| 008–12–96 | HS748–A27–128 | *Flight Controls* – Control system gust locks – Inspection/Rectification. | Applicable to all HS748 aircraft. Compliance is required as detailed in Alert Service Bulletin. |
| 005–02–97 | HS748–29–49 | *Hydraulic Power* – Inspection of the main hydraulic accumulators for corrosion. | Applicable to all HS748 aircraft. Compliance is required as detailed in Service Bulletin. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 006–02–2000 | HS748–27–133 | *Flight Controls* – Inspection of control circuits under floor forward of station 252F. | Applicable to all HS748 aircraft. Compliance is required as detailed in Service Bulletin. |
| 007–02–2000 | HS748–27–125 | *Flight Controls* – Introduction of improvements to the flight control installation. | Applicable to all HS748 aircraft. Compliance is required as detailed in Service Bulletin. |
| 003–04–2002 | HS748–32–104 | *Landing Gear* – Introduction of changes to the mounting structure to accommodate a nose landing gear with additional pintle pin baulking. | Applicable to all HS748 aircraft. Compliance is required as detailed in Service Bulletin. |
| 002–09–2002 | HS748–A28–44 | *Fuel-Distribution* – Chafe damage to a cross feed drain pipe. | Applicable to all HS748 aircraft. Compliance is required as detailed in Alert Service Bulletin. |
| 003–12–2002 | HS748–27–135 Revision 1 | *Flight Controls* – Gust locks – Installation of a baulking actuator on the elevator gust lock. | Cancelled and superseded by AD G-2004-0002. |
| 006–01–2003 | HS748–24–131 | *Electrical Power* – Relocation of battery earth posts. | Applicable to all HS748 aircraft with batteries installed in the nosecone. Compliance is required as detailed in Service Bulletin. |
| 003–02–2003 | HS748–28–045 | *Fuel* – Distribution – Removal of the fuel cross-feed drain stub pipe and valve, and inspection of electrical cable looms in the port and starboard wing dry bays. | Applicable to all HS748 aircraft. Compliance is required as detailed in Service Bulletin. |

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# United Kingdom Civil Aviation Authority

# AIRWORTHINESS DIRECTIVE

## AD No: G-2004-0002

Issue Date: 18 February 2004

This AD is issued by the UK CAA acting for and on behalf of the European Aviation Safety Agency as the Primary Aviation Authority (ICAO Annex 8 Authority of State of Design) for the affected product(s).

Approved by the European Aviation Safety Agency under approval number 2004-1279 on 17 February 2004.

In accordance with Article 9(7)(b) of the Air Navigation Order 2000 as amended the following action required by this Airworthiness Directive (AD) is mandatory for applicable aircraft registered in the United Kingdom.
No person may operate an aircraft to which an AD applies except in accordance with the requirements of that AD unless otherwise agreed with the Authority of the State of Registry.

| Type Approval Holders Name: | Type/Model Designation(s): |
|---|---|
| **BAE SYSTEMS (OPERATIONS) LIMITED** | **HS.748** |

**Type Certificate Data Sheet No:** None

**Superseded/ Revised ADs:** 003-12-2002

### ATA 27 - FLIGHT CONTROLS – GUST LOCKS - INSTALLATION OF A BAULKING ACTUATOR ON THE ELEVATOR GUST LOCK

**Manufacturer(s):** Hawker Siddeley Aviation Ltd/British Aerospace PLC

**Applicability:** Model HS.748 all Series aeroplanes certificated in any category.

**Reason:** BAE Systems (Operations) Ltd Service Bulletin HS748-27-135 Revision 2 incorporates minor changes that correct erroneous wiring information which if not corrected could result in the incorrect operation of the rotary actuator baulk.

**Effective Date:** 16 March 2004

**Compliance/Action:**

a) Within a period not exceeding 750 flight hours or 240 days after the installation of the baulk actuator in accordance with Part 2 of Service Bulletin HS748-27-135 Revision 1 or at next scheduled inspection of the baulk lever in accordance with Appendix 2 of Service Bulletin HS748-27-135 Revision 1 or 2, whichever occurs later, inspect Modification 7673 in accordance with Service Bulletin HS748-27-135 Revision 2 dated 2 October 2003 or later CAA approved revision and correct wiring as necessary. Function test the Elevator Gust Lock Baulk Actuator System in accordance with Appendix 1 of Service Bulletin HS748-27-135 Revision 2 dated 2 October 2003 or later CAA approved revision.

b) Within a period not exceeding 750 flight hours or 240 days after the installation of the baulk actuator in accordance with Part 2 of Service Bulletin HS748-27-135 Revision 1 or 2, inspect Modification 7673 in accordance with Appendix 2 of Service Bulletin HS748-27-135 Revision 2 or later CAA approved revision. Repeat this inspection at an interval not exceeding 750 flight hours or 240 days thereafter.

**Reference Publications:** BAE Systems (Operations) Limited Service Bulletin SB HS748-27-135 Revision 2, may be obtained from Project Management Group, Customer Information Department, BAE Systems (Operations) Limited, Prestwick International Airport, Ayrshire, KA9 2RW, Scotland. Telephone: +44 (0) 1292 675207 Facsimile: +44 (0) 1292 675704 E-mail: RApublications@baesystems.com

**Remarks:** Enquiries regarding this Directive should be referred to Mr M P Gadd, Civil Aviation Authority, Aircraft Certification Section, Safety Regulation Group, Aviation House, Gatwick Airport South, West Sussex, RH6 0YR, United Kingdom. Telephone: +44 (0) 1293 573313 Facsimile: +44 (0) 1293 573976 E-mail: michael.gadd@srg.caa.co.uk

## HOT-AIR BALLOONS AND HOT-AIR AIRSHIPS

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 2287 PRE 80 | BBAC MOD 1 | Introduction of dual Rego burner and on/off valves. | Should have been complied with by 30 April 1973. |
| 2288 PRE 80 | BBAC MOD 2 | Introduction of stop piece on dump valve line. | Should have been complied with by 31 March 1974. |
| 2289 PRE 80 | BBAC MOD 3 | Replacement of galvanised steel flying wires by stainless steel wires. | Should have been complied with by 31 March 1975. |
| 2290 PRE 80 | BBAC MOD 4 | Replacement of Velcro fastening of the rip panel. | Compliance required as detailed in Modification Bulletin. |
| 2291 PRE 80 | BBAC MOD 5 | Velcro rip panel seals – Inspection/Modification. | Applicable to Thunder Balloons Serial Nos. 002 to 012 inclusive, 014, 015, 016, 018, 019, 020 and 027. Should have been embodied by 31 March 1975. |
| 2292 PRE 80 | BBAC MOD 6 | To prevent inadvertent complete opening of the Velcro fastened panel. | See BBAC Modification Leaflet MOD 6 for compliance. |
| 013–02–92 | Thunder & Colt Service Bulletin No. 4 | Introduction of two rip stoppers at the top of the envelope. | Applicable to Colt Flying open book Serial No. 1691. Compliance required as detailed in Thunder & Colt Modification No. T146. |
| 004–10–92 | Thunder & Colt Service Bulletin No. 3 | Inspection of the envelope. | Applicable to Thunder & Colt hot-air airships. Compliance required as detailed in Service Bulletin. |
| 001–07–96 | Cameron Balloons (Thunder & Colt) SB2 Issue 1 Revision C | *Turning Vents* – Addition of reinforcing tapes to Thunder and Colt turning vents. | Applicable to all Thunder, Colt and Thunder and Colt envelopes fitted with turning vents and having a Constructors No. prior to 3550 (all Oswestry built envelopes). Compliance required as detailed in Service Bulletin. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 003–01–97 | Cameron Balloons (Thunder & Colt) SB3 Issue 1 Revision C | Reinforcement of attachments on the Trivent flap. | Applicable to Thunder and Colt envelopes SN3528, CN3553, CN3688, CN3719, CN3746, CN3825, CN3833, CN3835, CN3845, CN3886, CN3891, CN3922, CN3949, CN3956, CN4026. Compliance required as detailed in Service Bulletin. |
| 002–11–98 | Cameron Balloons (Thunder & Colt) SB4 Issue 1 Revision C | Periodic replacement of propane cylinder pressure relief valves. | Applicable to fuel cylinders supplied for flight by Cameron Balloons/Thunder & Colt and Thunder & Colt Ltd. Compliance required as detailed in Service Bulletin. |
| 003–11–98 | Cameron Balloons (Thunder & Colt) SB7 Issue B | Inspection of burner frame cross bar welds. | Applicable to triple burner frames post mod C252/T176. Compliance required as detailed in Service Bulletin. |
| 001–01–2000 | Cameron Balloons (Thunder & Colt) SB8 Issue A | Recall of cylinders | Applicable to titanium propane cylinders types CB2380 Serial Nos. up to and including BT0143 and CB2383 Serial Nos. up to and including BT0076. Compliance required as detailed in Alert Service Bulletin. |
| 003–05–2000 | Cameron Balloons (Sky Balloons) SB10 | Replacement of valve stems in the main blast, liquid fire and pilot light valves. | Applicable to Mk. 1 and Mk. 2 (Mistral) burners. Compliance required as detailed in Service Bulletin. |

## HUNTING PRESIDENT 2 AND 2A

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 2595 PRE 80 | K66–6562 | *Fuel* – Provision for the installation of filter units at fuel tank outlets. | Applicable to Series 2 and 2A aircraft. Should have been embodied by 1 January 1963. |
| 2596 PRE 80 | K66–6564 | *Flight Controls* – Aileron – To improve the attachments of inboard and outboard end ribs to spar. | Applicable to Series 2 and 2A aircraft. Should have embodied by 31 August 1965. |
| 2597 PRE 80 | K66–6587 | *Fuselage* – Mainplanes – To introduce front and rear spar lower booms in steel in lieu of aluminium alloy. | Applicable to Series 2 and 2A aircraft. Embodiment will renew the fatigue life of the components and so extend the operating life of the aircraft. |
| 2598 PRE 80 | CTI No. 8 | *Flight Controls* – Control Column Assembly – Security of elevator control. | Applicable to Series 2 and 2A aircraft. Should have been complied with not later than next Check 1 inspection after November 1961. |
| 2599 PRE 80 | CTI No. 22 | *Wings* – Inspection of undercarriage attachment fittings on wing diagonal ribs. | Applicable to Series 2 and 2A aircraft. Compliance required as detailed in Civil Technical Instruction. |
| 2600 PRE 80 | CTI No. 28 | *Flight Controls* – Inspection of flap operating levers Drawing No. K57–25–117. | Applicable to Series 2 and 2A aircraft. Compliance required as detailed in Civil Technical Instruction. |
| 2601 PRE 80 | CTI No. 29 | *Fire Protection* – Inspection/Replacement of Graviner fire extinguisher bottle and cartridges fitted to power plant installation. | Applicable to Series 2 and 2A aircraft. Compliance required within 5 flight hours from April 1968. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 2602 PRE 80 | CTI No. 31A | *Pneumatic* – Inspection of air bottles Type B22, B26 and B27. | Applicable to Series 2 and 2A aircraft. Should have been complied with by December 1968. |

## MILES M65 GEMINI

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 2681 PRE 80 | 153 | To improve the venting and draining of fuel tanks. | |
| 2682 PRE 80 | 240B | To introduce an endless chain to operate the flap jack and an additional support. | Complementary to Mod. No. 351. Not applicable to aircraft equipped with bucket type seats. |
| 2683 PRE 80 | 313 | To strengthen the lift flap bell crank levers. | Essential only when Mod. No. 104 (to introduce a footstep into the flap) is embodied. |
| 2684 PRE 80 | 328 | Introduction of copper contacts in lieu of beryllium copper to prevent fusing of starter switch contacts. | To be carried out in accordance with Handley Page (Reading) Limited, Service Instruction Gemini/15. |
| 2685 PRE 80 | 343 | Provision for positive locking of bolts at rear engine to the engine bearer. | Not applicable to Mark 3A or 3B. |
| 2686 PRE 80 | 351 | To provide a guard on the flap control chain pulley under the front seats. | Complementary to Mod. No. 240B. Not applicable to aircraft equipped with bucket type seats. |
| 2687 PRE 80 | 363 | To reinforce the rear windows.<br><br>Part A – To reinforce the windows.<br>Part B – To fit external metal frame. | Essential for Part A or Part B only to be fitted. |
| 2688 PRE 80 | 368 | Part A – To provide a guard for the aileron torque shaft.<br>Part B – To fit leather sleeve. | Essential for Part A or Part B only to be fitted. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 2689 PRE 80 | 405 | To prevent crossing of battery connections. | |
| 2690 PRE 80 | 432B | To reinforce the engine nacelle structure at the front support brackets. | To be carried out in accordance with Handley Page (Reading) Limited, Service Instruction Gemini/9. |
| 2691 PRE 80 | 434 | To reinforce the tailplane front false spar attachments to the tailplane root ribs. | To be carried out in accordance with Handley Page (Reading) Limited, Service Instruction Gemini/10. |
| 2692 PRE 80 | 438 | To prevent fouling of operative cable attachment clamps on the starter switches. | Supersedes Mod. No. 383. Not applicable when Mod. No. 358 (to reposition starter switches and move starter plug) is embodied. |
| 2693 PRE 80 | 446 | Introduction of modified engine mounting rear foot. | To be carried out in accordance with Handley Page (Reading) Limited, Service Instruction Gemini/14. Not applicable to Mark 3A or 3B. |
| 2694 PRE 80 | 461 | Introduction of undercarriage retraction switches. | |
| 2695 PRE 80 | R and W 047 | Introduction of redesigned connecting bar on undercarriage switches. | Western Manufacturing (Reading) Limited, Service Instruction Gemini/24 refers. Rotax D5506 Dual Pole Switch is an acceptable alternative. |
| 2696 PRE 80 | 462 | Introduction of starter isolation switch. | |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 2697 PRE 80 | 465 | Replacement of plastic rudder bar parallel motion links by metal. | To be carried out in accordance with Handley Page (Reading) Limited, Service Instruction Gemini/17. |
| 2698 PRE 80 | 467 | Drilling of fuel tank filler caps, and alterations to vent and drain pipes. | To be carried out in accordance with Handley Page (Reading) Limited, Service Instruction Gemini/18. |
| 2699 PRE 80 | 476 | Introduction of six 1/4" diameter bolts (three each side of nacelle) in lieu of 2 BA bolts securing the rear nacelle/wing attachment brackets. | To be carried out in accordance with Handley Page (Reading) Limited, Service Instruction Gemini/20. |
| 2700 PRE 80 | R & W 936 | Introduction of strengthened fork end to flap jacks. | To be carried out in accordance with Western Manufacturing (Reading) Limited Service Instruction Gemini/23. Any one of the following approved modifications is acceptable:<br><br>*Simpson's Aeroservices Mod. SA/M 20* – replacement for original faulty Acme thread fork ends.<br><br>*Simpson's Aeroservices Mod. SA/M 21* – replacement for original faulty square thread fork ends. |
| 2701 PRE 80 | – | Inspection and rework of the flap jack mounting (Part No. 3838262) on the rear face of Frame 7. | To be carried out in accordance with Handley Page (Reading) Limited, Service Instruction Gemini/12. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 2702 PRE 80 | – | Inspection of vent and drain connections on fuel tanks at periods of flying time not exceeding 150 hours. | To be carried out in accordance with Handley Page (Reading) Limited, Service Instruction Gemini/19. |
| 2703 PRE 80 | – | Inspection of rudder bar pedals to ensure correct assembly and prevent fouling. | To be carried out in accordance with Handley Page (Reading) Limited, Service Instruction Gemini/21. |
| 2704 PRE 80 | – | Inspection of Alleron Outer Hinge Bearing Housing. | Western Manufacturing (Reading) Limited, Service Instruction Gemini/27 refers. |
| 2705 PRE 80 | Airworthiness Notice No. 82 | Electrical Generation System – Warning of loss of generated electrical power. | Compliance required as detailed in Airworthiness Notice. |

## MILES M14A HAWK TRAINER III (MAGISTER)

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 2783 PRE 80 | 2 | Introduction of fork end in lieu of eye end for flap ram attachment. | |
| 2784 PRE 80 | 12 | Strengthening of parallel motion link assembly on the rudder bar. | |
| 2785 PRE 80 | 14 | Introduction of anti-spinning strakes. | |
| 2786 PRE 80 | 26 | To prevent control fouling between seat and elevator control. | |
| 2787 PRE 80 | 35 | Introduction of steel sleeves on the throttle rods. | |
| 2788 PRE 80 | 36 | Introduction of improved attachment of spats. | Not applicable when Mod. No. 116 (deletion of wheel spats and undercarriage oleo leg fairings) is embodied. |
| 2789 PRE 80 | 45 | Positive fixing of control column rudder grip. | |
| 2790 PRE 80 | 53 | Introduction of high aspect ratio rudder. | |
| 2791 PRE 80 | 58 | Introduction of markings on fuel cock handle. | |
| 2792 PRE 80 | 108 | Strengthening of rudder pedals. | |
| 2793 PRE 80 | 468 | Introduction of modification to fuel cock to prevent ‘all tanks on’ being selected. | |

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## MILES M38 MESSENGER

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 2706 PRE 80 | 72 | To fireproof all necessary pipes forward of the fireproof bulkhead. | Applicable to Marks 2, 2A, 3, 4, 4A and 5. |
| 2707 PRE 80 | 134 | To introduce laminated safety glass or Perspex in cabin doors. | Applicable to Marks 2, 2A, 3, 4, 4A and 5. |
| 2708 PRE 80 | 153A | To introduce improvements in the venting and draining of fuel tanks. | Applicable to Marks 2, 2A, 3, 4, 4A and 5. |
| 2709 PRE 80 | 240B | To introduce an endless chain to operate the flap jack and an additional support. | Applicable to Marks 2, 2A and 3 only. Complementary to Mod. No. 351. Not applicable to aircraft equipped with bucket type seats. |
| 2710 PRE 80 | 313 | To strengthen the lift flap bell crank levers. | Applicable to Marks 2, 2A, 3, 4, 4A and 5. Essential only when Mod. No. 104 (to introduce a footstep into the flap) is embodied. |
| 2711 PRE 80 | 351 | To provide a guard on the flap operating chain pulley under the front seat. | Applicable to Marks 2, 2A and 3 only. Complementary to Mod. No. 240B. Not applicable to aircraft equipped with bucket type seats. |
| 2712 PRE 80 | 363 | To reinforce the rear windows.<br><br>Part A – To reinforce the window.<br>Part B – To fit external metal frame. | Applicable to Marks 2, 2A and 3 only. Essential for Part A or Part B only to be fitted. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 2713 PRE 80 | 368 | Part A –To provide a guard for the aileron torque shaft (forward end).<br>Part B – To fit a leather sleeve. | Applicable to Marks 2, 2A, 3 and 4. Essential for Part A or Part B only to be fitted. Not applicable to three seater aircraft. |
| 2714 PRE 80 | 405A | To prevent crossing of battery connection. | Applicable to Marks 2, 2A, 3 and 4. Essential for aircraft with 24 volt electrical system only. |
| 2715 PRE 80 | 406 | To prevent crossing of battery connections. | Applicable to Marks 2, 2A, 3 and 4. Essential for aircraft with 12 volt electrical system only. |
| 2716 PRE 80 | 431 | To delete the cabin door jettison gear. | Applicable to Marks 4A and 5. |
| 2717 PRE 80 | 434 | To reinforce the tailplane front false spar attachments to the tailplane root ribs. | Applicable to all Marks. To be carried out in accordance with Handley Page (Reading) Ltd, Service Instruction Messenger/7. |
| 2718 PRE 80 | 462 | Introduction of starter isolation switch. | Applicable to all Marks. |
| 2719 PRE 80 | 465 | Replacement of plastic rudder bar parallel motion links by metal. | Applicable to all Marks. To be carried out in accordance with Handley Page (Reading) Ltd, Service Instruction Messenger/13. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 2720 PRE 80 | 467 | Drilling of fuel tank filler caps, and alterations to vent and drain pipes. | Applicable to all Marks. To be carried out in accordance with Handley Page (Reading) Ltd, Service Instruction Messenger/14. |
| 2721 PRE 80 | 1/13 | To reposition the fuel drain pipe in the engine bay. | Applicable to Mark 4A. |
| 2722 PRE 80 | 1/24 | To increase the size of the cable connections at the trim tabs. | Applicable to Marks 4A and 5. |
| 2723 PRE 80 | 1/40 | To strengthen Rib 4 at undercarriage attachment. | Applicable to Marks 4A and 5. |
| 2724 PRE 80 | 1/71 | To strengthen the nose cowl leg. | Applicable to Mark 4A. |
| 2725 PRE 80 | 1/80 | Screws for attachment of elevator hinge block. | Applicable to Marks 4A and 5. |
| 2726 PRE 80 | R&W 036 | Introduction of strengthened fork ends to flap jacks. | To be carried out in accordance with Western Manufacturing (Reading) Limited Service Instruction Messenger/17. Any one of the following approved Modification is acceptable:<br><br>*Simpson's Aeroservices Mod. SA/M 20* – replacement for original faulty Acme thread fork ends.<br>*Simpson's Aeroservices Mod. SA/M 21* – replacement for original faulty square thread fork ends. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 2727 PRE 80 | – | Inspection and rework of the flap jack mounting (Pt. No: 3838262) on the rear face of Frame 7. | To be carried out in accordance with Handley Page (Reading) Ltd, Service Instruction Messenger/8. |
| 2728 PRE 80 | – | Inspection of vent and drain connections on fuel tanks at periods of flying time not exceeding 150 hours. | To be carried out in accordance with Handley Page (Reading) Ltd, Service Instruction Messenger/15. |
| 2729 PRE 80 | – | Inspection of rudder bar pedals to ensure correct assembly and prevent fouling. | To be carried out in accordance with Handley Page (Reading) Ltd, Service Instruction Messenger/16. |
| 2730 PRE 80 | – | Inspection of Aileron Outer Hinge Bearing Housing. | Western Manufacturing (Reading) Ltd, Service Instruction Messenger/18 refers. |

## PERCIVAL PRENTICE

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 1470 PRE 80 | ATEL SB/1 | Ultrasonic crack detection of Hymatic type B13 air bottles. | Applicable to all Civil Prentice aircraft. Compliance required within three months of receipt of Service Bulletin. |

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## PERCIVAL PROCTOR AND VEGA GULL

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 1471 PRE 80 | 130 | Strengthened attachment ribs to aileron false spar. | Applicable only to Proctor Mark I and Vega Gull aircraft. *This modification need only be embodied if the attachment of the ribs to the false spar is defective.* |
| 1472 PRE 80 | 199 | Strengthened attachment airscoop baffle. | Applicable only to Proctor Mark I and Vega Gull aircraft. |
| 1473 PRE 80 | 210 | Drain holes in rear fuselage. | Applicable only to Proctor Mark I and Vega Gull aircraft. |
| 1474 PRE 80 | 215 | Wire reinforced control column gaiter. | Applicable only to Proctor Mark I and Vega Gull aircraft. |
| 1475 PRE 80 | 218 | Introduction of additional manifold drain. | Applicable only to Proctor Mark I and Vega Gull aircraft. Complementary to DH Mod. No. G1152 which must be embodied at the same time. |
| 1476 PRE 80 | 590 | Strengthened attachment ribs to aileron false spar. | Applicable only to Proctor Mark II and Mark III aircraft. *This modification need only be embodied if the attachment of the ribs to the false spar is defective.* |
| 1477 PRE 80 | 659 | Strengthened attachment airscoop baffle. | Applicable only to Proctor Mark II and Mark III aircraft. |
| 1478 PRE 80 | 676 | Drain holes in rear fuselage. | Applicable only to Proctor Mark II and Mark III aircraft. |
| 1479 PRE 80 | 685 | Wire reinforced control column gaiter. | Applicable only to Proctor Mark II and Mark III aircraft. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 1480 PRE 80 | 687 | Introduction of gauze filter to fuel tanks having serial numbers prefixed by the letters GSM. | Applicable only to Proctor Mark I, Mark II and Mark III and Vega Gull aircraft. |
| 1481 PRE 80 | 689 | Introduction of additional manifold drain. | Applicable only to Proctor Mark II and Mark III aircraft. Complementary to DH Mod. No. G1152, which must be embodied at the same time. |
| 1482 PRE 80 | 1141 | Introduction of gauze filter to fuel tanks having serial numbers prefixed by the letters GSM. | Applicable only to Proctor Mark IV and Mark V aircraft. |
| 1483 PRE 80 | 1143 | Introduction of additional manifold drain. | Applicable only to Proctor Mark IV and Mark V aircraft. Complementary to DH Mod. No. G1152 which must be embodied at the same time. |
| 1484 PRE 80 | C1171 | Introduction to Battery Master switch. | Applicable to all Proctor and Vega Gull aircraft in accordance with Notice to Licensed Aircraft Engineers and to Owners of Civil Aircraft No. 33. |
| 1485 PRE 80 | C1175 | Introduction of new type fuel tank vent. | Applicable only to Proctor Mark IV and Mark V aircraft. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 1486 PRE 80 | C1204 | Locking bottom pin, front spar wing attachment joint. | Applicable only to Proctor Mark I, Mark II, Mark III, Mark IV and Mark V aircraft. Modification need only be embodied if, owing to wear in the locking mechanism, the lower main attachment pin can be withdrawn from the front spar rear attachment plates while in the locked position. |
| 1487 PRE 80 | C1205 | Locking top pin, front spar attachment. | Applicable only to Proctor Mark I, Mark II, Mark III, Mark IV and Mark V aircraft. This modification need only be embodied if, owing to manufacturing discrepancies, the wing gap between the centre section nose and the outer plane is too large to ensure that the top pin cannot rotate and partly withdraw. |
| 1488 PRE 80 | C1206 | Flying control pulleys in rear fuselage. | Applicable only to Proctor Mark IV and Mark V aircraft. |
| 1489 PRE 80 | C1207 | Cabin door jettisoning label. | Applicable only to Proctor Mark I, Mark II, Mark III, Mark IV and Mark V aircraft. |
| 1490 PRE 80 | C1255 | Reinforcement of centre plane spars. | Applicable only to Proctor Mark IV and Mark V aircraft. |
| 1491 PRE 80 | C1228 | Strengthening of the attachment of the elevator lever to the rocking tube. | Applicable to Proctor Mark II and Mark III aircraft. To be carried out in accordance with Percival Aircraft Limited, Civil Technical Instruction No. 3. |
| 1492 PRE 80 | C1229 | Strengthening of the attachment of the elevator lever to the rocking tube. | Applicable to Proctor Mark I and Vega Gull. To be carried out in accordance with Percival Aircraft Ltd, Civil Technical Instruction No. 2. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 1493 PRE 80 | C1236 | Introduction of strengthening aileron mass balance arm. | Applicable to all Marks. To be carried out in accordance with Civil Technical Instruction No. 4. |
| 1494 PRE 80 | C1246 | Maximum permissible speed – Introduction of cockpit data plate, etc. | Applicable all Proctor aircraft. Compliance required by 1 November 1961. Hunting Aircraft Civil Technical Instruction No. 13 refers. |
| 1495 PRE 80 | – | Inspection of laminated spar booms. | Applicable only to Proctor Mark IV and Mark V aircraft. To be carried out in accordance with Percival Aircraft Limited, Civil Technical Instruction No. 2. |

**PILATUS BRITTEN-NORMAN BN–2, BN–2A, BN–2B AND BN–2T ISLANDER SERIES**

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| NOTE: In PB-N terminology, the term 'Modification' is used only for improvements incorporated during production. Post-production requirements are identified as 'Service Bulletins' and this term covers both 'Inspection' and 'Modification' activities. | | | |
| 0601 PRE 80 | BN–2/NB/M/179 | *Flight Controls* – To introduce a change of elevator trim tab angle. | Applicable to all Series aircraft, Serial Nos. as detailed in Modification Leaflet, and those aircraft that have Mod. No. NB/M/134 embodied. Compliance required as detailed in Modification Leaflet. |
| 0602 PRE 80 | BN–2/NB/M/238 | *Equipment/Furnishings* – Changing of seat webbing. | Applicable to all Series aircraft, Serial Nos. 1 to 14 inclusive. Compliance required as detailed in Modification Leaflet. |
| 0603 PRE 80 | BN–2/NB/M/294 | *Flight Controls* – Prevention of inadvertent cross connection of rudder control cables. | Cancelled. No longer a mandatory requirement. |
| 0604 PRE 80 | BN–2/NB/M/417 | *Flight Controls* – Reinforcement of the flap centre operating lever. | Applicable to all Series aircraft, Serial Nos. 1 to 159 inclusive. Compliance required as detailed in Modification Leaflet. |
| 0605 PRE 80 | BN–2/NB/M/468 | *Flight Controls* – To change the eye-end of the elevator trim jack. | Applicable to all Series aircraft delivered ex-factory prior to 1 October 1971. Compliance required as detailed in Modification Leaflet. |
| 0606 PRE 80 | BN–2/NB/M/507 | *Flight Controls* – Introduction of a new elevator trim tab. | Cancelled and superseded by AD 0640 PRE 80. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 0607 PRE 80 | BN–2/SB 5 | *Equipment/Furnishings* – Pilot and passenger seat cushion supports. | Applicable to all Series aircraft, Serial Nos. 1 to 19 inclusive. Compliance required as detailed in Service Bulletin. |
| 0608 PRE 80 | BN–2/SB11 | *Engine Fuel and Control* – Fuel pipe between engine-driven pump and carburettor. | Applicable to all Series aircraft not incorporating Mod. NB/M/300. Compliance required as detailed in Service Bulletin not later than 31 March 1969. |
| 0609 PRE 80 | BN–2/SB15 | *Flight Controls/Landing Gear* – Inspection of turnbuckles in aileron, rudder and nose-wheel steering control systems. | Applicable to aircraft Serial Nos. 3 to 43 inclusive, 45 and 46. Compliance required as detailed in Service Bulletin. |
| 0610 PRE 80 | BN–2/SB20 | *Flight Controls* – Rudder bar beam defects. | Applicable to Series 2A aircraft Serial Nos. 116 and subsequent which do not embody Mod. No. NB/M/341. Compliance required as detailed in Service Bulletin. |
| 0611 PRE 80 | BN–2/SB24 | *Flight Controls* – Elevator trim system final drive lever – defective attachment lugs. | Applicable to all Series aircraft not incorporating Mod. No. NB/M/394. Compliance required as detailed in Service Bulletin. |
| 0612 PRE 80 | BN–2/SB25 | *Wings* – Loose locking keys in wing attachment spindles. | Applicable to aircraft Serial Nos. C19 to C130 inclusive. Compliance required as detailed in Service Bulletin. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 0613 PRE 80 | BN–2/SB27 | *Stabilizers* – Inspection of tailplane front spar attachments. | Applicable to all Series aircraft not incorporating Mod. No. NB/M/404. Compliance required as detailed in Service Bulletin. |
| 0614 PRE 80 | BN–2/SB28 | *Power Plant* – Fire hazard in carburettor air boxes. | Applicable to all Series aircraft not incorporating Mod. No. NB/M/362. Compliance required as detailed in Service Bulletin. |
| 0615 PRE 80 | BN–2/SB36 | *Flight Controls* – Inspection of flap operating lever and flap attachments. | Applicable to all Series aircraft. Compliance required as detailed in Service Bulletin. |
| 0616 PRE 80 | BN–2/SB44 | *Nacelles/Pylons* –- Inspection for loose jo-bolts in the engine mounting frame attachment brackets. | Applicable to all Series aircraft not incorporating Mod. No. NB/M/455. Compliance required as detailed in Service Bulletin. |
| 0617 PRE 80 | BN–2/SB49 | *Flight Controls* – Inspection of elevator, elevator trim tab, trim tab drive circuit and attachments. | Applicable to all Series aircraft. Compliance required as detailed in Service Bulletin. See also Service Bulletin 142. |
| 0618 PRE 80 | BN–2/SB56 | *Flight Controls* – Rudder bar failure. | Applicable to all Series aircraft. Compliance required as detailed in Service Bulletin. See also Service Bulletin 128. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 0619 PRE 80 | BN–2/SB61 | *Nacelles/Pylons* – Inspection of upper engine mounting brackets on front wing spar. | Applicable to all Series aircraft not incorporating Mod. No. NB/M/1147. Compliance required as detailed in Service Bulletin. |
| 0620 PRE 80 | BN–2/SB66 | *Flight Controls* – 6° droop flap micro-switch setting. | Applicable to all Series aircraft with drooped flaps (Mod. No. NB/M/430). Compliance required as detailed in Service Bulletin. |
| 0621 PRE 80 | BN–2/SB67 | *Flight Controls* – Improved aileron mass balance attachment. | Applicable to all Series aircraft not incorporating Mod. No. NB/M/627. Compliance required as detailed in Service Bulletin. |
| 0622 PRE 80 | BN–2/SB68 | *Engine Indicating* – Sangamo Weston tachometers Part No. S128.5.139. | Applicable to all Series aircraft fitted with tachometers having Serial Nos. up to and including B.B. 96799. Compliance required as detailed in Service Bulletin. |
| 0623 PRE 80 | BN–2/SB69 | *Equipment/Furnishings* – Inspection and strengthening of flight compartment seat backs. | Applicable to all Series aircraft. Compliance required as detailed in Service Bulletin. |
| 0624 PRE 80 | BN–2/SB71 | *Equipment/Furnishings* – Defective seat locking mechanism on flight compartment seats – Alar Part No. NB-99–H–007 and Jetseats Part No. JS114. | Applicable to all Series aircraft. Compliance required as detailed in Service Bulletin. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 0625 PRE 80 | BN–2/SB72 | *Power Plant* – Engine mounting frame weld inspection. | Applicable to all Series aircraft. Compliance required as detailed in Service Bulletin. |
| 0626 PRE 80 | BN–2/SB74 | *Flight Controls* – Rudder bar lower mounting defects. | Applicable to all Series aircraft not incorporating Mod. No. NB/M/463 Part A. Compliance required as detailed in Service Bulletin. |
| 0627 PRE 80 | BN–2/SB76 | *Stabilizers* – Top, centre and bottom rudder hinge bracket defects. | Applicable to all Series aircraft. Compliance required as detailed in Service Bulletin. |
| 0628 PRE 80 | BN–2/SB85 | *Electrical Power* – Duplication of electrical power supply to audio system. | Applicable to all Series aircraft not incorporating Mod. No. NB/M/809. Compliance required as detailed in Service Bulletin. |
| 0629 PRE 80 | BN–2/SB91 | *Nacelles/Pylons* – Corrosion of engine mounting brackets. | Applicable to all Series aircraft. Compliance required as detailed in Service Bulletin. |
| 0630 PRE 80 | BN–2/SB95 | *Power Plant* – Air intake hose inspection. | Applicable to all Series aircraft fitted with IO-540-K1B5 (fuel injected) engines. Compliance required as detailed in Service Bulletin. |
| 0631 PRE 80 | BN–2/SB98 | *Flight Controls* – Corrosion inside aileron mass balance tube. | Applicable to all Series aircraft not incorporating Mod. No. NB/M/878. Compliance required as detailed in Service Bulletin. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 0632 PRE 80 | BN–2/SB101 | *Flight Controls* – Inspection and protection against electrolytic corrosive action. | Applicable to all Series aircraft not incorporating Mod. No. NB/M/929. Compliance required as detailed in Service Bulletin. |
| 0633 PRE 80 | BN–2/SB103 | *Engine Indicating* – Engine tachometer calibration. | Applicable to all Series aircraft. Compliance required as detailed in Service Bulletin. |
| 0634 PRE 80 | BN–2/SB104 | *Propellers* – Application of Hartzell Propeller Inc. Service Bulletin 118, latest revision. | Applicable to all Series aircraft. Compliance required as detailed in the Hartzell Service Bulletin. |
| 0635 PRE 80 | BN–2/SB109 | *Engine/Propeller Controls* – Reinforcement of Teleflex conduit swivel bracket attachment on propeller and engine controls. | Applicable to all Series aircraft not incorporating Mod. Nos. NB/M/939 and NB/M/996. Compliance required as detailed in Service Bulletin. |
| 0636 PRE 80 | BN–2/SB111 | *Flight Controls* – Examination of rudder bar pillar and slider tube assembly. | Applicable to Series 2A aircraft with rudder bar pre-Mod. No. NB/M/948. Compliance required as detailed in Service Bulletin. |
| 0637 PRE 80 | BN–2/SB114 | *Equipment/Furnishings* – Introduction of single buckle safety harness with inertia reel tensioning. | Applicable to all Series aircraft which do not incorporate Mod. No. NB/M/912 or NB/M/1027. Compliance required as detailed in Service Bulletin. |
| 0638 PRE 80 | BN–2/SB127 | *Flight Controls* – Chordwise cracks in swaged top skin of elevator trim tab. | Applicable to all Series aircraft. Compliance required as detailed in Service Bulletin. Superseded by BN–2/SB142. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 0639 PRE 80 | BN–2/SB 134 (A.P.Precision Hydraulic SB 32–277) | *Landing Gear* – Conversion of existing main undercarriage legs. | Applicable to all Series aircraft fitted with main undercarriage legs Part No. AIR 83002. Compliance required as detailed in Service Bulletin. |
| 0640 PRE 80 | BN–2/SB142 | *Flight Controls* – Elevator trim tab defects. | Applicable to BN–2, BN–2A and BN–2B Islander Series aircraft that do not already incorporate Mod. No. NB/M/1117. Compliance required as detailed in Service Bulletin. |
| 0641 PRE 80 | CAA Airworthiness Notice No. 82 | *Electrical Generation System* – Warning of loss of generated electrical power. | Applicable to all Series aircraft. Compliance required as detailed in Airworthiness Notice. |
| 008–07–80 | BN–2/SB58 | *Instruments* – Calibration control of Salmoiraghi airspeed indicators. | Cancelled by Service Bulletin BN–2/SB155. Cancellation of obsolete service bulletins. |
| 009-07-80 | BN–2/SB135 | *Landing Gear* – Failure of torque link pins in main undercarriage shock absorber units of Automotive Products Limited manufacture. | Applicable to all BN–2 and BN–2A aircraft fitted with main undercarriage legs Part Nos as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. AP Precision Hydraulics Service Bulletin 32–278 also refers and is referenced under this AD No in the Instruments and Equipment Section. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 010–07–80 | BN–2/SB137 | *Equipment/Furnishings* – Defective inflation mechanism on R.F.D. Lifejackets. | Applicable to all Series aircraft. Compliance required as detailed in The Walter Kidde Co Ltd Service Bulletin 25–109–8082. |
| 005–09–80 | BN–2/SB144 | *Air* – Cracking of hot/cold air shutter in carburettor air box. | Applicable to all Series aircraft with carburettor engines which do not incorporate Mod. No. NB/M/1112. Compliance required as detailed in Service Bulletin. |
| 018–02–82 | BN–2/SB145 | *Oxygen* – Oxygen breathing systems to Pilatus Britten-Norman Mod. No. NB/M/530. | Applicable to all Series aircraft which incorporate Mod. No. NB/M/530. Compliance required as detailed in Service Bulletin. |
| 019–02–82 | BN–2/SB154 | *Fuel* – Damage to wing tip tank fuel contents transmitter floats. | Applicable to all BN–2 Series aircraft with wing tip fuel tanks (Mod. No. NB/M/364). Compliance required as detailed in Service Bulletin. |
| 015–04–83 | BN–2/SB156 | *Auto-Pilot* – Changes to Collins AP107 auto-pilot system installed under Mod. No. NB/M/911 in conjunction with Mod. No. NB/M/1117. | Applicable to BN–2 Series aircraft incorporating Mod. No. NB/M/1117 which are likely to have Mod. No. NB/M/911 installed. Compliance required as detailed in Service Bulletin. |
| 016–04–83 | BN–2/SB157 | *Fuel* – Wing tip fuel tank controls – Improved operational features. | Applicable to all BN–2 Series fitted with wing tip tanks to Mod. No. NB/M/364. Compliance required as detailed in Service Bulletin. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 001–05–84 | BN–2/NB/M/1090 | *Noise Regulations* – Engine tachometer S128–5–150 – revised markings. | Applicable to all Series aircraft certified after 1 January 1980. Compliance required in accordance with Modification Leaflet. |
| 002–05–84 | BN–2/NB/M/1022 | *Engine Indicating* – Placard of maximum engine oil pressure. | Applicable to Series 2A aircraft. Compliance required in accordance with Modification Leaflet. |
| 007–06–84 | BN–2/SB163 | *Equipment/Furnishings* – Pilot's individual sliding seats – Possible failure of seat backs. | Applicable to aircraft equipped with individual pilot's sliding seats on floor tracks. Compliance required as detailed in Service Bulletin. |
| 005–06–85 | BN–2/SB.131 | *Tailplane* – Inspection for loose rivets and damage to tailplane skin and structure extending from root and leading edge out towards tips and rearwards to spars. | Applicable to all Series aircraft. Compliance required as detailed in Service Bulletin. |
| 005–12–85 | BN–2/SB.170 | *Landing Gear* – Inspection of main undercarriage upper torque link attachment lugs on Fairey Hydraulics Ltd., Part No.3499 HI units. | Applicable to all BN–2A, BN–2B and BN–2T Series aircraft fitted with Fairey Hydraulics main undercarriage units.Compliance required as detailed in Service Bulletin. Fairey Hydraulics Service Bulletin 32–4 also refers and is referenced under this AD No. in the Instruments and Equipment Section. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 004–07–86 | BN–2/SB.113 | *Flight Controls* – Elevator mass balance defect. | Applicable to BN–2 and BN–2A Series aircraft as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. |
| 005–07–86 | BN–2/SB.172 | *Engine* – Engine vibration isolators manufactured by Barry Controls – Inspection of brackets and elastomers for cracking and deterioration. | Applicable to all BN–2T Series aircraft. Compliance required as detailed in Service Bulletin. |
| 009–08–86 | CAA Letter ref 9/97/CtAw/168/169 dated 20 August 1986 | *Propellers* – Inspection of propeller hubs for cracking. | Superseded by CAA AD 001–07–94 which has now been superseded by FAA AD 2001–23–08. |
| 019–09–87 | Campaign Wire SL No 23 | *Auto Flight* – Century Autopilot installation to be rendered inoperative. | Applicable to all Century 31 Autopilot systems installed in BN–2 Series aircraft to Mod No NB–M–1271. Compliance required as detailed in Service Letter. |
| 020–02–90 | BN–2/SB.190 | Corrosion affecting primary structure – Continued airworthiness of ageing aircraft in general aviation use. | Applicable to all BN–2 Series aircraft. Compliance required as detailed in Service Bulletin. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 021–02–90 | BN–2/SB.187 | Potential failure of undervoltage sensor Part No. NB–81–3697 (Issue 1 to 5 inclusive). | Applicable to all BN–2 Series aircraft. Compliance required as detailed in Service Bulletin. |
| 021–04–90 | BN–2/SB.193 | *Ignition* – Power plant ice protection system – Automatic selection of engine igniter. | Applicable to BN–2T Series aircraft. Compliance required as detailed in Service Bulletin. |
| 022–04–90 | BN–2/SB.194 | *Electrical Power* – Introduction of a resistor in the generator field circuit. | Applicable to BN–2T Series aircraft. Compliance required as detailed in Service Bulletin. |
| 023–02–91 | BN–2/SB.197 | *Landing Gear* – Nose undercarriage unit mounting – Improved support structure. | Applicable to BN–2T Series aircraft. Compliance required as detailed in Service Bulletin. |
| 020–06–91 | BN–2/SB.202 | *Electrical Power* – Possible accidental short-circuit at rear of pilots switch panel – Preventive measures. | Applicable to BN–2 and BN–2T Series aircraft. Compliance required as detailed in Service Bulletin. |
| 010–10–91 | BN–2/SB.203 | *Engine Fuel and Control* – Replacement of composite floats with metal floats in Marvel Schebler carburettors. | Applicable to BN–2A and BN–2B Series aircraft. Compliance required as detailed in Service Bulletin. |
| 005–09–93 | BN–2/SB.214 | *Landing Gear* – Nose wheel steering drive ring failure. | Applicable to BN–2A/B and BN–2T Series aircraft. Compliance required as detailed in Service Bulletin. |
| 008–11–93 | BN–2/SB.215 | *Engine Fuel and Control* – Cracking of co-ordinator power input lever on Allison 250–B17C engine control system. | Applicable to BN–2T Series aircraft fitted with Allison 250–B17C engines. Compliance required as detailed in Service Bulletin. Allison Alert Commercial Engine Bulletin TP CEB–A–1287 also refers. |
| 007–09–94 | BN–2/SB.217 | *Flight Controls* – Century 31 autopilot system elevator trim cable splice – Wear and/or fraying. | Applicable to BN-2A/B and BN-2T Series aircraft including those styled Defender, having the Century 31 Autopilot System fitted to Modification NB/M/1271 or Century 2000 Autopilot System fitted to Modification NB/M/1488. Compliance required as detailed in Service Bulletin. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 009–05–95 | BN–2/SB.218 | *Engine Fuel and Control* – Control cable swivel unit mounting bracket failure. | Applicable to all BN–2 Series aircraft. Compliance required as detailed in Service Bulletin. |
| 005–06–95 | BN–2/SB.223 | *Flight Controls* – Rudder control cables – Incorrect assembly. | Applicable to all BN-2 Series aircraft Construction numbers 602 to 915 and 2101 to 2267 excluding 2115, 2260 and 2264. Compliance required as detailed in Service Bulletin. |
| 004–01–96 | BN–2/SB.228 | *Electrical Power* – 70 Amp DC generation system – Replace type 10B1 or 10D1 diodes. | Applicable to all BN-2, BN-2A and BN-2B Series aircraft. Compliance required as detailed in Service Bulletin. |
| 004–05–96 | BN–2/SB.232 | *Wingtip Fuel Tank System* – (Modification NB/M/364) Additional operating instructions. | Applicable to all BN-2A and BN-2B Series aircraft fitted with wingtip fuel tanks to modification NB/M/364. Compliance required as detailed in Service Bulletin. |
| 007–10–96 | BN-2/SB.229 | *Electrical power* – Modification NB/M/256 50A generator system – Generator inspection. | Applicable to all BN-2, BN-2A and BN-2B Series aircraft. Compliance required as detailed in Service Bulletin. |
| 008–10–96 | BN-2/SB.231 | *Landing Gear* – Introduction of Modification NB/M/1577 – Main landing gear, torque loading of attachment bolts. | Applicable to all BN-2, BN-2A, BN-2B and BN-2T aircraft. Compliance required as detailed in Service Bulletin |
| 009–10–97 | BN-2/SB.237 | *Wings* – Wing spar caps – Inspection. | Applicable to all BN-2, BN-2A, BN-2B and BN-2T aircraft. Compliance required as detailed in Service Bulletin. |
| 011–10–97 | BN-2/SB.235 | *Nacelles/Pylons* – Examine and repair the nacelle box structure at the bottom fitting of the main landing gear. | Applicable to all BN-2, BN-2A, BN-2B and BN-2T aircraft. Compliance required as detailed in Service Bulletin. |
| 005–07–98 | BN–2/SB.250 | *Propeller anti-ice system* – Inspection. | Applicable to all BN–2T Series aircraft. Compliance required as detailed in Service Bulletin. |
| 004–12–98 | BN–2/SB.249 | *Landing Gear* – Nose landing gear assembly chrome plating – Examine | Applicable to all BN–2, BN–2A, BN–2B and BN–2T aircraft fitted with nose landing gear assembly Part No. 3501H2. Compliance required as detailed in Service Bulletin. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 005–03–99 | BN–2/SB.240 | *Fuselage* – Installation of rudder lower hinge doubler. | Applicable to BN2, BN2A, BN2B and BN2T aircraft. Compliance required as detailed in Service Bulletin. |
| 006–03–99 | BN–2/SB.243 | *Flight Controls* – Control column sliding tube – Examine. | Applicable to BN2, BN2A, BN2B and BN2T aircraft. Compliance required as detailed in Service Bulletin. |
| 004–03–2000 | BN–2/SB.272 | *Engine Controls* – Throttle friction adjuster – Inspection. | Cancelled and superseded by AD 003–07–2000. |
| 005–03–2000 | BN–2/SB.259 | *Stabilisers* – Elevator outboard-hinge, inboard bracket – Inspection and replacement. | Cancelled and superseded by AD 002–07–2000. |
| 002–07–2000 | BN–2/SB.259 | *Stabilisers* – Elevator outboard-hinge, inboard-bracket – Inspection and replacement. | Applicable to BN2, BN2A, BN2B, BN2T and BN2T–4S aircraft. Compliance required as detailed in Service Bulletin. |
| 003–07–2000 | BN–2/SB.272 | *Engine Controls* – Throttle friction adjuster – Inspection. | Applicable to BN2, BN2A, BN2B, BN2T and BN2T–4 aircraft. Compliance required as detailed in Service Bulletin. |
| 005–08–2000 | BN–2/SB.274 | *Wings* – Removable access panels. | Applicable to BN2A, BN2B and BN2T aircraft. Compliance required as detailed in Service Bulletin. |
| 005–09–2000 | BN-2/SB.273 | *Landing Gear* – Inspection of oleo attachment brackets (NB-40-0075) at the bottom of the main landing gear tube. | Applicable to BN2, BN2A, BN2B, BN2T, BN2T-4R and BN2T-4S aircraft. Compliance required as detailed in Service Bulletin. |
| 001–08–2001 | SB 277 | *Windows* – Emergency exit window sealant. | Applicable to BN2 Series Islander aircraft. Compliance required as detailed in Service Bulletin. |
| 005–11–2001 | SB 275 | *Nacelles/Pylons* – Inspection of engine mounting brackets. | Applicable to BN2A, BN2B, BN2T, BN2T-4R and BN2T-4S Series aircraft. Compliance required as detailed in Service Bulletin. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 002–05–2002 | SB 282 | *Power Plant* – Cracking of turbine engine mounting frame NB–20–6853. | Applicable to BN2T and BN2T–4R and S aircraft. Compliance required as detailed in Service Bulletin. |
| 004–05–2002 | SB 284 | *Flight Control* – Control column universal joint – Supplies of undersized components. | Applicable to BN2 Series Islander aircraft. Compliance required as detailed in Service Bulletin. |
| 001–02–2003 | SB 289 | *Landing Gear* – Steering cable nut and bolt connection to turnbuckle at torque shaft. | Applicable to BN2T–4S aircraft. Compliance required as detailed in Service Bulletin. |
| 002–05–2003 | SB 292 | Control rod to elevator trim tab lever bolt retainer. | Applicable to BN2, BN2A, BN2B and BN2T aircraft. Compliance required as detailed in Service Bulletin. |

# United Kingdom Civil Aviation Authority

# AIRWORTHINESS DIRECTIVE

## AD No: G-2003-0012

Issue Date: 22 October 2003

This AD is issued by the UK CAA as the Primary Aviation Authority (ICAO Annex 8 Authority of State of Design) for the affected product(s).

Approved by EASA under approval number 217 on 16 October 2003.

In accordance with Article 9(7)(b) of the Air Navigation Order 2000 as amended the following action required by this Airworthiness Directive (AD) is mandatory for applicable aircraft registered in the United Kingdom.
No person may operate an aircraft to which an AD applies except in accordance with the requirements of that AD unless otherwise agreed with the Authority of the State of Registry.

Type Approval Holders Name:

**B-N GROUP LTD**

Type/Model Designation(s):

**BN2, BN2A, BN2B, BN2T, BN2T-4R AND BN2T-4S ISLANDER SERIES**
**BN2A-MKIII TRISLANDER SERIES**

**Type Certificate Data Sheet No:** BA8 and BA6

### ATA 25 – EQUIPMENT & FURNISHINGS - PASSENGER SEATS - INSPECTION

**Manufacturer(s):** Britten-Norman Ltd

**Applicability:** Britten-Norman BN2, BN2A, BN2B, BN2T, BN2T-4R, BN2T Islander series and BN2A-Mk III Trislander series aeroplanes certificated in any category, fitted with Futair F1005 series or BN Group Ltd type NB-16-2045 passenger seats, without modification NB-M-1756.

**Reason:** An incident has been reported where during boarding and loading of passengers on to an aeroplane, the tubing on a passenger seat rear frame failed.

**Effective Date:** 6 November 2003

**Compliance/Action:** Prior to the accumulation of 100 hours time-in-service (TIS) or within the next 100 landings after the effective date of this AD, whichever occurs first; and thereafter at intervals not to exceed 100 hours TIS or 100 landings, visually inspect each passenger seat frame in accordance with B-N Group Service Bulletin SB 286, Issue 1, dated 1 July 2003. If damage is found replace the seat frame with a serviceable item prior to further flight.

Repetitive inspections required by this AD may be terminated by accomplishment of B-N Group modification NB-M-1756 Part 2.

Note: Part 1 of NB-M-1756 is for new build seats.

**Reference Publications:** B-N Group Service Bulletin SB 286 Issue 1, dated 1 July 2003 and modification NB-M-1756 may be obtained from B-N Group Ltd, Bembridge Airport, Bembridge, Isle of Wight, PO35 5PR, United Kingdom. Phone: +44 (0) 1983 872511 Fax: +44 (0) 1983 873246

**Remarks:** Enquires regarding this Airworthiness Directive should be referred to Mr T Love, Civil Aviation Authority, Aircraft Certification Section, SRG, Aviation House, Gatwick Airport South, West Sussex, RH6 0YR, United Kingdom. Phone: +44 (0) 1293 573726 Fax: +44 (0) 1293 573976 E-mail: tony.love@srg.caa.co.uk

# United Kingdom Civil Aviation Authority

# AIRWORTHINESS DIRECTIVE

## AD No: G-2003-0013

Issue Date: 5 November 2003

This AD is issued by the UK CAA as the Primary Aviation Authority (ICAO Annex 8 Authority of State of Design) for the affected product(s).

Approved by EASA under approval number 435 on 28 October 2003.

In accordance with Article 9(7)(b) of the Air Navigation Order 2000 as amended the following action required by this Airworthiness Directive (AD) is mandatory for applicable aircraft registered in the United Kingdom.
No person may operate an aircraft to which an AD applies except in accordance with the requirements of that AD unless otherwise agreed with the Authority of the State of Registry.

| Type Approval Holders Name: | Type/Model Designation(s): |
|---|---|
| **B-N GROUP LTD** | **BN2, BN2A, BN2B, BN2T, BN2T-4R AND BN2T-4S ISLANDER SERIES**<br>**BN2A MK III TRISLANDER SERIES** |

Type Certificate Data Sheet No: **BA6 and BA8**

### ATA 32 - LANDING GEAR- RETIREMENT LIVES

**Manufacturer(s):** Britten-Norman Ltd

**Applicability:** Britten-Norman BN2, BN2A, BN2B, BN2T, BN2T-4R Islander series and BN2A Mk III Trislander series aeroplanes certificated in any category, fitted with FHL (formerly Fairey Hydraulics Ltd) landing gear**.**

**Reason:** FHL landing gears and components installed in subject aeroplanes have finite fatigue lives that had not previously been published. This could result in components remaining in service beyond their finite fatigue lives.

**Effective Date:** 6 November 2003

**Compliance/Action:**

**a)** Within one month after the effective date of this AD, determine the number of landings accumulated on all FHL main and nose landing gears using the criteria stated in B-N Group Service Bulletin SB 298, Issue 1, dated 1 July 2003. Any landing gear assemblies or components that have exceeded the fatigue lives stated in Paragraph 6 of B-N Group Service Bulletin SB 298, Issue 1, dated 1 July 2003, must be removed from service immediately.

**b)** From the effective date of this AD, Owners/Operators must maintain records of the number of landings experienced by all FHL landing gears that remain in service.

Note: This is required to assure the fatigue lives of these landing gears are not exceeded.

**Reference Publications:** B-N Group Service Bulletin SB 298, Issue 1, dated 1 July 2003, may be obtained from B-N Group Ltd, Bembridge Airport, Bembridge, Isle of Wight, PO35 5PR, United Kingdom. Phone: +44 (0) 1983 872511 Fax: +44 (0) 1983 873246

**Remarks:** Enquires regarding this Directive should be referred to Mr. T Love, Civil Aviation Authority, Aircraft Certification Section, Safety Regulation Group, Aviation House, Gatwick Airport South, West Sussex, RH6 0YR, United Kingdom. Phone: +44 (0) 1293 573726 Fax: +44 (0) 1293 573976 E-mail: tony.love@srg.caa.co.uk

# United Kingdom Civil Aviation Authority

# AIRWORTHINESS DIRECTIVE

## AD No: G-2004-0011

Issue Date: 25 May 2004

This AD is issued by the UK CAA acting for and on behalf of the European Aviation Safety Agency as the Primary Aviation Authority (ICAO Annex 8 Authority of State of Design) for the affected product(s).

Approved by the European Aviation Safety Agency under approval number 2004-5556 on 24 May 2004.

In accordance with Article 9(7)(b) of the Air Navigation Order 2000 as amended the following action required by this Airworthiness Directive (AD) is mandatory for applicable aircraft registered in the United Kingdom.
No person may operate an aircraft to which an AD applies except in accordance with the requirements of that AD unless otherwise agreed with the Authority of the State of Registry.

| Type Approval Holders Name: | Type/Model Designation(s): |
|---|---|
| **B-N GROUP LTD** | **BN2, BN2A, BN2B, BN2T, BN2T-4R AND BN2T-4S ISLANDER SERIES** |

**Type Certificate Data Sheet No:** BA8

**Superseded/ Revised ADs:** None

### ATA 27- FLIGHT CONTROLS – ELEVATOR FINAL DRIVE ROD – INSPECTION

**Manufacturer(s):** B-N Group Ltd, Britten-Norman Ltd, Fairey Britten-Norman Ltd, Britten-Norman (Bembridge) Ltd, Pilatus Britten-Norman Ltd and PADC.

**Applicability:** Models BN2, BN2A, BN2B, BN2T, BN2T-4R and BN2T-4S all series Islander aeroplanes, certificated in any category.

**Reason:** The aircraft manufacturer has identified several cases of corroded elevator final drive control rods. If not corrected corrosion of the interior surface could result in failure or collapse of the rod, resulting in loss of control or jamming of the elevator system.

**Effective Date:** 25 May 2004

**Compliance/Action:** Within the next 50 hours time-in-service or one month after the effective date of this AD, whichever occurs first, unless already accomplished, inspect the internal surface of the elevator system final drive control rod, in accordance with B-N Group Service Bulletin SB 303 issue 1 or later EASA approved revision.

If corrosion is found, the elevator drive control rod must be replaced before further flight.

**Reference Publications:** B-N Group Service Bulletin SB 303, Issue 1, dated 14 May 2004, may be obtained from B-N Group Ltd, Bembridge Airport, Bembridge, Isle of Wight, PO35 5PR, United Kingdom. Phone: +44 (0) 1983 872511 Fax: +44 (0) 1983 873246

**Remarks:** Enquires regarding this Airworthiness Directive should be referred to Mr. T Love, Civil Aviation Authority, Aircraft Certification Section, Safety Regulation Group, Aviation House, Gatwick Airport South, West Sussex, RH6 0YR, United Kingdom. Phone: +44 (0) 1293 573726 Fax: +44 (0) 1293 573976 E-mail: tony.love@srg.caa.co.uk

**Note:** This Airworthiness Directive was issued as an Emergency AD on 25 May 2004.

# United Kingdom Civil Aviation Authority

# AIRWORTHINESS DIRECTIVE

## AD No: G-2004-0014

Issue Date: 21 June 2004

This AD is issued by the UK CAA acting for and on behalf of the European Aviation Safety Agency as the Primary Aviation Authority (ICAO Annex 8 Authority of State of Design) for the affected product(s).

Approved by the European Aviation Safety Agency under approval number on 2004-6426 on 17 June 2004.

In accordance with Article 9(7)(b) of the Air Navigation Order 2000 as amended the following action required by this Airworthiness Directive (AD) is mandatory for applicable aircraft registered in the United Kingdom.
No person may operate an aircraft to which an AD applies except in accordance with the requirements of that AD unless otherwise agreed with the Authority of the State of Registry.

| Type Approval Holders Name: | Type/Model Designation(s): |
|---|---|
| **B-N GROUP LTD** | **BN2, BN2A, BN2B, BN2T, BN2T-4R AND BN2T-4S ISLANDER SERIES** |

**Type Certificate Data Sheet No:** BA8

**Superseded/ Revised ADs:** None

### ATA 55 – STABILISERS - HORIZONTAL STABILISER - INSPECTION

**Manufacturer(s):** B-N Group Ltd and predecessor companies including Britten-Norman Ltd, Fairey Britten-Norman Ltd, Britten-Norman (Bembridge) Ltd, Pilatus Britten-Norman Ltd and PADC.

**Applicability:** Models BN2, BN2A, BN2B, BN2T, BN2T-4R and BN2T-4S series Islander aeroplanes, certificated in any category.

**Reason:** There have been several reports of loose horizontal stabiliser attachment bolts. Failure to detect loose bolts could lead to loss of the horizontal stabiliser and subsequent loss of control. This Airworthiness Directive (AD) mandates inspections to detect and rectify loose horizontal attachment bolts.

**Effective Date:** 8 July 2004

**Compliance/Action:** Required within the next 50 hours time-in-service or two months from the effective date of this AD, whichever occurs first, and thereafter, at intervals not to exceed 1000 hours time-in-service, inspect the horizontal stabiliser attachment bolts and anchor nuts in accordance with B-N Group Ltd Service Bulletin 302 Issue 1 or later EASA approved revision.

**Reference Publications:** B-N Group Service Bulletin 302 Issue 1, dated 1 March 2004, may be obtained from B-N Group Ltd, Bembridge Airport, Bembridge, Isle of Wight, PO35 5PR, United Kingdom. Phone +44 (0) 1983 872511 Fax: +44 (0) 1983 873246.

**Remarks:** Enquiries regarding this Airworthiness Directive should be referred to Mr T Love, Civil Aviation Authority, Aircraft Certification Section, Safety Regulation Group, Aviation House, Gatwick Airport South, West Sussex, RH6 0YR, United Kingdom. Phone: +44 (0) 1293 573726 Fax: +44 (0) 1293 573976 Email: tony.love@srg.caa.co.uk.

## PILATUS BRITTEN-NORMAN BN–2A MK III TRISLANDER SERIES

NOTE: In PB-N terminology, the term 'Modification' is used only for improvements incorporated during production. Post-production requirements are identified as 'Service Bulletins' and this term covers both 'Inspection' and 'Modification' activities.

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 0626 PRE 80 | BN–2/SB74 | *Flight Controls* – Rudder bar lower mounting defects. | Applicable to all Series aircraft. Compliance required as detailed in Service Bulletin. |
| 0642 PRE 80 | BN–2/NB/M/238 | *Equipment/Furnishings* – Changing of seat webbing. | Applicable to aircraft when Islander seats are installed. Compliance required as detailed in Modification Leaflet. |
| 0643 PRE 80 | BN–2/NB/M/596 | *Flight Controls* – Introduction of strengthened rudder trim jack bracket. | Applicable to all Series aircraft delivered ex-factory prior to 1 July 1973. Compliance required as detailed in Modification Leaflet. |
| 0644 PRE 80 | BN–2/SB28 | Power Plant – Fire hazard in carburettor air boxes. | Cancelled. No longer a mandatory requirement. |
| 0645 PRE 80 | BN–2/SB56 | *Flight Controls* – Rudder bar failure. | Applicable to all Series aircraft. Compliance required as detailed in Service Bulletin. |
| 0646 PRE 80 | BN–2/SB62 | *Flight Controls* – Rudder trim jack lower mounting bracket. | Applicable to all Series aircraft. Compliance required as detailed in Service Bulletin. |
| 0647 PRE 80 | BN–2/SB63 | *Flight Controls* – Flap hinge attachments. | Applicable to all Series aircraft prior to Serial No. 359 which do not incorporate Mod. No. NB/M/615. Compliance required as detailed in Service Bulletin. |
| 0648 PRE 80 | BN–2/SB67 | *Flight Controls* – Improved aileron mass balance attachment. Ailerons Part No. NB-24–379/380. | Applicable to all Series aircraft. Compliance required as detailed in Service Bulletin. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 0649 PRE 80 | BN–2/SB69 | *Equipment/Furnishings* – Inspection and strengthening of flight compartment seat backs. (Alar Part No. NB-99-H-007 and Jet Seats Part No. JS 114). | Applicable to all Series aircraft. Compliance required as detailed in Service Bulletin. |
| 0650 PRE 80 | BN–2/SB71 | *Equipment/Furnishings* – Defective seat locking mechanism on flight compartment seats. (Alar Part No. NB-99-H-007 and Jet Seats Part No. JS 114) | Applicable to all Series aircraft. Compliance required as detailed in Service Bulletin. |
| 0651 PRE 80 | BN–2/SB72 | *Power Plant* – Engine mounting frame weld inspection. | Applicable to all Series aircraft. Compliance required as detailed in Service Bulletin. |
| 0652 PRE 80 | BN–2/SB73 | *Flight Controls* – Corrosion in elevator torque tube. | Applicable to all Series aircraft prior to Serial No. 360. Compliance required as detailed in Service Bulletin. |
| 0653 PRE 80 | BN–2/SB75 | *Flight Controls* – Renewal of elevator trim cables. | Applicable to all Series aircraft which do not embody Mod. No. NB/M/679. Compliance required as detailed in Service Bulletin. |
| 0654 PRE 80 | BN–2/SB77 | *Wings* – Incorrect riveting of wing bottom surface laminations at Stn. 112. | Applicable to all Series aircraft delivered prior to 25 July 1974. Compliance required as detailed in Service Bulletin. |
| 0655 PRE 80 | BN–2/SB85 | *Electrical Power* – Duplication of electrical power supply to audio system. | Applicable to all Series aircraft as detailed in Service Bulletin. |
| 0656 PRE 80 | BN–2/SB86 | *Fuselage* – Omission of drain holes from under-surface of rear fuselage. | Applicable to all Series aircraft. Compliance required as detailed in Service Bulletin. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 0657 PRE 80 | BN–2/SB88 | *Fire Protection* – Rear engine fire detection system. | Applicable to all Series aircraft not incorporating Mod. No. NB/M/508. Compliance required as detailed in Service Bulletin. |
| 0658 PRE 80 | BN–2/SB89 | *Landing Gear* – Torque tightening of bolts and defects in undercarriage lower bracket. | Applicable to all Series aircraft. Compliance required as detailed in Service Bulletin. |
| 0659 PRE 80 | BN–2/SB91 | *Nacelles/Pylons* – Corrosion of engine mounting brackets. | Applicable to all Series aircraft. Compliance required as detailed in Service Bulletin. |
| 0660 PRE 80 | BN–2/SB93 | *Propellers* – Propeller Blade Shank failure – rear engine. | Applicable to all Series aircraft. Compliance required as detailed in Service Bulletin. |
| 0661 PRE 80 | BN–2/SB98 | *Flight Controls* – Corrosion inside aileron mass balance tube. | Applicable to all Series aircraft. Compliance required as detailed in Service Bulletin. |
| 0662 PRE 80 | BN–2/SB101 | *Flight Controls* – Inspection and protection against electrolytic corrosive action – control rods. | Applicable to all Series aircraft not incorporating Mod. No. NB/M/929. Compliance required as detailed in Service Bulletin. |
| 0663 PRE 80 | BN–2/SB102 | *Flight Controls* – Cracking of rudder stop structure. | Applicable to all Series aircraft. Compliance required as detailed in Service Bulletin. |
| 0664 PRE 80 | BN–2/SB103 | *Engine Indicating* – Engine Tachometer Calibration. | Applicable to all Series aircraft. Compliance required as detailed in Service Bulletin. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 0665 PRE 80 | BN–2/SB104 | *Propellers* – Application of Hartzell Propeller Inc. Service Bulletin 118A. | Applicable to all Series aircraft. Compliance required as detailed in Service Bulletin. |
| 0666 PRE 80 | BN–2/SB109 | *Engine/Propeller Controls* – Reinforcement of Teleflex conduit swivel bracket attachment on propeller and engine controls. | Applicable to all Series aircraft not incorporating Mod. Nos. NB/M/939 and NB/M/996. Compliance required as detailed in Service Bulletin. |
| 0667 PRE 80 | BN–2/SB111 | *Flight Controls* – Examination of rudder bar pillar and slider tube assembly. | Applicable to all Series aircraft. Compliance required as detailed in Service Bulletin. |
| 0668 PRE 80 | BN–2/SB114 | *Equipment/Furnishings* – Introduction of single buckle safety harness with inertia reel tensioning. | Applicable to all Series aircraft not incorporating Mod. Nos. NB/M/912 or NB/M/1027. Compliance required as detailed in Service Bulletin. |
| 0669 PRE 80 | BN–2/SB116 | *Flight Controls* – Corrosion of rudder mass balance arm support brackets. | Applicable to all Series aircraft. Compliance required as detailed in Service Bulletin. |
| 0670 PRE 80 | BN–2/SB118 | *Landing Gear* – Attachment of undercarriage shock absorber mounting flange to main undercarriage leg tube. | Applicable to all Series aircraft not incorporating Mod. No. NB/M/1007. Compliance required as detailed in Service Bulletin. |
| 0671 PRE 80 | BN–2/SB120 | *Stabilizers* – Inspection of tailplane attachment bracket and surrounding structure at rear of pod. | Applicable to all Series aircraft. Compliance required as detailed in Service Bulletin. |
| 0672 PRE 80 | BN–2/SB128 | *Flight Controls* – Replacement of 20 SWG (0.036" thick) rudder bar pillar/slides tube assemblies at first pilot's position. | Applicable to all Series aircraft with pre-Mod. No. NB/M/948 rudder bars. Compliance required as detailed in Service Bulletin. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 0673 PRE 80 | BN–2/SB132 | *Flight Controls* – Inspection of rudder drive lever and final drive rod end in base of fin. | Applicable to all Series aircraft. Compliance required as detailed in Service Bulletin. |
| 0674 PRE 80 | BN–2/SB139 | *Landing Gear* – Retention of internal support ring for main undercarriage shock absorber within undercarriage leg extension tube. | Applicable to all Series aircraft. Compliance required as detailed in Service Bulletin. |
| 0675 PRE 80 | CAA Airworthiness Notice No. 82 | *Electrical Generation System* – Warning of loss of generated electrical power. | Applicable to all Series aircraft. Compliance required as detailed in Airworthiness Notice. |
| 021–06–80 | BN–2/SB61 | *Nacelles/Pylons* – Defects in upper mounting brackets for wing mounted engines. | Applicable to all Series aircraft. Compliance required as detailed in Service Bulletin. |
| 011–07–80 | BN–2/SB58 | *Instruments* – Calibration control of Salmoiraghi airspeed indicators. | Cancelled by Service Bulletin BN–2/SB155. Cancellation of obsolete service bulletins. |
| 012–07–80 | BN–2/SB133 | *Landing Gear* – Corrosion defects in main undercarriage shock absorbers of Automotive Products Ltd manufacture. | Applicable to all Series aircraft. Compliance required as detailed in A of Automotive Products Limited Service Bulletin No. 32–268. |
| 013–07–80 | BN–2/SB137 | *Equipment/Furnishings* – Defective inflation mechanism on R.F.D.Lifejackets. | Applicable to all Series aircraft. Compliance required as detailed in The Walter Kidde Co. Ltd. Service Bulletin 25–109–8082. |
| 006–09–80 | BN–2/SB144 | *Air* – Cracking of hot/cold air shutter in carburettor air box. | Applicable to all Series aircraft with carburettor engines. Compliance required as detailed in Service Bulletin. |
| 010–08–81 | BN–2/150 | Mandatory Life Limitations. | The limitations listed in the Service Bulletin are mandatory for aircraft on the United Kingdom Register. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 011–08–81 | BN–2/151 | *Nacelles/Pylons* – Inspection of wing engine nacelle structure around main undercarriage lower attachment bracket. | Applicable to all Series aircraft. Compliance required as detailed in Service Bulletin. |
| 006–11–81 | BN–2/146 | *Wings* – Inspection for improperly installed wing/fuselage attachment pins. | Applicable to all Series aircraft Serial Nos. as detailed in Service Bulletin. Compliance required as detailed in SB. |
| 020–02–82 | BN–2/SB154 | *Fuel* – Damage to wing tip tank fuel contents transmitter floats. | Applicable to all Series aircraft. Compliance required as detailed in SB. |
| 005–03–86 | BN–2/SB173 | *Landing Gear* – Inspection of main undercarriage upper torque link attachment lugs on Fairey Hydraulics Ltd., Part No. 3507H1 units. | Applicable to all Series aircraft fitted with Fairey Hydraulics main undercarriage units. Compliance required as detailed in Service Bulletin. Fairey Hydraulics Service Bulletin 32–7 also refers and is referenced under this AD No. in the Instruments and Equipment Section. |
| 009–08–86 | CAA Letter ref 9/97/CtAw/168/169 dated 20 August 1986 | *Propellers* – Inspection of propeller hubs for cracking. | Superseded by CAA AD 001–07–94 which has now been superseded by FAA AD 2001–23–08. |
| 014–06–88 | BN–2/SB.179 | *Flight Controls* –Internal corrosion of elevator trim tab operating rod. | Applicable to all Series aircraft. Compliance required as detailed in Service Bulletin. |
| 020–02–90 | BN–2/SB.190 | Corrosion affecting primary structure – Continued airworthiness of ageing aircraft in general aviation use. | Applicable to all Series aircraft. Compliance required as detailed in Service Bulletin. |
| 021–02–90 | BN–2/SB.187 | Potential failure of undervoltage sensor Part No. NB–81–3697 (Issue 1 to 5 inclusive). | Applicable to all Series aircraft. Compliance required as detailed in Service Bulletin. |
| 016–06–91 | BN–2/SB.199 | *Stabilizer* – Cracking of tailplane front attachment brackets. | Applicable to all Series aircraft. Compliance required as detailed in Service Bulletin. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 017–06–91 | BN–2/SB.200 | *Wings* – Cracking of undercarriage top block support structure. | Applicable to all Series aircraft. Compliance required as detailed in Service Bulletin. |
| 020–06–91 | BN–2/SB.202 | *Electrical Power* – Possible accidental short-circuit at rear of pilots switch panel – Preventive measures. | Applicable to all Series aircraft. Compliance required as detailed in Service Bulletin. |
| 010–10–91 | BN–2/SB.203 | *Engine Fuel and Control* – Replacement of composite floats with metal floats in Marvel Schebler carburettors. | Applicable to BN–2A Mk III Series Trislander aircraft. Compliance required as detailed in Service Bulletin. |
| 006–11–92 | BN–2/SB.209 | *Landing Gear* – Crack detection of upper and lower torque/link assemblies fitted to Fairey Hydraulics main undercarriage units. | Applicable to BN–2A Mk III Series Trislander aircraft. Compliance required as detailed in Service Bulletin. |
| 005–09–93 | BN–2/SB.214 | *Landing Gear* – Nose wheel steering drive ring failure. | Applicable to BN–2A Mk III Series Trislander aircraft. Compliance required as detailed in Service Bulletin. |
| 009–05–95 | BN–2/SB.218 | *Engine Fuel and Control* – Control cable swivel unit mounting bracket failure. | Applicable to BN–2A Mk III Series Trislander aircraft. Compliance required as detailed in Service Bulletin. |
| 007–10–96 | BN-2/SB.229 | *Electrical Power* – Modification NB/M/256 50A generator system – Generator inspection. | Applicable to BN-2A Mk III Series Trislander aircraft. Compliance required as detailed in Service Bulletin. |
| 009–10–97 | BN-2/SB.237 | *Wings* – Wing spar caps – Inspection. | Applicable to BN-2A Mk III Series Trislander aircraft. Compliance required as detailed in Service Bulletin. |
| 004–12–98 | BN–2/SB.249 | *Landing Gear* – Nose landing gear assembly chrome plating – Examine. | Applicable to BN–2A Mk III Series Trislander aircraft fitted with nose landing gear assembly Part No. 3811H2. Compliance required as detailed in Service Bulletin. |
| 006–03–99 | BN–2/SB.243 | *Flight Controls* – Control column sliding tube – Examine. | Applicable to BN–2A Mk III Trislander aircraft. Compliance required as detailed in Service Bulletin. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 004–03–2000 | BN–2/SB.272 | *Engine Controls* – Throttle friction adjuster – Inspection. | Cancelled and superseded by AD 003–07–2000. |
| 003–07–2000 | BN–2/SB.272 | *Engine Controls* – Throttle friction adjuster – Inspection. | Applicable to BN–2A Mk III Trislander aircraft. Compliance required as detailed in Service Bulletin. |
| 005–09–2000 | BN–2/SB.273 | *Landing Gear* – Inspection of oleo attachment brackets (NB-40-0075) at the bottom of the main landing gear tube. | Applicable to BN–2A Mk III Trislander aircraft. Compliance required as detailed in Service Bulletin. |
| 001–08–2001 | SB 277 | *Windows* – Emergency exit window sealant. | Applicable to BN–2A Mk III Trislander aircraft. Compliance required as detailed in Service Bulletin. |
| 005–11–2001 | SB 275 | *Nacelles/Pylons* – Inspection of engine mounting brackets. | Applicable to BN–2A Mk III Trislander aircraft. Compliance required as detailed in Service Bulletin. |
| 001–05–2002 | SB 281 | *Power Plant* – Cracking of Trislander rear engine mounting frame NB–51–H–1021. | Applicable to BN–2A Mk III Series Trislander aircraft. Compliance required as detailed in Service Bulletin. |
| 004–05–2002 | SB 284 | *Flight Control* – Control column universal joint – Supplies of undersized components. | Applicable to BN–2A Mk III Series Trislander aircraft. Compliance required as detailed in Service Bulletin. |

# United Kingdom Civil Aviation Authority

# AIRWORTHINESS DIRECTIVE

## AD No: G-2003-0012

Issue Date: 22 October 2003

This AD is issued by the UK CAA as the Primary Aviation Authority (ICAO Annex 8 Authority of State of Design) for the affected product(s).

Approved by EASA under approval number 217 on 16 October 2003.

In accordance with Article 9(7)(b) of the Air Navigation Order 2000 as amended the following action required by this Airworthiness Directive (AD) is mandatory for applicable aircraft registered in the United Kingdom.
No person may operate an aircraft to which an AD applies except in accordance with the requirements of that AD unless otherwise agreed with the Authority of the State of Registry.

Type Approval Holders Name:

**B-N GROUP LTD**

Type/Model Designation(s):

**BN2, BN2A, BN2B, BN2T, BN2T-4R AND BN2T-4S ISLANDER SERIES**
**BN2A-MKIII TRISLANDER SERIES**

**Type Certificate Data Sheet No:** BA8 and BA6

### ATA 25 – EQUIPMENT & FURNISHINGS - PASSENGER SEATS - INSPECTION

**Manufacturer(s):** Britten-Norman Ltd

**Applicability:** Britten-Norman BN2, BN2A, BN2B, BN2T, BN2T-4R, BN2T Islander series and BN2A-Mk III Trislander series aeroplanes certificated in any category, fitted with Futair F1005 series or BN Group Ltd type NB-16-2045 passenger seats, without modification NB-M-1756.

**Reason:** An incident has been reported where during boarding and loading of passengers on to an aeroplane, the tubing on a passenger seat rear frame failed.

**Effective Date:** 6 November 2003

**Compliance/Action:** Prior to the accumulation of 100 hours time-in-service (TIS) or within the next 100 landings after the effective date of this AD, whichever occurs first; and thereafter at intervals not to exceed 100 hours TIS or 100 landings, visually inspect each passenger seat frame in accordance with B-N Group Service Bulletin SB 286, Issue 1, dated 1 July 2003. If damage is found replace the seat frame with a serviceable item prior to further flight.

Repetitive inspections required by this AD may be terminated by accomplishment of B-N Group modification NB-M-1756 Part 2.

Note: Part 1 of NB-M-1756 is for new build seats.

**Reference Publications:** B-N Group Service Bulletin SB 286 Issue 1, dated 1 July 2003 and modification NB-M-1756 may be obtained from B-N Group Ltd, Bembridge Airport, Bembridge, Isle of Wight, PO35 5PR, United Kingdom. Phone: +44 (0) 1983 872511 Fax: +44 (0) 1983 873246

**Remarks:** Enquires regarding this Airworthiness Directive should be referred to Mr T Love, Civil Aviation Authority, Aircraft Certification Section, SRG, Aviation House, Gatwick Airport South, West Sussex, RH6 0YR, United Kingdom. Phone: +44 (0) 1293 573726 Fax: +44 (0) 1293 573976 E-mail: tony.love@srg.caa.co.uk

# United Kingdom Civil Aviation Authority

# AIRWORTHINESS DIRECTIVE

## AD No: G-2003-0013

Issue Date: 5 November 2003

This AD is issued by the UK CAA as the Primary Aviation Authority (ICAO Annex 8 Authority of State of Design) for the affected product(s).

Approved by EASA under approval number 435 on 28 October 2003.

In accordance with Article 9(7)(b) of the Air Navigation Order 2000 as amended the following action required by this Airworthiness Directive (AD) is mandatory for applicable aircraft registered in the United Kingdom.
No person may operate an aircraft to which an AD applies except in accordance with the requirements of that AD unless otherwise agreed with the Authority of the State of Registry.

| Type Approval Holders Name: | Type/Model Designation(s): |
|---|---|
| **B-N GROUP LTD** | **BN2, BN2A, BN2B, BN2T, BN2T-4R AND BN2T-4S ISLANDER SERIES**<br>**BN2A MK III TRISLANDER SERIES** |

Type Certificate Data Sheet No: **BA6 and BA8**

### ATA 32 - LANDING GEAR- RETIREMENT LIVES

**Manufacturer(s):** Britten-Norman Ltd

**Applicability:** Britten-Norman BN2, BN2A, BN2B, BN2T, BN2T-4R Islander series and BN2A Mk III Trislander series aeroplanes certificated in any category, fitted with FHL (formerly Fairey Hydraulics Ltd) landing gear**.**

**Reason:** FHL landing gears and components installed in subject aeroplanes have finite fatigue lives that had not previously been published. This could result in components remaining in service beyond their finite fatigue lives.

**Effective Date:** 6 November 2003

**Compliance/Action:**

**a)** Within one month after the effective date of this AD, determine the number of landings accumulated on all FHL main and nose landing gears using the criteria stated in B-N Group Service Bulletin SB 298, Issue 1, dated 1 July 2003. Any landing gear assemblies or components that have exceeded the fatigue lives stated in Paragraph 6 of B-N Group Service Bulletin SB 298, Issue 1, dated 1 July 2003, must be removed from service immediately.

**b)** From the effective date of this AD, Owners/Operators must maintain records of the number of landings experienced by all FHL landing gears that remain in service.

Note: This is required to assure the fatigue lives of these landing gears are not exceeded.

**Reference Publications:** B-N Group Service Bulletin SB 298, Issue 1, dated 1 July 2003, may be obtained from B-N Group Ltd, Bembridge Airport, Bembridge, Isle of Wight, PO35 5PR, United Kingdom. Phone: +44 (0) 1983 872511 Fax: +44 (0) 1983 873246

**Remarks:** Enquires regarding this Directive should be referred to Mr. T Love, Civil Aviation Authority, Aircraft Certification Section, Safety Regulation Group, Aviation House, Gatwick Airport South, West Sussex, RH6 0YR, United Kingdom. Phone: +44 (0) 1293 573726 Fax: +44 (0) 1293 573976 E-mail: tony.love@srg.caa.co.uk

## ROLLASON DRUINE CONDOR

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 2460 PRE 80 | RAE/TNS/D62/3 | Securing of loose seat cushions. | Applicable to all aircraft. Compliance required as detailed in TNS. |
| 2461 PRE 80 | RAE/TNS/D62/12 | Inspection for heavy landing damage. | Applicable to all aircraft. Compliance required every 50 flying hours. RAE/TNS/D62/10 also refers. |

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## SCOTTISH AVIATION BULLDOG SERIES 100 AND 120 AIRCRAFT

CAA Type Certificate No. BA7. Type Design Organisation – BAE SYSTEMS, Prestwick

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 2365 PRE 80 | BDG/100/27 | *Equipment/Furnishings* – Modification No. BH 72 to pilot's and co-pilot's seat back locating plungers. | Applicable to Series 100 Models 101 and 104. Should have been accomplished by 30 April 1974. |
| 2366 PRE 80 | BDG/100/96 | *Engine Fuel and Control* – Bendix Fuel Injector System with Bellows type body seal. | Applicable to all Series 100 and 200 aircraft. Compliance required as detailed in Avco Lycoming Service Bulletin No 428. |
| 004–07–81 | SB 100/103 | *Wings* – Inspection of undercarriage attachment lugs – Port and Starboard – Main spar centre section. | Applicable to all Series 100 and 120 aircraft. Compliance required as detailed in Service Bulletin. |
| 006–07–84 | BDG/100/127 | *Fuselage* – Cracking of angle diaphragm and flange at tailplane spar attachment. | Applicable to all Series 100 and 120 aircraft. Compliance required as detailed in Service Bulletin. |
| 006–01–85 | BDG/100/143 | *Flight Controls* – Pilot's rudder torque tubes – Failure at lever hub weld. | Applicable to all Series 100 and 120 aircraft. Compliance required as detailed in SB. |
| 009–04–87 | BDG/100/153 | *Flight Controls* – Control rod end fittings – Security of attachment. | Applicable to all Series 100 and 120 aircraft. Compliance required as detailed in SB. |
| 028–04–90 | BDG/100/156 | *Flight Controls* – Inspection of handgrip fitting on control column. | Applicable to all Series 100 and 120 aircraft. Compliance required as detailed in SB. |
| 002–11–91 | BDG/100/162 | *Flight Controls* – Corrosion of elevator torque tubes. | Applicable to Series 100 and 120 aircraft. Compliance required as detailed in SB. |
| 006–12–94 | BDG/100/165 | *Mainplanes* – Notification of life limitation for main-spar joint. | Cancelled and superseded by AD 003–12–96. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 004–10–95 | BDG/100/167 | *Landing Gear* – Brake system – Foot brake controls – To inspect the brake torque-tube assemblies. | Applicable to all Series 100 and 120 aircraft. Compliance required as detailed in SB. |
| 001–08–96 | BDG/100/28 | Canopy jettison cable assembly (Pre Mod BH 76). | Applicable to all Series 100 and 120 aircraft. Compliance required as detailed in SB. |
| 002–08–96 | BDG/100/92 | *Fuselage/Mainplane* – Cracking at or near bolt holes of mainplane to fuselage lower joint plate assemblies. | Applicable to all Bulldog aircraft without modification no BH193 embodied. Compliance required as detailed in SB. Aircraft on which Bulldog modification no BH193 (SB BDG–100–166, CAA AD 004–07–2001 refer) has been embodied no longer have to comply with the mandatory inspections called for by SB BDG–100–92. |
| 003–08–96 | BDG/100/123 | Engine mounting cracking. | Applicable to all Series 100 and 120 aircraft. Compliance required as detailed in SB. |
| 003–12–96 | BDG/100/170 | Notification of life limitation of aircraft. | Applicable to all Series 100 and 120 aircraft. Compliance required as detailed in SB. |
| 002–06–2001 | BDG/121/1 | Conversion of Bulldog T Mk I aircraft to civil aircraft Model 121. | Applicable to Bulldog T Mk I aircraft constructors numbers 199 to 223, 230 to 238, 240 to 249, 253 to 277, 285 to 297, 303 to 337 and 341 to 363. Compliance required as detailed in SB. |
| 004–07–2001 | BDG/100/166 | *Wings* – Introduction of strengthening to the centre section of the main spar. | Applicable to all Bulldog aircraft with the exception of constructors number BH/120/201. Compliance required as detailed in SB. |

## SCOTTISH AVIATION TWIN PIONEER

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 2427 PRE 80 | C162 | Re-design of wing bracing strut internal 'Vee' brace in outer wing. | This modification has been embodied in all aircraft during construction. |
| 2428 PRE 80 | C285 | *Hydraulic Power* – Introduction of strengthened gland Part No. 717924 in lieu of gland Part No. 717918 in piston-operated shuttle valve Part No. 7179. | Applicable to all Series aircraft. Compliance required before completion of 750 landings. |
| 2429 PRE 80 | C311 | *Wings* – Introduction of lift strut incorporating multi-bolt attachments for stabilising strut. | Applicable to all Series aircraft. Should have been embodied by 30 September 1959. |
| 2430 PRE 80 | C319 | *Wings* – Introduction of stabilising strut Part No. SA.B3.20.334 in lieu of Part No. SA.B3.20.243. | Applicable to all Series aircraft. Should have been embodied by 30 September 1959. |
| 2431 PRE 80 | C324 | Introduction of tube insert type throttle and CSU wrapped boxes in console and replacement of Teleflex transmission cable DS380 with brittle tested transmission cable DS380. (Teleflex Mod. 14298 refers.) | Applicable to aircraft Serial No. 507, 508, 513, 517 and 519. Compliance required as detailed in modification leaflet. |
| 2432 PRE 80 | C334 | Introduction of Cadmium plating on lift strut steel fittings and incorporation of Ferrobestos bushes at bolted joints. | Applicable to all Series aircraft. Should have been embodied by 31 August 1959. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 2433 PRE 80 | C344 | Replacement of 380 Wrapped Box Assembly and Teleflex transmission cable for the throttle and CSU control, on control console assembly Part No. E41560. (Teleflex Mod. 14341 refers.) | Applicable to aircraft Serial Nos. 501, 502, 504 and 505. Compliance required as detailed in modification leaflet. |
| 2434 PRE 80 | C347 | Introduction of Cadmium plating on special bolts on undercarriage 'Vee' brace and trunnion at top of Oleo leg. | Applicable to all Series aircraft. Should have been embodied by 31 August 1959. |
| 2435 PRE 80 | C403 | Introduction of slat jack, Electro-Hydraulics Part No. 4477 in lieu of Part No. 4694. (Electro-Hydraulics Mod. No. EH/95/Mod 7 refers.) | Applicable to aircraft Serial No. 507 and subsequent. Compliance required as detailed in modification leaflet. |
| 2436 PRE 80 | C441 | Replacement of throttle and CSU control box and wheel assembly and the replacement of Teleflex transmission cable with Teleflex brittle-tested transmission cable. (Teleflex Mod. 14338 refers.) | Applicable to aircraft Serial Nos. as detailed in modification leaflet. Compliance required as detailed in modification leaflet. |
| 2437 PRE 80 | C580 | Introduction of strengthened flap jack Part No. 4464 in lieu of Part No. 4476. (Electro-Hydraulics Mod. No. EH/95/Mod 9 refers.) | Applicable to aircraft Serial No. 507 and subsequent. Compliance required as detailed in modification leaflet. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 2438 PRE 80 | C598 | Introduction of Shackles (between undercarriage and fuselage) Part Nos. SA.B7.40.40 and SA.B7.40.42 in lieu of Part Nos. SA.B3.40.26 and SA.B3.40.27. | Applicable to all Series aircraft. Compliance required not later than 1200 flight hours. |
| 2439 PRE 80 | C680 | Introduction of Ice Guard on CSU Swivel Assembly. | Applicable to Series 1 and 3 aircraft. Should have been embodied by 31 December 1959. |
| 2440 PRE 80 | C719 | Introduction of Washer Part No. SP 18G to elevator connection on port control column. | Applicable to all Series aircraft. Should have been embodied by 31 July 1959. |
| 2441 PRE 80 | C729 | Introduction of Brake Unit AH51417 in lieu of AH50743. | Applicable to Series 1, 2 and 3 aircraft. Should have been embodied by 30 January 1960. |
| 2442 PRE 80 | C735 | Introduction of 2" wide protection strips on lift strut replacing .85" wide strips. | Applicable to all Series aircraft. Should have been embodied 31 March 1959. |
| 2443 PRE 80 | C759 | Introduction of Bearing Plate on Fireproof Bulkhead at Engine Mount Fittings. | Applicable to Series 1 and 3 aircraft. Compliance required at next engine change or check 4 inspection or on embodiment of repair scheme SA.B3.03.863. |
| 2444 PRE 80 | C808 | Replacement of all axle bracket and sliding tube assemblies of undercarriage Part No. 1705, Serial Nos. 1–36 inclusive. | Applicable to undercarriage units as detailed. Should have been embodied by 31 March 1960. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 2445 PRE 80 | C860 | Introduction of an inspection hole in the control column. | Applicable to Series 1, 2 and 3 aircraft. Should have been embodied by 1 December 1960. |
| 2446 PRE 80 | C928 | Introduction of main wheel AH 51805 in lieu of AH 50742. (Dunlop Mod. 3776.) | Applicable to Series 1, 2 and 3 aircraft. Should have been embodied by 1 August 1961. |
| 2447 PRE 80 | C960 | Introduction of Mills Equipment Modification ME/2 on Passenger Seat Belts Type ME/1789. | Applicable to Series 1, 2 and 3 aircraft. Should have been embodied by 1 March 1962. |
| 2448 PRE 80 | C965 | Introduction of PTFE covered strips and washers on wing lift strut in way of stabilizer strut fitting. | Applicable to Series 1, 2 and 3 aircraft. Should have been embodied by 1 June 1962. |
| 2449 PRE 80 | C979 | Cockpit Windows – Introduction of filler strips manufactured in PVC in lieu of neoprene. | Applicable to Series 1, 2 and 3 aircraft. Should have been embodied by 1 June 1964. |
| 2450 PRE 80 | C988 | Installation of fair leads in way of aileron cables under cockpit floor. | Applicable to Series 1, 2 and 3 aircraft. Should have been embodied by 15 June 1964. |
| 2451 PRE 80 | C989 | Automatic Pilot – Introduction of Emergency Cut-out Control. | Applicable to Series 1 and 3 aircraft. Should have been embodied by 1 August 1965. |
| 2452 PRE 80 | Scottish Aviation TNS 22 | Inspection and life limitation of bolted attachments of wings, main landing gear and tailplane. | Applicable to all Series aircraft. Compliance required as detailed in TNS. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 2453 PRE 80 | Scottish Aviation TNS 26 | Inspection of heat exchange unit intensifier tube. | Applicable to Series 1 and 2 aircraft. Compliance required as detailed in TNS. |
| 2454 PRE 80 | Scottish Aviation TNS 33 | Mandatory Life Limitations. | The limitations listed in the Technical News Sheet are mandatory for aircraft on the United Kingdom Register. |
| 2455 PRE 80 | Scottish Aviation TNS 36 | Rework of lap straps to increase safety standard. | Applicable to all Series aircraft. Compliance required as detailed in TNS. |
| 2456 PRE 80 | Scottish Aviation TNS 42 | Inspection of wing attachment main lift strut. | Applicable to all Series aircraft. Compliance required as detailed in TNS. |
| 2457 PRE 80 | Scottish Aviation TNS 45 | Inspection and repair of nacelle longeron at engine mount attachment. | Applicable to all Series aircraft. Compliance required as detailed in TNS. |
| 2458 PRE 80 | Scottish Aviation TNS 50 | Improved method of adjustment for excessive clearance of flap push-pull rods to drive sprockets. | Applicable to all Series aircraft. Compliance required as detailed in TNS. |
| 2459 PRE 80 | Airworthiness Notice No. 82 | Electrical Generation System – Warning of loss of generated electrical power. | Applicable to all Series aircraft. Compliance required as detailed in Airworthiness Notice. |

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## SHORT SC5 BELFAST

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 006–05–81 | S.B. 5–1 | Time Limits/Maintenance Checks – Fatigue Life. | Applicable to all Belfast aircraft. Compliance required as detailed in Service Bulletin. |
| 007–05–81 | S.B. A32–2 | Inspection of main undercarriage leg outer cylinders. | Applicable to all Belfast aircraft. INSPECT in accordance with Service Bulletin at the frequencies stated. |
| 008–05–81 | S.B. 33–1 | Introduction of hydraulic pressure warning system for aft cargo door/ramp. | Applicable to all Belfast aircraft. MODIFY in accordance with Service Bulletin not later than 1 November 1980. |
| 009–05–81 | S.B. 52–1 | Introduction of an instruction placard for shoot bolt handles on forward flight compartment door. | Applicable to all Belfast aircraft. MODIFY in accordance with Service Bulletin not later than 1 May 1980. |
| 010–05–81 | S.B. 52–2 | Introduction of instruction labels on stub deck and crew stair position doors. | Applicable to all Belfast aircraft. MODIFY in accordance with Service Bulletin not later than 1 June 1980. |
| 011–05–81 | ASB 26–1 | APU and APU fire extinguishing system. Remove fire extinguisher bottle and inhibit operation of APU. | Applicable to all Belfast aircraft. MODIFY in accordance with Service Bulletin not later than 15 April 1981. |

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**SHORT BROTHERS SD3–30 SERIES AIRCRAFT**

CAA Type Certificate No. BA11

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 0182 PRE 80 | SD3–27–04 (5190) | *Flight Controls* – Wing aileron control circuit – Bolt change. | Requirements of Service Bulletin No. SD3–27–04 are cancelled by Transmittal Sheet No. 1 dated 10 July 1980. |
| 0183 PRE 80 | SD3–27–14 | *Flight Controls* – Replacement of lifed control rods in flap control circuit. | Requirements of Service Bulletin No. SD3–27–14 are cancelled by Revision No. 1 dated 15 January 1980. |
| 0184 PRE 80 | SD3–28–08 (5524) | *Fuel System* – Replacement of Flight Refuelling purge valve. | Requirements of Service Bulletin No. SD3–28–08 are cancelled by Transmittal Sheet No. 2 dated 10 July 1980. |
| 0185 PRE 80 | SD3–28–12 | *Fuel System* – Maintenance programme – introduction of an inspection check on the gravity feed check valves. | Applicable to SD3–30 aircraft Serial Nos. SH3000, SH3001, SH3002 to SH3027 inclusive (Pre Mod. 5130). Compliance required as detailed in Service Bulletin. |
| 0186 PRE 80 | SD3–28–13 | *Fuel System* – To introduce an improved check valve in gravity feed pipe from Cell 4. | Applicable to SD3–30 aircraft Serial Nos. SH3002 to SH3027 inclusive. Compliance required as detailed in Service Bulletin. |
| 0187 PRE 80 | SD3–29–03 (5140) | *Hydraulic Power* – Replacement of main line filter. | Requirements cancelled and superseded by Service Bulletin SD3–29–07. |
| 0188 PRE 80 | SD3–30–A04 | *Ice and Rain* – Drainage of pneumatic de-icing system. | Applicable to SD3–30 aircraft Serial Nos. SH3002, SH3004 to SH3007 inclusive and SH3009 to SH3011 inclusive. Compliance required as detailed in Service Bulletin. Embodiment of Modification No. 5332 deletes the requirements of Service Bulletin SD3–30–A04. |
| 0189 PRE 80 | SD3–30–05 (5452) | *Ice and Rain* – Provision of drainage holes – Wing pneumatic de-icing system. | Requirements of Service Bulletin No. SD3–30–05 are cancelled by Transmittal Sheet No. 2 dated 10 July 1980. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 0190 PRE 80 | SD3–32–03 (5179) | *Landing Gear* – Introduction of developed main landing gear swivel sub-assembly together with new flanged retention collar and increased diameter attachment bolt. | Applicable to SD3–30 aircraft Serial Nos. SH3002 to SH3010 inclusive (Menasco SB No. 32–8) and SH3004 to SH3007 inclusive (Menasco Modification No. 5179). Compliance required as detailed in Service Bulletin. |
| 0191 PRE 80 | SD3–32–05 | *Landing Gear* – Security of main landing gear swivel to shock strut attachment pins. | Applicable to all SD3–30 aircraft. Compliance required as detailed in Menasco Service Bulletin No. 32–2. |
| 0192 PRE 80 | SD3–32–06 | *Landing Gear* – Inspection of nose landing gear trunnion. | Applicable to all SD3–30 aircraft. Compliance required as detailed in Menasco Service Bulletin No. 32–3. |
| 0193 PRE 80 | SD3–32–09 | *Landing Gear* – Failure in service of main landing gear wheel assemblies. | Applicable to all SD3–30 aircraft. Compliance required as detailed in Dunlop Service Bulletin No. 32–A901. |
| 0194 PRE 80 | SD3–32–16 (5405) | *Landing Gear* – To provide visual indication of nose wheel steering range. | Requirements of Service Bulletin No. SD3–32–16 are cancelled by Transmittal Sheet No. 1 dated 10 July 1980. |
| 0195 PRE 80 | SD3–32–18 | *Landing Gear* – Replacement of main landing gear downlock stop. | Applicable to all SD3–30 aircraft. Compliance required as detailed in Menasco Service Bulletin No. 32–7. |
| 0196 PRE 80 | SD3–32–19 | *Landing Gear* – Replacement of nose landing gear life limited cylinder. | Applicable to SD3–30 aircraft Serial Nos. SH3002 to SH3022 inclusive. Compliance required as detailed in Menasco Service Bulletin No. 32–10. |
| 0197 PRE 80 | SD3–32–24 | *Landing Gear* – Life limitation of nose landing gear steering collar. | Applicable to SD3–30 aircraft Serial Nos. SH3002 to SH3022 inclusive. Compliance required as detailed in Service Bulletin. |
| 0198 PRE 80 | SD3–32–25 | *Landing Gear* – Inspection of main landing gear downlock stop. | Applicable to all SD3–30 aircraft. Compliance required as detailed in Menasco Service Bulletin No. 32–18. |
| 0199 PRE 80 | SD3–32–26 | *Landing Gear* – Inspection of nose landing gear steering bellcrank. | Applicable to SD3–30 aircraft Serial Nos. SH3002 to SH3022 inclusive. Compliance required as detailed in Menasco Service Bulletin No. 32–12. |
| 0200 PRE 80 | SD3–32–28 | *Landing Gear* – Replacement of life limited main landing gear beam assemblies. | Applicable to all SD3–30 aircraft. Compliance required as detailed in Menasco Service Bulletin No. 32–15. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 0201 PRE 80 | SD3–32–38 | *Landing Gear* – To facilitate greasing and introduction of vent hole in nose landing gear downlock mechanism housing. | Applicable to all SD3–30 aircraft. Compliance required as detailed in Menasco Service Bulletin No. 32–23. |
| 0202 PRE 80 | SD3–32–41 (5593) | *Landing Gear* – Introduction of Menasco Restrictor Valve in main landing gear 'UP' line. | Requirements of Service Bulletin No. SD3–32–41 are cancelled by Transmittal Sheet No. 1 dated 10 July 1980. |
| 0203 PRE 80 | SD3–32–44 (5662) | *Landing Gear* – Replacement of restrictor Part No SD3–73–1209 in nose landing gear 'UP' line with restrictor Part No. HTE 9950. | Requirements of Service Bulletin No. SD3–32–44 are cancelled by Transmittal Sheet No. 2 dated 10 July 1980. |
| 0204 PRE 80 | SD3–32–50 | *Landing Gear* – Modification of nose and main landing gear retraction actuators. | Applicable to all SD3–30 aircraft fitted with retraction actuators with Serial Nos. quoted in Menasco Service Bulletin No. 32–29. Compliance required as detailed in Menasco Service Bulletin No. 32–29. |
| 0205 PRE 80 | SD3–32–55 | *Landing Gear* – Replacement of life limited main landing gear cylinder. | Applicable to all SD3–30 aircraft fitted with shockstrut assemblies having Serial Nos. quoted in Menasco Service Bulletin No. 32–33. Compliance required as detailed in Menasco Service Bulletin No. 32–33. |
| 0206 PRE 80 | SD3–32–60 | *Landing Gear* – Replacement of life limited nose landing gear link sub-assembly. | Applicable to all SD3–30 aircraft fitted with nose landing gear beam assemblies having Serial Nos. quoted in Menasco Service Bulletin No. 32–30. Compliance required as detailed in Menasco Service Bulletin No. 32–30. |
| 0207 PRE 80 | SD3–32–64 | *Landing Gear* – Failure of main wheel half hubs. | Applicable to all SD3–30 aircraft fitted with main landing gear wheels Part No. AH 53369. Compliance required as detailed in Dunlop Service Bulletin No. 32–920. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 0208 PRE 80 | SD3–32–65 | *Landing Gear* – Lubrication of main landing gear downlock mechanism. | Applicable to all SD3–30 aircraft fitted with main landing gear shockstrut and link assemblies having Serial Nos. quoted in Menasco Service Bulletin No. 32–44. Compliance required as detailed in Menasco Service Bulletin No. 32–44. |
| 0209 PRE 80 | SD3–32–66 | *Landing Gear* – Lubrication of nose landing gear downlock mechanism. | Applicable to all SD3–30 aircraft fitted with nose landing gear downlock mechanism assemblies having Part Nos. quoted in Menasco Service Bulletin No. 32–45. Compliance required as detailed in Menasco Service Bulletin No. 32–45. |
| 0210 PRE 80 | SD3–32–68 | *Landing Gear* – Inspection of nose landing gear shockstrut cylinder. | Applicable to all SD3–30 aircraft fitted with nose landing gear shockstrut assemblies having Part Nos. quoted in Menasco Service Bulletin No. 32–53. Compliance required as detailed in Menasco Service Bulletin No. 32–53. |
| 0211 PRE 80 | SD3–32–79 | *Landing Gear* – To embody the requirements of Menasco Service Bulletin No. 32–57. | Applicable to all SD3–30 aircraft fitted with nose landing gear assemblies as defined in Menasco Service Bulletin No. 32–57. Compliance required as detailed in Service Bulletin. |
| 0212 PRE 80 | SD3–53–01 (5083, 5084, 5111 and 5104) | *Fuselage* – To improve weather and fuel sealing arrangement – passenger compartment fuselage roof. | Applicable to SD3–30 aircraft Serial Nos. SH3004 and SH3005. Compliance required as detailed in Service Bulletin. |
| 0213 PRE 80 | SD3–53–07 (5071, 5073 and 5477) | *Fuselage* – To strengthen stub wing structure. | Applicable to SD3–30 aircraft Serial Nos. SH3004 to SH3007 inclusive. Compliance required as detailed in Service Bulletin. |
| 0214 PRE 80 | SD3–53–18 | *Fuselage* – Inspection and sealing arrangements at controls penetration of fuselage roof. | Applicable to SD3–30 aircraft Serial Nos. SH3002 to SH3027 inclusive. Compliance required as detailed in Service Bulletin. |
| 0215 PRE 80 | SD3–53–19 (5480) | *Fuselage* – Provision of access through side seat rail vertical panel and inspection of front and rear spar frames for damage. | Applicable to SD3–30 aircraft Serial Nos. SH3002 and SH3004 to SH3013 inclusive. Compliance required as detailed in Service Bulletin. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 0216 PRE 80 | SD3–53–20 | *Fuselage* – Inspection of spar frames in areas which have drill penetration damage and subsequent addition of reinforcing plates. | Applicable to SD3–30 aircraft Serial No. SH3002. Compliance required as detailed in Service Bulletin. |
| 0217 PRE 80 | SD3–53–21 (5477) | *Fuselage* – Replacement of laminated aluminium shims in stub wing structural bolted joints. | Applicable to SD3–30 aircraft Serial Nos. SH3008 to SH3013 inclusive. Compliance required as detailed in Service Bulletin. |
| 0218 PRE 80 | SD3–53–22 | *Fuselage* – Inspection of spar frames in areas which have drill penetration damage and subsequent addition of reinforcing plates. | Applicable to SD3–30 aircraft Serial No. SH3013. Compliance required as detailed in Service Bulletin. |
| 0219 PRE 80 | SD3–53–23 | *Fuselage* – Inspection of spar frames in areas which have drill penetration damage and subsequent addition of reinforcing plates. | Applicable to SD3–30 aircraft Serial Nos. SH3004 and SH3009. Compliance required as detailed in Service Bulletin. |
| 0220 PRE 80 | SD3–53–24 | *Fuselage* – Inspection of spar frames in areas which have drill penetration damage and subsequent addition of reinforcing plates. | Applicable to SD3–30 aircraft Serial No. SH3006. Compliance required as detailed in Service Bulletin. |
| 0221 PRE 80 | SD3–53–25 | *Fuselage* – Inspection of spar frames in areas which have drill penetration damage and subsequent addition of reinforcing plates. | Applicable to SD3–30 aircraft Serial No. SH3010. Compliance required as detailed in Service Bulletin. |
| 0222 PRE 80 | SD3–53–26 | *Fuselage* – Inspection of spar frames in areas which have drill penetration damage and subsequent addition of reinforcing plates. | Applicable to SD3–30 aircraft Serial No. SH3012. Compliance required as detailed in Service Bulletin. |
| 0223 PRE 80 | SD3–53–A27 | *Fuselage* – Inspection of 'Ampep' bush at main landing gear swivel pin mounting in stub wing structure. | Applicable to SD3–30 aircraft Serial Nos. SH3002 to SH3018 inclusive. Compliance required as detailed in Service Bulletin. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 0224 PRE 80 | SD3–53–28 | *Fuselage* – Replacement of buttstraps on fuselage skin panels. | Applicable to SD3–30 aircraft Serial Nos. SH3004, 3005, 3006, 3007 and 3008. Compliance required as detailed in Service Bulletin. |
| 0225 PRE 80 | SD3–53–29 | *Fuselage* – Requirements for packing at wing drag link attachments in fuselage. | Applicable to SD3–30 aircraft Serial Nos. SH3001 to SH3013 inclusive. Compliance required as detailed in Service Bulletin. |
| 0226 PRE 80 | SD3–53–30 | *Fuselage* – Inspection and recording of possible drill penetration damage to front and rear spar frames in way of side seat rail. | Applicable to SD3–30 aircraft Serial Nos. SH3002 to SH3019 inclusive and SH3021. Compliance required as detailed in Service Bulletin. |
| 0227 PRE 80 | SD3–53–31 | *Fuselage* – Inspection of spar frames in areas which have drill penetration damage and subsequent addition of reinforcing plates. | Applicable to SD3–30 aircraft Serial No. SH3008. Compliance required as detailed in Service Bulletin. |
| 0228 PRE 80 | SD3–53–34 | *Fuselage* – Inspection of stub wing spars. | Applicable to SD3–30 aircraft Serial Nos. SH3001 to SH3024 inclusive. Compliance required as detailed in Service Bulletin. |
| 0229 PRE 80 | SD3–55–05 (5345) | *Stabilizers* – Filling annular gap between rudder torque tube and outer sleeve above lower rudder bearing with grease, restricting water ingress and improving drainage of fin structure. | Applicable to all SD3–30 aircraft for Part 'A' and Serial Nos. SH3004 to SH3007 inclusive and SH3009 for Part 'B'. Compliance required as detailed in Service Bulletin. |
| 0230 PRE 80 | SD3–57–05 | *Wings* – Application of adhesive backed sealing tape along piano hinge line of wing trailing edge shrouds to prevent water ingress. | Applicable to SD3–30 aircraft Serial Nos. SH3003 to SH3011 inclusive. Compliance required as detailed in Service Bulletin. |
| 0231 PRE 80 | SD3–61–02 | *Propellers* – Uprating of cable links on emergency changeover relays for propeller de-icing. | Requirements of Service Bulletin No. SD3–61–02 are cancelled by Transmittal Sheet No. 2 dated 10 July 1980. |
| 0232 PRE 80 | SD3–61–A03 | *Propellers* – Inspection of propeller proximity switch wiring. | Applicable to SD3–30 aircraft Serial Nos. SH3004 to SH3007 inclusive and SH3009 to SH3013 inclusive. Compliance required as detailed in Service Bulletin . |
| 0233 PRE 80 | SD3–61–A05 | *Propellers* – Inspection of low blade angle pitch mechanism support bracket for cracks. | Applicable to SD3–30 aircraft Serial Nos. SH3002 to SH3019 inclusive. Compliance required as detailed in Service Bulletin. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 0234 PRE 80 | SD3–61–06 | *Propellers* – To check the torque on Hartzell Propellers attaching bolts Part No. A2047. | Superseded by FAA AD 83–08–01 R1. |
| 0235 PRE 80 | SD3–71–04 (5434) | *Power Plant* – Replacement of bolts attaching engine support tube brackets to engine ring with bolts of higher ultimate tensile strength. | Applicable to SD3–30 aircraft Serial Nos. SH3004 to SH3007 inclusive and SH3009 to SH3017 inclusive. Compliance required as detailed in Service Bulletin. |
| 0236 PRE 80 | Maintenance Manual | Mandatory Life Limitations. | The limitations listed in the Maintenance Manual are mandatory for aircraft on the United Kingdom Register. |
| 004–07–80 | SD3–53–41 | *Fuselage* – Visual inspection of and if necessary repair to existing fuselage sealing on top skin plus additional sealing. | Applicable to SD3–30 aircraft Serial Nos. SH 3002 to SH 3072 inclusive. Compliance required as detailed in Service Bulletin. |
| 010–09–80 | SD3–32–85 | *Landing Gear* – To embody the requirements of Menasco Service Bulletin No. 32–35 to main landing gear. | Applicable to all SD3–30 aircraft with units as defined in Menasco Service Bulletin No. 32–35. Compliance required as detailed in Service Bulletin. |
| 011–09–80 | SD3–32–32 | *Landing Gear* – To embody the requirements of Menasco Service Bulletin No. 32–48 to main landing gear. | Applicable to all SD3–30 aircraft with units as defined in Menasco Service Bulletin No. 32–48. Compliance required as detailed in Service Bulletin. |
| 004–06–81 | SD3–32–86 | *Landing Gear* – To embody the requirements of Menasco Service Bulletin No. 32–61 to main landing gear. | Applicable to all SD3–30 aircraft with units as defined in Menasco Service Bulletin 32–61. Compliance required as detailed in Service Bulletin. |
| 014–06–81 | SD3–32–90 | *Landing Gear* – To embody the requirements of Menasco Service Bulletin No. 32–65. | Applicable to all SD3–30 aircraft fitted with main landing gear life limited beam assemblies having Serial Nos. quoted in Menasco Service Bulletin 32–65. Compliance required as detailed in Menasco Service Bulletin. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 015–06–81 | SD3–32–92 | *Landing Gear* – To add a clamp block and a protective duct to the flexible brake hoses on the main landing gear and to incorporate the requirements of Menasco Service Bulletin No. 32–72. | Applicable to SD3–30 aircraft Serial Nos. SH3002 to SH3063 inclusive. Compliance required as detailed in Service Bulletin. |
| 006–12–81 | SD3–53–43 | *Fuselage* – To reinforce top member of fuselage frame at Stn. 340.46. | Applicable to SD3–30 aircraft Serial Nos. SH3048 to SH3071 inclusive, SH3073, SH3075 and SH3077. Compliance required as detailed in Service Bulletin. |
| 007–12–81 | SD3–76–01 | *Engine Controls* – To introduce a modified baulk lever in the power control circuit. | Applicable to SD3–30 aircraft Serial Nos. SH3002 to SH3068 inclusive. Compliance required as detailed in Service Bulletin. |
| 008–12–81 | SD3–76–02 | *Engine Controls* – To modify power input lever at engine and if necessary to inspect clevis end of power input cable for cracks. | Applicable to SD3–30 aircraft Serial Nos. SH3002 to SH3048 inclusive and SH3049 to SH3058 inclusive. Compliance required as detailed in Service Bulletin. |
| 007–01–82 | SD3–27–23 | *Flight Controls* – To increase up travel on right aileron. | Applicable to SD3–30 aircraft, Serial Nos. SH3002 to SH3067 inclusive if PT6A–45R engines are fitted, SH3068 to SH3071 inclusive, SH3073, SH3075, SH3077 and SH3078. Compliance required as detailed in Service Bulletin. |
| 008–01–82 | SD3–56–02 | *Windows* – To increase the thickness of the window transparency located aft of the propeller plane on the right hand (starboard) side of the aircraft. | Applicable to SD3–30 aircraft Serial Nos. SH3002 to SH3071 inclusive, SH3073, SH3075, SH3077 and SH3078. Compliance required as detailed in Service Bulletin. |
| 021–02–82 | SD3–25–30 | *Equipment/Furnishings* – To fit a closing panel in the aft baggage compartment. | Applicable to SD3–30 aircraft Serial Nos. SH3002 to 3071 inclusive, SH3073, SH3075, SH3077 and SH3078. Compliance required as detailed in Service Bulletin. |
| 001–04–82 | SD3–28–16 | *Fuel* – Introduction of leakage checks. | Applicable to all SD3–30 aircraft. Compliance required as detailed in Service Bulletin. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 016–04–82 | SD3–53–47 | *Fuselage* – Introduction of eductor and leak test facility for fuel fume seal installation. | Applicable to SD3–30 aircraft Serial Nos. SH3002 to SH3091 inclusive as follows:<br>SH3002 to SH3084. Part 'A' or Part 'C'<br>SH3085 to SH3091. Part 'B'<br>Compliance required as detailed in Service Bulletin. |
| 010–08–82 | SD3–57–10 | *Wings* – Inspection/repair of rib/skin attachment cleats at left wing station 160. | Applicable to SD3–30 aircraft Serial Nos. SH3002 to SH3093 inclusive. Compliance required as detailed in Service Bulletin. |
| 035–06–83 | SD3–32–96 | *Landing Gear* – To embody the requirements of Menasco Service Bulletin No 32–71 – Nose landing gear – Replacement of life limited cylinder. | Applicable to all SD3–30 aircraft with units as defined in Service Bulletin. Compliance required as detailed in Service Bulletin. |
| 036–06–83 | SD3–25–32 | *Equipment/Furnishings* – To embody the requirements of Teleflex Morse Ltd Service Bulletin No 25–00–185429 on crew seat harness – Introduction of D73766/000 Roll Assembly. | Superseded by issue 2 of Teleflex Morse Service Bulletin 25–00–185429 referenced under AD 011–10–82 in the Instruments and Equipment Section. Shorts have covered issue 2 with Service Bulletin SD3–25–37. |
| 037–06–83 | SD3–28–17 | *Fuel* – Replacement of flexible fume proof ducts. | Applicable to SD3–30 aircraft Serial Nos. SH3002 to SH3089 inclusive. Compliance required as detailed in Service Bulletin. |
| 007–08–83 | SD3–55–16 | *Stabilizers* – Inspection of horizontal stabilizer to fuselage attachment fittings, pins and bushes for corrosion and/or wear. | Applicable to all SD3–30 aircraft. Compliance required as detailed in Service Bulletin. |
| 001–11–83 | SD3–32–101 | *Landing Gear* – To embody the requirements of Menasco Service Bulletin No 32–74 Nose landing gear – Replacement of life limited fork sub-assembly. | All SD3–30 aircraft with units as defined in Menasco Service Bulletin No 32–74. Compliance as required by Service Bulletin. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 007–02–84 | SD3–24–18 | *Electrical Power* – To insulate body of line contactor No 141CC01A on 1C and 2C panels. | Applicable to SD3–30 aircraft Serial No. SH3001 to SH3096 inclusive. Compliance required as detailed in Service Bulletin. |
| 009–10–84 | SD3–28–22 | *Fuel* – To seal fuel tank electrical connections. | Applicable to aircraft Serial Nos as detailed in SB. Compliance required as detailed in SB. |
| 008–01–85 | SD3–30–IL–192 | *Flight Manual* – Amended instructions for systems operation – Ice and rain protection systems. | Service Information letter cancelled at Revision 1 therefore AD is now cancelled. |
| 009–01–85 | SD3–32–109 | *Landing gear* – To embody the requirements of Menasco Service Bulletin No. 32–79 Main landing gear link assembly – replacement of life limited retainer pins. | Applicable to all SD3–30 aircraft with units as defined in Menasco Service Bulletin No. 32–79. Compliance required as detailed in SB. |
| 007–02–85 | SD3–22–A02 | *Autoflight* – To inhibit Automatic Flight Control System. | Applicable to SD3–30 aircraft Serial Nos. as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. |
| 005–03–85 | SD3–27–29 | *Flight Controls* – To improve the integrity of mounting of elevator torque tube. | Applicable to aircraft Serial Nos. as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. |
| 006–03–85 | SD3–27–A28 | *Flight Controls* – Inspection of complete elevator control circuit. | Applicable to SD3–30 aircraft Serial No. SH3031. Compliance required as detailed in Service Bulletin. |
| 005–08–85 | SD330–53–53 | *Fuselage* – Introduction of reinforcing strap on fuselage top skin. | Applicable to SD3–30 aircraft Serial Nos. SH3098, SH3099, SH3102 and SH3105. Compliance required as detailed in Service Bulletin. |
| 018–09–85 | SD330–34–26 | *Navigation* – Inspect and where necessary replace pitot tubes. | Applicable to SD3–30 aircraft Serial Nos. SH3002 to SH3096 inclusive. Compliance required as detailed in Service Bulletin. |
| 006–10–85 | SD330–28–29 | *Fuel* – Introduction of improved fuel pipe shrouds, also new rubber seals and Dowty seals together with inspection of fuel pipes. | Applicable to SD3–30 aircraft Serial Nos. as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 007–11–85 | SD330–53–58 | *Fuselage* – To apply sealant to certain areas of the fuselage top skin. | Applicable to SD3–30 aircraft Serial Nos. SH3002 to SH3116 inclusive. Compliance required as detailed in Service Bulletin. |
| 011–02–86 | SD330–27–31 | *Flight Controls* – Introduction of guards in way of elevator and rudder control levers. | Applicable to SD3–30 aircraft Serial Nos. SH3002 to SH3099, SH3102 and SH3105. Compliance required as detailed in Service Bulletin. |
| 004–04–86 | SD330–25–47 | *Equipment/Furnishings* – To blank off lightening holes in structure around emergency oxygen bottles. | Applicable to SD3–30 aircraft Serial Nos. as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. |
| 005–04–86 | SD330–71–20 | *Powerplant* – To inspect engine mounting structure for wear. | Classification of Service Bulletin changed from mandatory to recommended therefore AD is now cancelled. |
| 006–06–86 | SD330–22–05 | *Auto Flight* – To alter electrical wiring from circuit breaker No 49 and No 252. | Applicable to SD3–30 aircraft Serial Nos. SH3098 and SH3102. Compliance required as detailed in Service Bulletin. |
| 012–07–86 | SD330–24–21 | *Electrical Power* – To insulate ECE contactor bodies. | Applicable to SD3–30 aircraft Serial Nos. SH 3002 to SH 3107, SH 3109 to SH 3121 and SH 3123 to SH 3125 inclusive. Compliance required as detailed in Service Bulletin. |
| 005–10–86 | SD330–32–114 | *Landing Gear* – To reposition Keystone landing gear warning horn as fitted and to replace Lucas with Keystone when required. | Applicable to SD3–30 aircraft Serial Nos. as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. |
| 001–02–88 | SD330–32–119 | *Landing Gear* – Nose landing gear – Replacement of life limited pintle pins. Menasco Service Bulletin No 32–69. | Applicable to all SD3–30 aircraft fitted with units detailed in Menasco Service Bulletin. Compliance required as detailed in Service Bulletin. |
| 001–05–90 | SD330–24–25 | *Electrical Power* – To revise power source for pitot static heaters. | Applicable to all SD3–30 aircraft. Compliance required as detailed in Service Bulletin. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 015–02–91 | SD330–28–35 | *Fuel* – To prevent inadvertent operation of LP levers. | Applicable to all SD3–30 aircraft. Compliance required as detailed in Service Bulletin. |
| 014–10–92 | SD3–22–02 | *Autoflight* – To introduce autopilot computer APC–65 with Collins S.B.22 embodied. | Applicable to SD3–30 aircraft Serial Nos. SH3098, SH3100, SH3101, SH3102, SH3103, SH3104, SH3106 and SH3107. Compliance required as detailed in Service Bulletin. |
| 015–10–92 | SD3–27–27 | *Flight Controls* – Introduction of a guard panel in way of elevator controls. | Applicable to SD3–30 aircraft Serial Nos. SH3100 and SH3101. Compliance required as detailed in Service Bulletin. |
| 016–10–92 | SD330–28–32 | *Fuel* – Replacement of flexible fumeproof shrouds and inspection of fuel pipes. | Applicable to SD3–30 aircraft Serial Nos. SH3100, SH3101, SH3103, SH3104, SH3106 and SH3107. Compliance required as detailed in Service Bulletin. |
| 017–10–92 | SD330–28–33 | *Fuel* – Replacement of junction boxes on aft fuel system and new rubber seals and Dowty seals on junction boxes forward and aft fuel system. | Applicable to SD3–30 aircraft Serial Nos. SH3100, SH3101, SH3103, SH3104, SH3106, SH3107, SH3109–SH3114 inclusive. Compliance required as detailed in Service Bulletin. |
| 018–10–92 | SD3–53–48 | *Fuselage* – Inspection/Modification of drag links. | Applicable to SD3–30 aircraft Serial Nos. SH3002–SH3088 inclusive. Compliance required as detailed in Service Bulletin. |
| 012–03–93 | SD330–53–65 | *Fuselage* – To inspect distance piece and adjacent side plates in wing strut pick up on stub wing. | Applicable to all SD3–30 aircraft. Compliance required as detailed in Service Bulletin. |
| 005–04–95 | SD330–55–18 | *Stabilizers* – To inspect fin to tailplane attachment bolts and upper shear angle. | Applicable to all SD3–30 aircraft. Compliance required as detailed in Service Bulletin. |
| 005–09–95 | SD330–27–34 | *Flight Controls* – To inspect flap hydraulic units in wings. | Applicable to all SD3–30 aircraft. Compliance required as detailed in Service Bulletin. |
| 008–01–97 | SD3–27–36 | *Flight Controls* – To inspect inner flap sub-assembly lever bracket and levers. | Applicable to all SD3–30 aircraft. Compliance required as detailed in Service Bulletin. |
| 006–02–97 | SD330–55–19 | *Stabilizers* – To inspect elevators and rudder skin flutes. | Applicable to all SD3–30 aircraft. Compliance required as detailed in Service Bulletin. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 003–06–98 | SD330–30–33 | *Ice and Rain Protection* – To accomplish changes required by Service Bulletin SD330–30–30 Revision 1. | Applicable to all SD3–30 aircraft which have incorporated Service Bulletin SD330–30–30 original issue. Compliance required as detailed in Service Bulletin. |
| 008–10–98 | SD330–29–19 | *Fuselage* – To inspect emergency brake accumulator mounting structure. | Applicable to all SD3–30 aircraft. Compliance required as detailed in Service Bulletin. |
| 006–11–98 | SD330–53–68 | *Fuselage* – To inspect stub wing shear decks and ribs for corrosion, rework and report findings as necessary. | Applicable to all SD3–30 aircraft. Compliance required as detailed in Service Bulletin. |
| 013–11–98 | SD330–27–37 | *Flight Controls* – To replace existing bolts in elevator control torque tube bearing housing retaining plate with hex. head bolts. | Applicable to all SD3-30 aircraft. Compliance required as detailed in Service Bulletin. |
| 014–11–98 | SD330–71–23 | *Powerplant* – To inspect the engine mounting tubes, tube end fittings, taper pins and foot fittings for corrosion, replace if necessary and report findings. | Applicable to all SD3–30 aircraft. Compliance required as detailed in Service Bulletin. |
| 002–12–98 | SD330–26–14 | *Fire Protection* – To introduce new fire extinguisher adapter covers for forward and aft baggage bays. | Applicable to all SD3-30 aircraft with forward and aft baggage bays and those with forward baggage bay only. Compliance required as detailed in Service Bulletin. |
| 008–02–99 | SD330–35–1 | *Oxygen* – To replace oxygen system O-rings MS28778 with AS3582 type. | Applicable to SD3–30 aircraft Serial Nos. SH3100, SH3101, SH3103, SH3104, SH3106, SH3107 and SH3109 to SH3120 inclusive. Compliance required as detailed in Service Bulletin. |
| 007–04–2000 | SD330–27–38 | *Flight Controls* – To inspect flight control trim chains and cable/chain assemblies for manufacture using ‘Spring Clip’ connecting links. | Applicable to all SD3-30 aircraft. Compliance required as detailed in Service Bulletin. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 002–02–2001 | SD330–71–24 | *Powerplant* – To introduce 'Static reduced to MTOP power check'. | Applicable to all SD3–30 aircraft fitted with PT6A–45R engines. Compliance required as detailed in Service Bulletin. |
| 006–04–2001 | SD 330–24–29 | *Electrical Power* – To inspect for possible fouling of hydraulic pipelines serving 7P panel with adjacent electrical wiring harnesses and to replace hydraulic pipeline/s if required. | Applicable to all SD3–30 aircraft. Compliance required as detailed in Service Bulletin. |
| 007–05–2001 | SD330–27–39 | *Flight Controls* – To inspect elevator torque shaft assembly bearing housings. | Applicable to all SD3–30 aircraft. Compliance required as detailed in Service Bulletin. |
| 005–05–2002 | SB330–26–15 | *Fire Protection* – To introduce new inserts at forward and aft baggage bay fire extinguishing point adaptors. | Applicable to all SD3–30 aircraft. Compliance required as detailed in Service Bulletin. |
| 002–06–2002 | SD330–31–15 | *Indicating/Recording System* – Introduction of ice VANE annunciators on the central warning panel (CWP). | Applicable to all SD3–30 aircraft. Compliance required as detailed in Service Bulletin. |
| 007–08–2002 | SD330–71–25 | *Powerplant* – To inspect the engine support tubes, tube end fittings and taper pins for corrosion. | Applicable to all SD3–30 aircraft. Compliance required as detailed in Service Bulletin. |
| 001–04–2003 | SD330–32–122 | *Landing Gear* – To inspect MLG aft pintle pin bushes for stiffness and condition. | Applicable to SD3–30 aircraft. Compliance required as detailed in Service Bulletin. |

# United Kingdom Civil Aviation Authority

# AIRWORTHINESS DIRECTIVE

## AD No: G-2004-0021

Issue Date: 25 August 2004

This AD is issued by the UK CAA acting for and on behalf of the European Aviation Safety Agency as the Primary Aviation Authority (ICAO Annex 8 Authority of State of Design) for the affected product(s).

Approved by the European Aviation Safety Agency under approval number 2004-9032 on 24 August 2004.

In accordance with Article 9(7)(b) of the Air Navigation Order 2000 as amended the following action required by this Airworthiness Directive (AD) is mandatory for applicable aircraft registered in the United Kingdom.
No person may operate an aircraft to which an AD applies except in accordance with the requirements of that AD unless otherwise agreed with the Authority of the State of Registry.

| Type Approval Holders Name: | Type/Model Designation(s): |
|---|---|
| **SHORT BROTHERS PLC** | **SD3-30, SD3-60, SD3-SHERPA, SD3-60 SHERPA** |

**Type Certificate Data Sheet No:** BA11

**Superseded/ Revised ADs:** None

### ATA 28 - FUEL SYSTEM – INTRODUCTION OF ADDITIONAL BONDING AND ADDITIONAL BONDING/INSULATION CHECKS ON FUEL TANK INTERNAL COMPONENTS

**Manufacturer(s):** Short Brothers PLC

**Applicability:** Models SD3-30, SD3-60, SD3-Sherpa and SD3-60 Sherpa aeroplanes, certificated in any category.

**Reason:** The FAA and JAA have examined the underlying safety issues involved in recent fuel tank explosions on several large transport aeroplanes, including the adequacy of existing regulations, the service history of aeroplanes subject to those regulations, and existing maintenance practices for fuel tank systems. As a result of those findings, the FAA issued a regulation titled “Transport Airplane Fuel Tank Systems Design Review, Flammability Reduction and Maintenance and Inspection Requirements”. In addition to new airworthiness standards for transport aeroplanes and new maintenance requirements, the rule included Special Federal Aviation Regulation No. 88. JAA worked closely with FAA and published their equivalent requirements in JAA Fuel Tank Safety Recommendation Letter reference 04/00/02/07/03-L024 dated 3 February 2003.

Among other actions, SFAR 88 and the JAA Safety Recommendation Letter require certain type design holders to substantiate that their fuel tank systems can prevent ignition sources in the fuel tanks. This requirement applies to type design holders for large turbine-powered transport aeroplanes and for subsequent modifications to those aeroplanes. It requires them to perform design review and to develop design changes and maintenance procedures if their designs do not meet the new fuel tank safety standards. Airworthiness Directives will be adopted to mandate any changes found necessary to address unsafe conditions identified as a result of these reviews.

In evaluating these reviews FAA and JAA established four criteria intended to define the unsafe conditions associated with fuel tank systems that require corrective actions. The percentage of operating time during which fuel tanks are exposed to flammable conditions is one of these criteria. The other three criteria address the failure types under evaluation: single failures, single failures in combination with other latent condition(s) and in-service failure experience. For all four criteria, the evaluations included consideration of previous actions taken that may mitigate the need for further action.

continued on next page

Based on this process, EASA has determined that the actions identified in this Airworthiness Directive (AD) are necessary to reduce the potential of ignition sources inside fuel tanks, which, in combination with flammable fuel vapours in fuel tank explosions and consequent loss of the aeroplane. In this case, two additional bonding jumpers between the fuel vent pipes and the aircraft structure are required, as are additional inspections including bonding/insulation checks on internal components of the fuel tank.

**Effective Date:** 9 September 2004

**Compliance/Action: Compliance/Action**

a) Within 1 month after the effective date of this AD, insert Shorts Flight Manual Advance Amendment Bulletin 1/2004 or later EASA approved revision in the Aircraft Flight Manual.

b) Within 6 months after the effective date of this AD, perform the following tasks in accordance with the applicable Shorts Service Bulletin or later EASA approved revision specified in Table 1 of this AD.

| Aircraft Type/ Model | Applicable Service Bulletin | Aircraft Maintenance Manual Sections 5-20-01 & 5-20-02 introduced by |
|---|---|---|
| SD3-30 | SD 330-28-37 initial issue dated June 2004 | TR330-AMM-14 Dated July 2004 |
| SD3-60 | SD 360-28-23 initial issue dated June 2004 | TR360-AMM-33 Dated July 2004 |
| SD3-SHERPA | SD3 SHERPA-28-2 initial issue dated June 2004 | TRSD3S-AMM-15 Dated July 2004 |
| SD3-60 SHERPA | SD360 SHERPA-28-3 initial issue dated June 2004 | TRSD360S-AMM-14 Dated July 2004 |

Table 1

i. Carry out an insulation resistance check of the fuel tank float switches in accordance with Section 2 Part A of the applicable Service Bulletin.

ii. Inspect the condition of the Fuel Quantity Gauging System sensor cables and the cable supports inside the fuel tanks in accordance with Section 2 Part B of the applicable Service Bulletin.

iii. Inspect the integrity of the existing bonding of the 2 off vent pipes inside cell 2 of the forward fuel tank in accordance with Section 2 Part C of the applicable Service Bulletin.

iv. Install new bonding jumper wires between the forward and aft fuel tank vent pipes and the aircraft structure in accordance Section 2 Part D of the applicable Service Bulletin.

Any defect identified as a result of performing the tasks specified in Paragraph b) must be rectified prior to further flight.

c) Upon completion of Paragraph b) of this AD, compliance with section 5-20-01 and 5-20-02 of the applicable Aircraft Maintenance Manual introduced as specified in Table 1 (or later approved AMM revision) of this AD is mandatory.

**Reference Publications:** Shorts Service Bulletins, Aircraft Maintenance Manual Temporary Revisions and Flight Manual Advance Amendment Bulletin 1/2004 - copies may be obtained from Short Brothers PLC, PO Box 241, Airport Road, Belfast BT3 9DZ, Northern Ireland.

**Remarks:** Enquiries regarding this Airworthiness Directive may be directed to Civil Aviation Authority, Safety Regulation Group, Certification and Approvals Department, Aviation House, Gatwick Airport South, West Sussex, RH6 0YR, United Kingdom. Phone: +44 (0) 1293 5733289 Fax: +44 (0) 1293 573976 E-mail: peter.moule@srg.caa.co.uk

**SHORT BROTHERS SD3–SHERPA AND SD3–60 SHERPA SERIES AIRCRAFT**

CAA Type Certificate No. BA11

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 012–10–92 | SB SD3 SHERPA–24–1 | *Electrical Power* – To increase the gauge of earth wires. | Applicable to SD3 Sherpa aircraft Serial Nos. SH3201 to SH3205 inclusive. Compliance required as detailed in Service Bulletin. |
| 013–10–92 | SB SD3 SHERPA–32–1 | *Landing Gear* – Main landing gear – Rear pintle pin – Inspection of bush assembly at fork end. To embody the requirements of Dowty Service Bulletin No. 32–70SD. | Applicable to SD3 Sherpa aircraft as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. |
| 024–01–93 | SB SD3 SHERPA–33–1 | *Lights* – To alter the power supply to the Emergency Lighting System. | Applicable to SD3 Sherpa aircraft Serial Nos. SH3201 to SH3210 inclusive. Compliance required as detailed in Service Bulletin. |
| 025–01–93 | SB SD3 SHERPA–76–1 | *Engine Controls* – To modify ground/air lever. | Applicable to SD3 Sherpa aircraft Serial Nos. SH3201 to SH3210 inclusive. Compliance required as detailed in Service Bulletin. |
| 010–02–93 | SB SD3 SHERPA–23–2 | *Communications* – To correct interphone operations. | Applicable to SD3 Sherpa aircraft Serial Nos. SH3201 to SH3210 inclusive. Compliance required as detailed in Service Bulletin. |
| 011–02–93 | SB SD3 SHERPA–34–2 | *Navigation* – To revise wiring and to add a relay to the Flight Management System. | Applicable to SD3 Sherpa aircraft Serial Nos. SH3208, SH3211 and SH3212. Compliance required as detailed in Service Bulletin. |
| 013–03–93 | SB SD3 SHERPA–53–1 | *Fuselage* – To inspect distance piece and adjacent side plates in wing strut pick up on stub wing. | Applicable to SD3 Sherpa aircraft Serial Nos. SH3201 to SH3216 inclusive. Compliance required as detailed in Service Bulletin. |
| 006–04–95 | SB SD3 SHERPA–55–1 | *Stabilisers*– To inspect fin to tailplane attachment bolts and upper shear angle. | Applicable to all SD3 Sherpa aircraft. Compliance required as detailed in Service Bulletin. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 008–09–95 | SB SD3 SHERPA–27–1 | *Flight Controls* – To inspect flap hydraulic units in wings. | Applicable to all SD3 Sherpa aircraft. Compliance required as detailed in Service Bulletin. |
| 009–09–95 | SB SD3 SHERPA–32–2 | *Landing Gear* – To embody the requirements of Messier-Dowty Ltd Service Bulletin No. 32–78SD. Main Landing Gear – To make an inspection of the shock absorber gland nut. | Applicable to all SD3 Sherpa aircraft with units as defined in Messier-Dowty Ltd Service Bulletin. Compliance required as detailed in Short Brothers Service Bulletin. |
| 009–01–97 | SB SD360 SHERPA–27–1 | *Flight Controls* – To inspect inner flap sub-assembly lever bracket and levers. | Applicable to all SD3–60 Sherpa aircraft. Compliance required as detailed in Service Bulletin. |
| 010–01–97 | SB SD3 SHERPA–27–2 | *Flight Controls* – To inspect inner flap sub-assembly lever bracket and levers. | Applicable to all SD3 Sherpa aircraft. Compliance required as detailed in Service Bulletin. |
| 002–04–97 | SB SD360 SHERPA–35–1 | *Oxygen* – To introduce a new stainless steel pipe assembly SD37125003–401. | Applicable to all SD3–60 Sherpa aircraft not incorporating Mod K6098. Compliance required as detailed in Service Bulletin. |
| 003–04–97 | SB SD3 SHERPA–35–2 | *Oxygen* – To introduce a new stainless steel pipe assembly SD 37125003–401. | Applicable to all SD3 Sherpa aircraft. Compliance required as detailed in Service Bulletin. |
| 004–11–97 | SB SD360 SHERPA–53–2 | *Fuselage* – To inspect distance piece and adjacent side plates in wing strut pick up on stub wing. | Applicable to all SD3–60 Sherpa aircraft. Compliance required as detailed in Service Bulletin. |
| 005–11–97 | SB SD360 SHERPA–53–3 | *Fuselage* – To inspect stub wing shear decks in way of retaining pin at MLG forward pintle pin, and install new bushes where required. | Applicable to SD3–60 Sherpa aircraft except aircraft which have embodied Service Bulletin SD3–60 Sherpa 32–3 or equivalent SD360–32–35 carried out at manufacture . Compliance required as detailed in Service Bulletin. |
| 004–07–98 | SB SD360 SHERPA–76–1 | *Engine Controls* – To inspect and replace as required, power control cables and pulleys. | Applicable to all SD3–60 Sherpa aircraft. Compliance required as detailed in Service Bulletin. |
| 009–10–98 | SB SD3 SHERPA–29–2 | *Fuselage* – To inspect emergency brake accumulator mounting structure. | Applicable to all SD3 Sherpa aircraft. Compliance required as detailed in Service Bulletin. |
| 011–10–98 | SB SD360 SHERPA–29–1 | *Fuselage* – To inspect emergency brake accumulator mounting structure. | Applicable to all SD3–60 Sherpa aircraft. Compliance required as detailed in Service Bulletin. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 012–10–98 | SB SD360 SHERPA–27–2 | *Flight Controls* – To inspect elevator trim torque tube assembly for correct installation. | Applicable to SD3–60 Sherpa aircraft Serial Nos. SH3401 to SH3417. Compliance required as detailed in Service Bulletin. |
| 007–11–98 | SB SD3 SHERPA–53–4 | *Fuselage* – To inspect stub wing shear decks and ribs for corrosion, rework and report findings as necessary. | Applicable to all SD3 Sherpa aircraft. Compliance required as detailed in Service Bulletin. |
| 008–11–98 | SB SD360 SHERPA–53–4 | *Fuselage* – To inspect stub wing shear decks and ribs for corrosion, rework and report findings as necessary. | Applicable to all SD3–60 Sherpa aircraft. Compliance required as detailed in Service Bulletin. |
| 009–11–98 | SB SD3 SHERPA–27–3 | *Flight Controls* – To replace existing bolts in elevator control torque tube bearing housing retaining plate with hex. head bolts. | Applicable to all SD3 Sherpa aircraft. Compliance required as detailed in Service Bulletin. |
| 010–11–98 | SB SD360 SHERPA–27–3 | *Flight Controls* – To replace existing bolts in elevator control torque tube bearing housing retaining plate with hex. head bolts. | Applicable to all SD3–60 Sherpa aircraft. Compliance required as detailed in Service Bulletin. |
| 011–11–98 | SB SD3 SHERPA–71–1 | *Powerplant* – To inspect the engine mounting tubes, tube end fittings, taper pins and foot fittings for corrosion, replace if necessary and report findings. | Applicable to all SD3 Sherpa aircraft. Compliance required as detailed in Service Bulletin. |
| 012–11–98 | SB SD360 SHERPA–71–1 | *Powerplant* – To inspect the engine mounting tubes, tube end fittings, taper pins and foot fittings for corrosion, replace if necessary and report findings. | Applicable to all SD3–60 Sherpa aircraft. Compliance required as detailed in Service Bulletin. |
| 001–12–98 | SB SD3 SHERPA–26–2 | *Fire Protection* – To introduce new fire extinguisher adaptor cover for forward baggage bay. | Applicable to all SD3 Sherpa aircraft. Compliance required as detailed in Service Bulletin. |
| 006–02–99 | SB SD3 SHERPA–35–3 | *Oxygen* – To replace oxygen system O-rings MS28778 with AS3582 type. | Applicable to all SD3 Sherpa aircraft. Compliance required as detailed in Service Bulletin. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 007–02–99 | SB SD360 SHERPA–35–2 | *Oxygen* – To replace oxygen system O-rings MS28778 with AS3582 type. | Applicable to all SD3–60 Sherpa aircraft. Compliance required as detailed in Service Bulletin. |
| 007–04–99 | SB SD3 SHERPA–25–7 | *Equipment and Furnishings* – To introduce new aircraft serial plate to replace existing aircraft serial plate. | Applicable to all SD3 Sherpa aircraft. Compliance required as detailed in Service Bulletin. |
| 009–04–2000 | SB SD360 SHERPA–27–5 | *Flight Controls* – To inspect flight control trim chains and cable/chain assemblies for manufacture using 'Spring Clip' connecting links. | Applicable to all SD3–60 Sherpa aircraft. Compliance required as detailed in Service Bulletin. |
| 010–04–2000 | SB SD3 SHERPA –27–4 | *Flight Controls* – To inspect flight control trim chains and cable/chain assemblies for manufacture using 'Spring Clip' connecting links. | Applicable to all SD3 Sherpa aircraft. Compliance required as detailed in Service Bulletin. |
| 003–02–2001 | SB SD3 SHERPA–71–2 | *Powerplant* – To introduce 'Static reduced to MTOP power check'. | Applicable to all SD3 Sherpa aircraft. Compliance required as detailed in Service Bulletin. |
| 004–02–2001 | SB SD360 SHERPA–71–2 | *Powerplant* – To introduce 'Static reduced to MTOP power check'. | Applicable to all SD3–60 Sherpa aircraft. Compliance required as detailed in Service Bulletin. |
| 008–04–2001 | SB SD3 SHERPA–24–5 | *Electrical Power* – To inspect for possible fouling of hydraulic pipelines serving 7P panel with adjacent electrical wiring harnesses and to replace hydraulic pipeline if required. | Applicable to all SD3 Sherpa aircraft. Compliance required as detailed in Service Bulletin. |
| 009–04–2001 | SB SD3–60 SHERPA–24–4 | *Electrical Power* – To inspect for possible fouling of hydraulic pipelines serving 7P panel with adjacent electrical wiring harnesses and to replace hydraulic pipeline if required. | Applicable to all SD3–60 Sherpa aircraft. Compliance required as detailed in Service Bulletin. |
| 003–05–2001 | SB SD3–60 SHERPA–27–6 | *Flight Controls* – To inspect elevator torque shaft assembly bearing housings. | Applicable to all SD3–60 Sherpa aircraft. Compliance required as detailed in Service Bulletin. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 008–05–2001 | SB SD3 SHERPA–27–5 | *Flight Controls* – To inspect elevator torque shaft assembly bearing housings. | Applicable to all SD3 Sherpa aircraft. Compliance required as detailed in Service Bulletin. |
| 006–05–2002 | SB SD3 SHERPA–26–3 | *Fire Protection* – To introduce new insert at forward baggage bay fire extinguishing point adaptor. | Applicable to all SD3 Sherpa aircraft. Compliance required as detailed in Service Bulletin. |
| 007–05–2002 | SB SD360 SHERPA–26–1 | *Fire Protection* – To introduce new insert at forward baggage bay fire extinguishing point adaptor. | Applicable to all SD3–60 Sherpa aircraft. Compliance required as detailed Service Bulletin. |
| 004–06–2002 | SB SD3 SHERPA–31–2 | *Indicating/Recording System* – Introduction of ice VANE annunciators on the central warning panel (CWP). | Applicable to all SD3 Sherpa aircraft. Compliance required as detailed in Service Bulletin. |
| 005–06–2002 | SB SD360 SHERPA–31–1 | *Indicating/Recording System* – Introduction of ice VANE annunciators on the central warning panel (CWP). | Applicable to all SD3–60 Sherpa aircraft. Compliance required as detailed in Service Bulletin. |
| 003–04–2003 | SB SD360 SHERPA–32–2 | *Landing Gear* – To inspect MLG aft pintle pin bushes for stiffness and condition. | Applicable to SD3–60 Sherpa aircraft. Compliance required as detailed in Service Bulletin. |
| 004–04–2003 | SB SD3 SHERPA–32–3 | *Landing Gear* – To inspect MLG aft pintle pin bushes for stiffness and condition. | Applicable to SD3 Sherpa aircraft. Compliance required as detailed in Service Bulletin. |
| 004–05–2003 | SB SD3 SHERPA–53–6 | *Fuselage* – To inspect stub wing shear decks in way of retaining pin at main landing gear (MLG) forward pintle pin, and install new bushes where required. | Applicable to SD3 Sherpa aircraft, except aircraft which have embodied Service Bulletin SD3 Sherpa–32–4. Compliance required as detailed in Service Bulletin. |
| 001–06–2003 | SB SD360 SHERPA–55–1 | *Stabilisers* – To inspect vertical stabiliser to horizontal stabiliser attachment bolts and upper shear angle. | Applicable to all SD3–60 Sherpa aircraft. Compliance required as detailed in Service Bulletin. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 008–06–2003 | SB SD360 SHERPA–32–1 | *Landing Gear* – To embody the requirements of Messier-Dowty Ltd Service Bulletin No. 32–78SD. | Applicable to SD3–60 Sherpa with units as defined in Messier-Dowty Ltd Service Bulletin No. 32–78SD. Compliance required as detailed in Service Bulletin. |

# United Kingdom Civil Aviation Authority

# AIRWORTHINESS DIRECTIVE

## AD No: G-2004-0021

Issue Date: 25 August 2004

This AD is issued by the UK CAA acting for and on behalf of the European Aviation Safety Agency as the Primary Aviation Authority (ICAO Annex 8 Authority of State of Design) for the affected product(s).

Approved by the European Aviation Safety Agency under approval number 2004-9032 on 24 August 2004.

In accordance with Article 9(7)(b) of the Air Navigation Order 2000 as amended the following action required by this Airworthiness Directive (AD) is mandatory for applicable aircraft registered in the United Kingdom.
No person may operate an aircraft to which an AD applies except in accordance with the requirements of that AD unless otherwise agreed with the Authority of the State of Registry.

| Type Approval Holders Name: | Type/Model Designation(s): |
|---|---|
| **SHORT BROTHERS PLC** | **SD3-30, SD3-60, SD3-SHERPA, SD3-60 SHERPA** |

**Type Certificate Data Sheet No:** BA11

**Superseded/ Revised ADs:** None

### ATA 28 - FUEL SYSTEM – INTRODUCTION OF ADDITIONAL BONDING AND ADDITIONAL BONDING/INSULATION CHECKS ON FUEL TANK INTERNAL COMPONENTS

**Manufacturer(s):** Short Brothers PLC

**Applicability:** Models SD3-30, SD3-60, SD3-Sherpa and SD3-60 Sherpa aeroplanes, certificated in any category.

**Reason:** The FAA and JAA have examined the underlying safety issues involved in recent fuel tank explosions on several large transport aeroplanes, including the adequacy of existing regulations, the service history of aeroplanes subject to those regulations, and existing maintenance practices for fuel tank systems. As a result of those findings, the FAA issued a regulation titled “Transport Airplane Fuel Tank Systems Design Review, Flammability Reduction and Maintenance and Inspection Requirements”. In addition to new airworthiness standards for transport aeroplanes and new maintenance requirements, the rule included Special Federal Aviation Regulation No. 88. JAA worked closely with FAA and published their equivalent requirements in JAA Fuel Tank Safety Recommendation Letter reference 04/00/02/07/03-L024 dated 3 February 2003.

Among other actions, SFAR 88 and the JAA Safety Recommendation Letter require certain type design holders to substantiate that their fuel tank systems can prevent ignition sources in the fuel tanks. This requirement applies to type design holders for large turbine-powered transport aeroplanes and for subsequent modifications to those aeroplanes. It requires them to perform design review and to develop design changes and maintenance procedures if their designs do not meet the new fuel tank safety standards. Airworthiness Directives will be adopted to mandate any changes found necessary to address unsafe conditions identified as a result of these reviews.

In evaluating these reviews FAA and JAA established four criteria intended to define the unsafe conditions associated with fuel tank systems that require corrective actions. The percentage of operating time during which fuel tanks are exposed to flammable conditions is one of these criteria. The other three criteria address the failure types under evaluation: single failures, single failures in combination with other latent condition(s) and in-service failure experience. For all four criteria, the evaluations included consideration of previous actions taken that may mitigate the need for further action.

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Based on this process, EASA has determined that the actions identified in this Airworthiness Directive (AD) are necessary to reduce the potential of ignition sources inside fuel tanks, which, in combination with flammable fuel vapours in fuel tank explosions and consequent loss of the aeroplane. In this case, two additional bonding jumpers between the fuel vent pipes and the aircraft structure are required, as are additional inspections including bonding/insulation checks on internal components of the fuel tank.

**Effective Date:** 9 September 2004

**Compliance/Action: Compliance/Action**

a) Within 1 month after the effective date of this AD, insert Shorts Flight Manual Advance Amendment Bulletin 1/2004 or later EASA approved revision in the Aircraft Flight Manual.

b) Within 6 months after the effective date of this AD, perform the following tasks in accordance with the applicable Shorts Service Bulletin or later EASA approved revision specified in Table 1 of this AD.

| Aircraft Type/ Model | Applicable Service Bulletin | Aircraft Maintenance Manual Sections 5-20-01 & 5-20-02 introduced by |
|---|---|---|
| SD3-30 | SD 330-28-37 initial issue dated June 2004 | TR330-AMM-14 Dated July 2004 |
| SD3-60 | SD 360-28-23 initial issue dated June 2004 | TR360-AMM-33 Dated July 2004 |
| SD3-SHERPA | SD3 SHERPA-28-2 initial issue dated June 2004 | TRSD3S-AMM-15 Dated July 2004 |
| SD3-60 SHERPA | SD360 SHERPA-28-3 initial issue dated June 2004 | TRSD360S-AMM-14 Dated July 2004 |

Table 1

i. Carry out an insulation resistance check of the fuel tank float switches in accordance with Section 2 Part A of the applicable Service Bulletin.

ii. Inspect the condition of the Fuel Quantity Gauging System sensor cables and the cable supports inside the fuel tanks in accordance with Section 2 Part B of the applicable Service Bulletin.

iii. Inspect the integrity of the existing bonding of the 2 off vent pipes inside cell 2 of the forward fuel tank in accordance with Section 2 Part C of the applicable Service Bulletin.

iv. Install new bonding jumper wires between the forward and aft fuel tank vent pipes and the aircraft structure in accordance Section 2 Part D of the applicable Service Bulletin.

Any defect identified as a result of performing the tasks specified in Paragraph b) must be rectified prior to further flight.

c) Upon completion of Paragraph b) of this AD, compliance with section 5-20-01 and 5-20-02 of the applicable Aircraft Maintenance Manual introduced as specified in Table 1 (or later approved AMM revision) of this AD is mandatory.

**Reference Publications:** Shorts Service Bulletins, Aircraft Maintenance Manual Temporary Revisions and Flight Manual Advance Amendment Bulletin 1/2004 - copies may be obtained from Short Brothers PLC, PO Box 241, Airport Road, Belfast BT3 9DZ, Northern Ireland.

**Remarks:** Enquiries regarding this Airworthiness Directive may be directed to Civil Aviation Authority, Safety Regulation Group, Certification and Approvals Department, Aviation House, Gatwick Airport South, West Sussex, RH6 0YR, United Kingdom. Phone: +44 (0) 1293 5733289 Fax: +44 (0) 1293 573976 E-mail: peter.moule@srg.caa.co.uk

# United Kingdom Civil Aviation Authority

# AIRWORTHINESS DIRECTIVE

## AD No: G-2004-0022

Issue Date: 25 August 2004

This AD is issued by the UK CAA acting for and on behalf of the European Aviation Safety Agency as the Primary Aviation Authority (ICAO Annex 8 Authority of State of Design) for the affected product(s).

Approved by the European Aviation Safety Agency under approval number 2004-9033 on 24 August 2004.

In accordance with Article 9(7)(b) of the Air Navigation Order 2000 as amended the following action required by this Airworthiness Directive (AD) is mandatory for applicable aircraft registered in the United Kingdom.
No person may operate an aircraft to which an AD applies except in accordance with the requirements of that AD unless otherwise agreed with the Authority of the State of Registry.

| Type Approval Holders Name: | Type/Model Designation(s): |
|---|---|
| **SHORT BROTHERS PLC** | **SD3-60, SD3-SHERPA, SD3-60 SHERPA** |

**Type Certificate Data Sheet No:** BA11

**Superseded AD:** 007-08-92

### ATA 32 - LANDING GEAR – MAIN LANDING GEAR – REAR PINTLE PIN – INSPECTION OF BUSH ASSEMBLY AT FORK END

**Manufacturer(s):** Short Brothers PLC

**Applicability:** Models SD3-60, SD3-Sherpa and SD3-60 Sherpa aeroplanes, certificated in any category.

**Reason:** Following an incident on an SD3 aircraft where a main landing gear rear pintle pin fork end failed. Investigation by the landing gear manufacturer determined that the primary cause of the failure was attributable to corrosion under the bushes in the fork end. Deteriorated or missing sealant around the edges of the bushes allowed the ingress of moisture and allowed the onset of corrosion. The CAA published Airworthiness Directive (AD) 007-08-92 which mandated accomplishment of Messier Dowty Service Bulletin 32-70SD and Shorts Service Bulletin SD360-32-33 to detect and correct corroded components.

Since the publication of AD 007-08-92 the aircraft manufacturer has informed the CAA of another incident on an SD3 aircraft where the pintle pin fork end had cracked. This AD supersedes CAA AD 007-08-92 and requires further inspections to identify damaged pintle pin fork ends.

**Effective Date:** 9 September 2004

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**Compliance/Action:** Required at the next 'B' check, but no later than three months after the effective date of this AD, Carry out an inspection of the main landing gear rear pintle pin assemblies for correctly applied sealant in accordance with Shorts Service Bulletin SD360-32-37, SD3 SHERPA-32-5 or SD360 SHERPA-32-4 Section 1.C Part A, as applicable or later EASA approved revision.

If the sealant is incorrectly applied, at the next 'C' Check, but no later than 12 months after the effective date of this AD, perform a magnetic flaw detection inspection of the rear pintle pin fork ends in accordance with Shorts Service Bulletin SD360-32-37, SD3 SHERPA-32-5 or SD360 SHERPA-32-4 Section 1.C Part B, as applicable or later EASA approved revision.

Cracked pintle pin fork ends must be replaced with a serviceable item that has been inspected in accordance with this AD before further flight.

**Reference Publications:** Shorts Service Bulletins SD-360-37, SD Sherpa-32-5 and SD360 Sherpa-32-4 may be obtained from Short Brothers PLC, PO Box 241, Airport Road, Belfast BT3 9DZ, Northern Ireland.

**Remarks:** Enquiries regarding this AD may be directed to Civil Aviation Authority, Safety Regulation Group, Certification and Approvals Department, Aviation House, Gatwick Airport South, West Sussex, RH6 0YR, United Kingdom. Phone: +44 (0) 1293 573289, Fax: +44 (0) 1293 573976, e-mail: peter.moule@srg.caa.co.uk

**SHORT BROTHERS SD3–60 SERIES AIRCRAFT**

CAA Type Certificate No. BA11

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 022–06–83 | SD360–25–05 | *Equipment/Furnishings* – To embody the requirements of Irvin Great Britain Ltd Service Bulletin No. 2 – Introduction of single-action type quick release. | Applicable to all SD3–60 aircraft fitted with Irvin Aircrew Safety Harness Type AH6/6. Compliance required in accordance with Irvin Great Britain Ltd Service Bulletin No. 2. |
| 027–06–83 | SD360–32–A03 | *Landing Gear* – MLG Rear pintle pin/inboard bush lubrication and inspection. | Applicable to all SD3–60 aircraft. Compliance required as detailed in Service Bulletin. |
| 003–09–83 | Dowty Rotol SB 32–17SD | *Main and nose undercarriage* – Lifing of units and component details. | Applicable to all SD3–60 aircraft. Compliance required as detailed in Service Bulletin.<br>NOTE: Dowty Rotol Service Bulletin 32–17SD supersedes Service Bulletin 32–6SD which was previously recorded against this AD number. |
| 004–09–83 | Dowty Rotol SB 32–4SD | *Nose undercarriage* – Introduction of new main fitting. | Cancelled and superseded by CAA AD No. 017–11–83. |
| 005–09–83 | Dowty Rotol SB 32–3SD | *Nose undercarriage* – Steering actuator – Introduction of larger diameter attachment screws. | Cancelled and superseded by CAA AD No. 016–11–83. |
| 013–11–83 | SD360–32–07 | *Landing Gear* – To embody the requirements of Dowty Rotol Service Bulletin No. 32–7SD – Main undercarriage Shock Absorber – New Gland Housing. | Service Bulletin has been cancelled therefore the AD is now cancelled. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 014–11–83 | SD360–32–08 | *Landing Gear* – To embody the requirements of Dowty Rotol Service Bulletin No. 32–8SD – Main Undercarriage – Wheel Lever – Introduction of strengthened brake plate bolt. | Service Bulletin has been cancelled therefore the AD is now cancelled. |
| 015–11–83 | SD360–32–10 | *Landing Gear* – To embody the requirements of Dowty Rotol Service Bulletin No. 32–11SD – Main Undercarriage – Pintle Pin – Pintle Nut. | Applicable to all SD3–60 aircraft with units as defined in Dowty Rotol Service Bulletin. Compliance required as detailed in Dowty Rotol Service Bulletin. |
| 016–11–83 | SD360–32–11 | *Landing Gear* – To embody the requirements of Dowty Rotol Service Bulletin No. 32–3SD – Nose Undercarriage – Steering Actuator – Introduction of larger diameter attachment screws. | Service Bulletin has been cancelled therefore the AD is now cancelled. |
| 017–11–83 | SD 360–32–12 | *Landing Gear* – To embody the requirements of Dowty Rotol Service Bulletin No. 32–4SD – Nose Undercarriage – Introduction of new main fitting. | Service Bulletin has been cancelled therefore the AD is now cancelled. |
| 019–11–83 | SD 360–71A02 | *Powerplant* – Inspection of engine flexible mounts, Barry Pt. No. 93880–12. | Applicable to all SD3–60 aircraft fitted with Barry engine mounts Pt. No. 93880–12. Compliance as detailed in Service Bulletin. |
| 006–12–83 | Maintenance Manual | Mandatory Life Limitations. | The limitations listed in the Maintenance Manual are Mandatory for aircraft on the United Kingdom Register. |
| 002–03–84 | SD360–71–05 | *Powerplant* – To replace oil cooler left air intake scoop. | Applicable to aircraft Serial Nos. SH 3601 to SH 3634 inclusive. Compliance required as detailed in Service Bulletin. |
| 006–04–84 | SD360–34–09 | *Pitot Static System* – To inspect and, where necessary, replace pitot tubes. | Applicable to SD3–60 aircraft. Compliance required as detailed in SB. |
| 015–05–84 | SD360–53–11 | *Fuselage* – To strengthen bottom sector of Frame 475. | Applicable to aircraft Serial Nos. SH3601 to SH3633 inclusive. Compliance required as detailed in Service Bulletin. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 010–10–84 | SD360–28–06 | *Fuel* – To seal fuel tank electrical connections. | Applicable to aircraft Serial Numbers as detailed in SB. Compliance required as detailed in SB. |
| 010–01–85 | SD360–IL–80 | *Flight Manual.* Amended instructions for systems operation. Ice and rain protections systems. | Applicable to all SD3–60 aircraft. Compliance required as detailed in Information Letter. |
| 007–03–85 | SD360–27–06 | *Flight Controls* – To improve the integrity of mounting of elevator torque tube. | Applicable to aircraft Serial Nos as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. |
| 006–05–85 | SD 360–55–02 | *Stabilisers* – To increase mass balance on elevator tab and elevator. | Applicable to aircraft Serial Nos SH 3601 to SH 3622 inclusive. Compliance required as detailed in Service Bulletin. |
| 006–08–85 | SD360–27–04 | *Flight Controls* – Introduction of guards in way of elevator and rudder control levers. | Applicable to aircraft Serial Nos. SH3601 to SH3665 inclusive. Compliance required as detailed in Service Bulletin. |
| 017–09–85 | SD360–55–06 | *Stabilisers* – Introduction of Cherrymax rivets and bolts at rear spar of horizontal stabiliser. | Applicable to aircraft Serial Nos. SH 3601 to SH 3678 inclusive. Compliance required as detailed in Service Bulletin. |
| 019–09–85 | SD360–55–11 | *Stabilisers* – Inspection of spar webs of horizontal stabilisers. | Applicable to aircraft Serial Nos SH3601 to SH3691 inclusive and SH3694. Compliance required as detailed in Service Bulletin. |
| 007–10–85 | SD360–55–10 | *Stabilisers* – Inspection for looseness of bushes in tailplane attachment fittings. | Applicable to all SD3–60 aircraft. Compliance required as detailed in Service Bulletin. |
| 008–10–85 | SD360–28–17 | *Fuel* – To introduce daily water drain checks and to invert the fuel LP booster pump in the forward and aft fuel collector tanks. | Applicable to aircraft Serial Nos. SH3601 to SH3677 inclusive. Compliance required as detailed in Service Bulletin. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 009–11–85 | SD360–53–22 | *Fuselage* – To apply sealant to certain areas of the fuselage top skin. | Applicable to aircraft Serial Nos. as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. |
| 007–03–86 | SD360–27–10 | *Flight Controls* – To alter green band on elevator trim control indicator for PT6A–65R engines. | Applicable to all SD3–60 aircraft fitted with Pratt & Whitney PT6A–65R engines. Compliance required as detailed in Service Bulletin. |
| 008–03–86 | SD360–27–11 | *Flight Controls* – To alter green band on elevator trim control indicator for PT6A–65AR engines. | Applicable to aircraft Serial Nos. as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. |
| 002–04–86 | SD360–31–04 | *Indicating/Recording Systems* – To fit a cover to protect FDR. | Applicable to aircraft Serial Nos SH3601 to SH3679 inclusive. Compliance required as detailed in Service Bulletin. |
| 003–04–86 | SD360–28–12 | *Fuel* – Introduction of improved fuel pipe shrouds, also new rubber seals and Dowty seals together with inspection of fuel pipes. | Applicable to aircraft Serial Nos. SH3601 to SH3661 and SH3663 to SH3665 inclusive. Compliance required as detailed in Service Bulletin. |
| 005–05–86 | SD360–27–09 | *Flight Controls* – To prevent incorrect installation of aileron control lever and rods. | Applicable to aircraft Serial Nos SH 3601 to SH 3676 inclusive. Compliance required as detailed in Service Bulletin. |
| 013–07–86 | SD360–24–06 | *Electrical Power* – To insulate ECE contactor bodies. | Applicable to aircraft Serial Nos. SH 3601 to SH 3695 inclusive. Compliance required as detailed in Service Bulletin. |
| 006–10–86 | SD360–32–23 | *Landing Gear* – To reposition Keystone landing gear warning horn as fitted and to replace Lucas with Keystone when required. | Applicable to aircraft Serial Nos as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. |
| 010–11–86 | SD360–22–11 | *Autoflight* – To inspect servo cables and cable guard posts for correct installation. | Applicable to aircraft Serial Nos SH3632, SH3648, SH3651, SH3686, SH3687, SH3688 and SH 3689. Compliance required as detailed in Service Bulletin. |
| 003–01–87 | SD360–25–34 | *Equipment/Furnishing* – Non-compliance of left-hand garment bag stowage. | Applicable to all SD3–60 aircraft with facility for fitment of garment bag stowage. Compliance required as detailed in Service Bulletin not later than 31 March 1987. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 013–01–87 | SD360–61–A04 | *Propellers* – Inspection of Hartzell propeller blades. | Applicable to all SD3–60 aircraft. Compliance required as detailed in Alert Service Bulletin. |
| 007–03–87 | SD360–24–12 | *Electrical Power* – To introduce protection against ground supply reverse polarity. | Applicability to aircraft Serial Nos SH 3601 to SH 3676 inclusive. Compliance required as detailed in Service Bulletin. |
| 002–04–87 | SD360–27–16 | *Flight Controls* – To improve rudder gust lock. | Applicable to aircraft Serial Nos SH 3601 to SH 3715 inclusive. Compliance required as detailed in Service Bulletin not later than 31 January 1988. |
| 005–04–87 | SD360–61–A05 | *Propellers* – Life limitation of specific blades. | Applicable to aircraft Serial Nos SH 3604, SH 3608, SH 3611, SH 3633, SH 3637, SH 3638, SH 3641, SH 3686, SH 3687 and SH3688. Compliance required as detailed in Alert Service Bulletin. |
| 004–07–87 | SD360–61–06 | *Propellers* – To embody the requirements of Hartzell Propeller Inc Service Bulletin 154. Replacement blade requirements for propeller Models HC–B5MP–3()/ M10876K. | Applicable to aircraft Serial Nos SH3601 to SH3715 inclusive. Compliance required as detailed in Service Bulletin. |
| 011–09–87 | SD360–34–31 | *Navigation* – To alter power source for IDC altimeter. | Applicable to aircraft Serial Nos. as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. |
| 006–02–88 | SD360–32–28 | *Landing gear* – Nose landing gear – Security of abutment plate screws. | Applicable to SD3–60 aircraft as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. Dowty Rotol Service Bulletin 32–57SD also refers and is referenced under this AD No. in the Instruments and Equipment section. |
| 002–04–88 | SD360–55–16 | *Stabilizers* – To inspect horizontal rear spar web to boom riveting. | Applicable to aircraft Serial Nos SH3601 to SH3691 inclusive and SH3694. Compliance required as detailed in Service Bulletin. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 011–04–88 | SD360–76–08 | *Engine Controls* – To inspect cables in power control circuit. | Applicable to all SD3–60 aircraft. Compliance required as detailed in Service Bulletin. |
| 012–04–88 | SD360–27–21 | *Flight Controls* – To inspect/adjust microswitch WM2 in rudder gust lock system. | Applicable to all SD3–60 aircraft. Compliance required as detailed in Service Bulletin. |
| 002–05–90 | SD360–24–18 | *Electrical Power* – To revise power source for pitot static heaters. | Applicable to aircraft Serial Nos. as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. |
| 007–09–90 | SD360–76–11 | *Engine Controls* – To modify ground/air lever. | Applicable to aircraft as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. |
| 016–02–91 | SD360–28–20 | *Fuel* – To prevent inadvertent operation of LP levers. | Applicable to all SD3–60 aircraft. Compliance required as detailed in Service Bulletin. |
| 010–03–91 | SD360–57–12 | *Wings* – To inspect wing strut attachment fittings, on outer wing and stub wing, for cracks. | Applicable to SD3–60 aircraft Serial Nos. SH3601 to SH3642 inclusive. Compliance required as detailed in Service Bulletin. |
| 003–05–91 | SD360–55–17 | *Stabilizers* – To inspect rudder torque tube fitting for signs of exfoliation corrosion and repair where necessary. | Applicable to all SD3–60 aircraft. Compliance required as detailed in Service Bulletin. |
| 006–06–91 | SD360–33–22 | *Lights* – To alter the power supply to the Emergency Lighting System. | Superseded by CAA AD 009–06–92. |
| 008–06–92 | SD360–32–32 | *Landing Gear* – Main landing gear – Actuator – Wear to the piston rod slots. | Applicable to SD3–60 aircraft fitted with actuator unit Part No. 104796004 Serial Nos. DRG/4729/86, DRG/4730/86, DRG/5057/86, DRG/5059/86, DRG/5060/86 and DRG/5061/86. Compliance required as detailed in Service Bulletin. |
| 009–06–92 | SD360–33–23 | *Lights* – To alter the power supply to the emergency lighting system. | Applicable to SD3–60 aircraft Serial Nos. SH3601–SH3763 as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 007–08–92 | SD360–32–33 | *Landing Gear* – Main landing gear – Rear pintle pin – Inspection of bush assembly at fork end. | Cancelled and superseded by AD G–2004–0022. |
| 026–01–93 | SD360–55–19 | *Stabilisers* – To perform ultrasonic inspection of attachment lugs of horizontal stabiliser. | Applicable to all aircraft with tailplanes with 20 000 flights accumulated. Compliance required as detailed in Service Bulletin. |
| 014–03–93 | SD360–53–38 | *Fuselage* – To inspect distance piece and adjacent side plates in wing strut pick up on stub wing. | Applicable to all aircraft. Compliance required as detailed in Service Bulletin. |
| 013–02–94 | SD360–27–23 | *Flight Controls* – To improve the rudder gust lock system. | Applicable to aircraft as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. |
| 007–09–95 | SD360–27–24 | *Flight Controls* – To inspect flap hydraulic units in wings. | Applicable to all aircraft. Compliance required as detailed in Service Bulletin. |
| 010–09–95 | SD360–32–34 | *Landing Gear* – To embody the requirements of Messier-Dowty Ltd Service Bulletin No. 32–78SD. Main Landing Gear – To make an inspection of the shock absorber gland nut. | Applicable to all aircraft with units as defined in Messier-Dowty Ltd Service Bulletin. Compliance required as detailed in Short Brothers Service Bulletin. |
| 007–05–96 | SD360–33–25 | *Lights* – To introduce new strobe light and power supply with associated hardware. | Applicable to all 200 variant aircraft. Compliance required as detailed in Service Bulletin. |
| 005–09–96 | SD360–53–42 | *Fuselage* – To inspect stub wing shear decks in way of retaining pin at MLG forward pintle pin and install new bushes where required. | Applicable to SD3–60 aircraft except aircraft which have embodied Service Bulletin SD360–32–25. Compliance required as detailed in Service Bulletin. |
| 011–01–97 | SD360–27–26 | *Flight Controls* – To inspect inner flap sub-assembly lever bracket and levers. | Applicable to all aircraft. Compliance required as detailed in Service Bulletin. |
| 008–09–97 | SD360–39–04 | *Electronic/Electrical components and multipurpose units* – Inspection of diodes (6F40) and check torque tightening. | Applicable to all aircraft. Compliance required as detailed in Service Bulletin. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 006–11–97 | SD360–53–43 | *Fuselage* – To inspect stub wing shear decks and ribs for corrosion, rework or report findings as necessary. | Applicable to all aircraft. Compliance required as detailed in Service Bulletin. |
| 010–10–98 | SD360–29–06 | *Fuselage* – To inspect emergency brake accumulator mounting structure. | Applicable to all aircraft. Compliance required as detailed in Service Bulletin. |
| 015–11–98 | SD360–11–23 | *Placards and Markings* – To introduce a revised engine limitations label. | Applicable to SD3–60 aircraft Serial Nos. SH3716 to SH3763 inclusive. Compliance required as detailed in Service Bulletin. |
| 016–11–98 | SD360–27–27 | *Flight Controls* – To inspect elevator trim control cables for signs of wear or broken wires. | Applicable to all aircraft. Compliance required as detailed in Service Bulletin. |
| 017–11–98 | SD360–27–28 | *Flight Controls* – To replace existing bolts in elevator control torque tube bearing housing retaining plate with hex. head bolts. | Applicable to all aircraft. Compliance required as detailed in Service Bulletin. |
| 018–11–98 | SD360–71–18 | *Powerplant* – To inspect the engine mounting tubes, tube end fittings, taper pins and foot fittings for corrosion, replace if necessary and report findings. | Applicable to all aircraft. Compliance required as detailed in Service Bulletin. |
| 003–12–98 | SD360–26–11 | *Fire Protection* – To introduce new fire extinguisher adaptor covers for forward and rear baggage bays. | Applicable to all aircraft. Compliance required as detailed in Service Bulletin. |
| 011–03–99 | SD360–21–23 | *Air Conditioning* – To accomplish changes required by Service Bulletin SD360–21–21 Revision 1. | Applicable to all aircraft which have incorporated Service Bulletin SD360–21–21 at original issue. Compliance required as detailed in Service Bulletin. |
| 008–04–2000 | SD360–27–30 | *Flight Controls* – To inspect flight control trim chains and cable/chain assemblies for manufacture using 'Spring Clip' connecting links. | Applicable to all aircraft. Compliance required as detailed in Service Bulletin. |
| 005–02–2001 Revision 1 | SD360–71–19 | *Powerplant* – To introduce 'Static reduced to MTOP power check'. | Service Bulletin cancelled at Revision 2 therefore AD is cancelled at Revision 1. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 001–04–2001 | SD 360–30–26 | *Ice and Rain Protection* – To inspect wiring to heated windshield for fouling with flight instruments. | Applicable to all aircraft. Compliance required as detailed in Service Bulletin. |
| 007–04–2001 | SD 360–24–25 | *Electrical Power* – To inspect for possible fouling of hydraulic pipelines serving 7P panel with adjacent electrical wiring harnesses and to replace hydraulic pipeline if required. | Applicable to all aircraft. Compliance required as detailed in Service Bulletin. |
| 009–05–2001 | SD 360–27–31 | *Flight Controls* – To inspect elevator torque shaft assembly bearing housings. | Applicable to all aircraft. Compliance required as detailed in Service Bulletin. |
| 008–05–2002 | SD 360–26–13 | *Fire Protection* – To introduce new inserts at forward and aft baggage bay fire extinguishing point adaptors. | Applicable to all aircraft. Compliance required as detailed in Service Bulletin. |
| 003–06–2002 | SD 360–31–06 | *Indicating/Recording System* – Introduction of ice VANE annunciators on the central warning panel (CWP). | Applicable to all aircraft. Compliance required as detailed in Service Bulletin. |
| 008–08–2002 | SD 360–71–20 | *Powerplant* – To inspect the engine support tubes, tube end fittings and taper pins for corrosion. | Applicable to all aircraft. Compliance required as detailed in Service Bulletin. |
| 004–11–2002 | SD 360–53–44 | *Stabilisers* – To inspect vertical stabiliser web fittings for corrosion. | Cancelled and superseded by AD G-2004-0005. |
| 002–04–2003 | SD 360–32–36 | *Landing Gear* – To inspect MLG aft pintle pin bushes for stiffness and condition. | Applicable to all aircraft. Compliance required as detailed in Service Bulletin. |
| 009–06–2003 | SB 360–55–20 | *Stabilizers* – To inspect elevator trim tab balance weight brackets for cracks and repair/replace if required. | Applicable to all aircraft. Compliance required as detailed in Service Bulletin. |

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# United Kingdom Civil Aviation Authority

# AIRWORTHINESS DIRECTIVE

## AD No: G-2004-0005

Issue Date: 2 March 2004

This AD is issued by the UK CAA acting for and on behalf of the European Aviation Safety Agency as the Primary Aviation Authority (ICAO Annex 8 Authority of State of Design) for the affected product(s).

Approved by the European Aviation Safety Agency under approval number 2004-1699 on 26 February 2004.

In accordance with Article 9(7)(b) of the Air Navigation Order 2000 as amended the following action required by this Airworthiness Directive (AD) is mandatory for applicable aircraft registered in the United Kingdom.
No person may operate an aircraft to which an AD applies except in accordance with the requirements of that AD unless otherwise agreed with the Authority of the State of Registry.

| Type Approval Holders Name: | Type/Model Designation(s): |
|---|---|
| **SHORTS BROTHERS PLC** | **SD3-60** |

**Type Certificate Data Sheet No:** BA11

**Superseded/ Revised ADs:** 004-11-2002

**ATA 53 - STABILIZERS – INSPECTIONS OF VERTICAL STABILIZER SHEAR ATTACHMENTS FOR CORROSION AND REPLACEMENT IF REQUIRED**

**Manufacturer(s):** Short Brothers PLC

**Applicability:** Model SD3-60 aeroplanes (excluding SD3-60 Sherpa) certificated in any category.

**Reason:** Short Brothers Service Bulletin SD360-53-44 required a detailed visual inspection of the fin front spar web to fuselage upper skin shear attachment fitting p/n SD3-12-6978 and the fin rear spar web to root rib shear cleat p/n SD3-32-6384 for corrosion. As a consequence of additional reported findings of corrosion in the other fin attachment fittings, p/n SD3-12-6923 and SD3-32-6441/6694, a revised inspection/replacement programme is required to include additional fittings and to introduce appropriate continuing airworthiness instructions to determine the continued serviceability of the fittings when corrosion is detected.

**Effective Date:** 16 March 2004

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**Compliance/Action:** Required at next 4800 Flight Hour structural inspection but no later than 30 May 2004, unless previously accomplished.

A(i) Inspect vertical stabiliser shear attachment fittings part numbers SD3-12-6978, SD3-32-6384, SD3-12-6923 and SD3-32-6441 (or SD3-32-6694) for corrosion in accordance with Section 2 Accomplishment Instructions of Short Brothers Service Bulletin SD360-53-45 dated December 2003 or later CAA approved revision. Aircraft previously inspected in accordance with Short Brothers Service Bulletin SD360-53-44 are deemed to have satisfied the requirement for this initial inspection provided no corrosion was detected. Where corrosion was detected and the affected fitting has not yet been replaced, a review of the inspection findings must be made to determine if the corrosion was within the acceptable limits specified in SD360-53-45.

(ii) Any corrosion detected on any of the fittings and assessed to be unacceptable must be replaced before further flight in accordance with Section 2 Part B of Short Brothers Service Bulletin SD360-53-45 dated December 2003 or later CAA approved revision.

(iii) Where corrosion is detected on any of the fittings and assessed to be within acceptance limits, a repetitive inspection of each affected fitting shall be performed every 6 months commencing from the date of the initial inspection, until the fitting is replaced. Replacement of all corroded fittings is required no later than 18 months from the date of the initial inspection carried out in accordance with paragraph A(i) above.

B Where no corrosion is detected or from the date of replacement, future inspections of the fittings shall be carried out in accordance with Short Brothers Recommended Maintenance Programme (Section 5-26-53, ATA 53-40, Item 12(d) and Section 5-26-55, ATA 55-30, Item 5(a) or equivalent reference in Supplement 1 for aircraft beyond half life), at intervals not exceeding 24 from the initial inspection/replacement.

**Reference Publications:** Short Brothers Service Bulletin SD360-53-45 dated December 2003 and Aircraft Maintenance Programme 5-26-53 and 5-26-55. Copies may be obtained from Short Brothers PLC, PO Box 241, Airport Road, Belfast BT3 9DZ, Northern Ireland.

**Remarks:** Enquires regarding this Airworthiness Directive should be directed to Civil Aviation Authority, Safety Regulation Group, Programmes Department, Aviation House, Gatwick Airport South, West Sussex, RH6 0YR, United Kingdom. Phone: +44 (0) 1293 573316, Fax: +44 (0) 1293 573976, e-mail: paul.sparkes@srg.caa.co.uk

# United Kingdom Civil Aviation Authority

# AIRWORTHINESS DIRECTIVE

## AD No: G-2004-0021

Issue Date: 25 August 2004

This AD is issued by the UK CAA acting for and on behalf of the European Aviation Safety Agency as the Primary Aviation Authority (ICAO Annex 8 Authority of State of Design) for the affected product(s).

Approved by the European Aviation Safety Agency under approval number 2004-9032 on 24 August 2004.

In accordance with Article 9(7)(b) of the Air Navigation Order 2000 as amended the following action required by this Airworthiness Directive (AD) is mandatory for applicable aircraft registered in the United Kingdom.
No person may operate an aircraft to which an AD applies except in accordance with the requirements of that AD unless otherwise agreed with the Authority of the State of Registry.

| Type Approval Holders Name: | Type/Model Designation(s): |
|---|---|
| **SHORT BROTHERS PLC** | **SD3-30, SD3-60, SD3-SHERPA, SD3-60 SHERPA** |

**Type Certificate Data Sheet No:** BA11

**Superseded/ Revised ADs:** None

### ATA 28 - FUEL SYSTEM – INTRODUCTION OF ADDITIONAL BONDING AND ADDITIONAL BONDING/INSULATION CHECKS ON FUEL TANK INTERNAL COMPONENTS

**Manufacturer(s):** Short Brothers PLC

**Applicability:** Models SD3-30, SD3-60, SD3-Sherpa and SD3-60 Sherpa aeroplanes, certificated in any category.

**Reason:** The FAA and JAA have examined the underlying safety issues involved in recent fuel tank explosions on several large transport aeroplanes, including the adequacy of existing regulations, the service history of aeroplanes subject to those regulations, and existing maintenance practices for fuel tank systems. As a result of those findings, the FAA issued a regulation titled “Transport Airplane Fuel Tank Systems Design Review, Flammability Reduction and Maintenance and Inspection Requirements”. In addition to new airworthiness standards for transport aeroplanes and new maintenance requirements, the rule included Special Federal Aviation Regulation No. 88. JAA worked closely with FAA and published their equivalent requirements in JAA Fuel Tank Safety Recommendation Letter reference 04/00/02/07/03-L024 dated 3 February 2003.

Among other actions, SFAR 88 and the JAA Safety Recommendation Letter require certain type design holders to substantiate that their fuel tank systems can prevent ignition sources in the fuel tanks. This requirement applies to type design holders for large turbine-powered transport aeroplanes and for subsequent modifications to those aeroplanes. It requires them to perform design review and to develop design changes and maintenance procedures if their designs do not meet the new fuel tank safety standards. Airworthiness Directives will be adopted to mandate any changes found necessary to address unsafe conditions identified as a result of these reviews.

In evaluating these reviews FAA and JAA established four criteria intended to define the unsafe conditions associated with fuel tank systems that require corrective actions. The percentage of operating time during which fuel tanks are exposed to flammable conditions is one of these criteria. The other three criteria address the failure types under evaluation: single failures, single failures in combination with other latent condition(s) and in-service failure experience. For all four criteria, the evaluations included consideration of previous actions taken that may mitigate the need for further action.

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Based on this process, EASA has determined that the actions identified in this Airworthiness Directive (AD) are necessary to reduce the potential of ignition sources inside fuel tanks, which, in combination with flammable fuel vapours in fuel tank explosions and consequent loss of the aeroplane. In this case, two additional bonding jumpers between the fuel vent pipes and the aircraft structure are required, as are additional inspections including bonding/insulation checks on internal components of the fuel tank.

**Effective Date:** 9 September 2004

**Compliance/Action: Compliance/Action**

a) Within 1 month after the effective date of this AD, insert Shorts Flight Manual Advance Amendment Bulletin 1/2004 or later EASA approved revision in the Aircraft Flight Manual.

b) Within 6 months after the effective date of this AD, perform the following tasks in accordance with the applicable Shorts Service Bulletin or later EASA approved revision specified in Table 1 of this AD.

| Aircraft Type/ Model | Applicable Service Bulletin | Aircraft Maintenance Manual Sections 5-20-01 & 5-20-02 introduced by |
|---|---|---|
| SD3-30 | SD 330-28-37 initial issue dated June 2004 | TR330-AMM-14 Dated July 2004 |
| SD3-60 | SD 360-28-23 initial issue dated June 2004 | TR360-AMM-33 Dated July 2004 |
| SD3-SHERPA | SD3 SHERPA-28-2 initial issue dated June 2004 | TRSD3S-AMM-15 Dated July 2004 |
| SD3-60 SHERPA | SD360 SHERPA-28-3 initial issue dated June 2004 | TRSD360S-AMM-14 Dated July 2004 |

Table 1

i. Carry out an insulation resistance check of the fuel tank float switches in accordance with Section 2 Part A of the applicable Service Bulletin.

ii. Inspect the condition of the Fuel Quantity Gauging System sensor cables and the cable supports inside the fuel tanks in accordance with Section 2 Part B of the applicable Service Bulletin.

iii. Inspect the integrity of the existing bonding of the 2 off vent pipes inside cell 2 of the forward fuel tank in accordance with Section 2 Part C of the applicable Service Bulletin.

iv. Install new bonding jumper wires between the forward and aft fuel tank vent pipes and the aircraft structure in accordance Section 2 Part D of the applicable Service Bulletin.

Any defect identified as a result of performing the tasks specified in Paragraph b) must be rectified prior to further flight.

c) Upon completion of Paragraph b) of this AD, compliance with section 5-20-01 and 5-20-02 of the applicable Aircraft Maintenance Manual introduced as specified in Table 1 (or later approved AMM revision) of this AD is mandatory.

**Reference Publications:** Shorts Service Bulletins, Aircraft Maintenance Manual Temporary Revisions and Flight Manual Advance Amendment Bulletin 1/2004 - copies may be obtained from Short Brothers PLC, PO Box 241, Airport Road, Belfast BT3 9DZ, Northern Ireland.

**Remarks:** Enquiries regarding this Airworthiness Directive may be directed to Civil Aviation Authority, Safety Regulation Group, Certification and Approvals Department, Aviation House, Gatwick Airport South, West Sussex, RH6 0YR, United Kingdom. Phone: +44 (0) 1293 5733289 Fax: +44 (0) 1293 573976 E-mail: peter.moule@srg.caa.co.uk

# United Kingdom Civil Aviation Authority

# AIRWORTHINESS DIRECTIVE

## AD No: G-2004-0022

Issue Date: 25 August 2004

This AD is issued by the UK CAA acting for and on behalf of the European Aviation Safety Agency as the Primary Aviation Authority (ICAO Annex 8 Authority of State of Design) for the affected product(s).

Approved by the European Aviation Safety Agency under approval number 2004-9033 on 24 August 2004.

In accordance with Article 9(7)(b) of the Air Navigation Order 2000 as amended the following action required by this Airworthiness Directive (AD) is mandatory for applicable aircraft registered in the United Kingdom.
No person may operate an aircraft to which an AD applies except in accordance with the requirements of that AD unless otherwise agreed with the Authority of the State of Registry.

| Type Approval Holders Name: | Type/Model Designation(s): |
|---|---|
| **SHORT BROTHERS PLC** | **SD3-60, SD3-SHERPA, SD3-60 SHERPA** |

**Type Certificate Data Sheet No:** BA11

**Superseded AD:** 007-08-92

### ATA 32 - LANDING GEAR – MAIN LANDING GEAR – REAR PINTLE PIN – INSPECTION OF BUSH ASSEMBLY AT FORK END

**Manufacturer(s):** Short Brothers PLC

**Applicability:** Models SD3-60, SD3-Sherpa and SD3-60 Sherpa aeroplanes, certificated in any category.

**Reason:** Following an incident on an SD3 aircraft where a main landing gear rear pintle pin fork end failed. Investigation by the landing gear manufacturer determined that the primary cause of the failure was attributable to corrosion under the bushes in the fork end. Deteriorated or missing sealant around the edges of the bushes allowed the ingress of moisture and allowed the onset of corrosion. The CAA published Airworthiness Directive (AD) 007-08-92 which mandated accomplishment of Messier Dowty Service Bulletin 32-70SD and Shorts Service Bulletin SD360-32-33 to detect and correct corroded components.

Since the publication of AD 007-08-92 the aircraft manufacturer has informed the CAA of another incident on an SD3 aircraft where the pintle pin fork end had cracked. This AD supersedes CAA AD 007-08-92 and requires further inspections to identify damaged pintle pin fork ends.

**Effective Date:** 9 September 2004

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**Compliance/Action:** Required at the next 'B' check, but no later than three months after the effective date of this AD, Carry out an inspection of the main landing gear rear pintle pin assemblies for correctly applied sealant in accordance with Shorts Service Bulletin SD360-32-37, SD3 SHERPA-32-5 or SD360 SHERPA-32-4 Section 1.C Part A, as applicable or later EASA approved revision.

If the sealant is incorrectly applied, at the next 'C' Check, but no later than 12 months after the effective date of this AD, perform a magnetic flaw detection inspection of the rear pintle pin fork ends in accordance with Shorts Service Bulletin SD360-32-37, SD3 SHERPA-32-5 or SD360 SHERPA-32-4 Section 1.C Part B, as applicable or later EASA approved revision.

Cracked pintle pin fork ends must be replaced with a serviceable item that has been inspected in accordance with this AD before further flight.

**Reference Publications:** Shorts Service Bulletins SD-360-37, SD Sherpa-32-5 and SD360 Sherpa-32-4 may be obtained from Short Brothers PLC, PO Box 241, Airport Road, Belfast BT3 9DZ, Northern Ireland.

**Remarks:** Enquiries regarding this AD may be directed to Civil Aviation Authority, Safety Regulation Group, Certification and Approvals Department, Aviation House, Gatwick Airport South, West Sussex, RH6 0YR, United Kingdom. Phone: +44 (0) 1293 573289, Fax: +44 (0) 1293 573976, e-mail: peter.moule@srg.caa.co.uk

## SHORT BROTHERS SC7 SKYVAN SERIES AIRCRAFT

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 0415 PRE 80 | 11–57 | *Placards* – Auto-Pilot – To add height lock restriction label when 2nd pilots stand-by static is selected. | Applicable to Skyvan Series 3 (Variants 100–11, –22, –24, –32, 200–7, 300–2, –3). Compliance required as detailed in Service Bulletin. |
| 0416 PRE 80 | 11–58 | *Placards* – To revise aircraft operational label for FAA requirements. FAR 23.–559 (a) FAR 23.1567(a). | Applicable to Skyvan Series 3 all 200 variant aircraft. Compliance required as detailed in Service Bulletin. |
| 0417 PRE 80 | 22–51 | *Auto-Pilot* – Improved torque limiting resistor board, actuator (mechanics). Computer actuator. | Applicable to all Skyvan Series 3 aircraft fitted with Sperry Autopilot SPL 45. Compliance required as detailed in Service Bulletin. |
| 0418 PRE 80 | 22–A59 | *Auto-Pilot* – Trapping of aileron servo control cable between the guide pulleys at Station 226. | Applicable to Skyvan Series 3, 3A and 3M fitted with auto-pilot. Compliance required as detailed in Service Bulletin. |
| 0419 PRE 80 | 24–55 | *Electrical Power* – To provide a new lid to suit fuse charts on panel 1D. | Applicable to Skyvan Series 3 (Variant 100–7). Compliance required as detailed in Service Bulletin. |
| 0420 PRE 80 | 24–54 | *Electrical Power* – To provide a new lid to suit fuse charts on panel 1D. | Applicable to Skyvan Series 3 (Variant 100–16). Compliance required as detailed in Service Bulletin. |
| 0421 PRE 80 | 24–65 | *Electrical Power* – To provide automatic power change-over for the 1st pilot's horizon. | Applicable to Skyvan Series 3, 3A and 3M. Compliance required as detailed in Service Bulletin. |
| 0422 PRE 80 | 26–A2 | *Fire Protection* – Revision of check weighing of automatic fire extinguishers type 132A. | Applicable to Skyvan Series 2 aircraft Serial Nos. SH1834, SH1835 and SH1837. Compliance required as detailed in Service Bulletin. |
| 0423 PRE 80 | 27–4 | *Flight Controls* – To replace elevator control lever with new unit of improved design. | Applicable to Skyvan Series 2. Compliance required as detailed in Service Bulletin. |
| 0424 PRE 80 | 27–55 | *Flight Controls* – To delete rigging bracket from rudder bar assembly. | Applicable to Skyvan Series 3 and 3A. Compliance required as detailed in Service Bulletin. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 0425 PRE 80 | 27–56A | *Flight Controls* – To check the flap control mechanism on top of fuselage for freedom of movement. | Applicable to Skyvan Series 3, 3A and 3M. Compliance required as detailed in Service Bulletin. |
| 0426 PRE 80 | 27–A64 | *Flight Controls* – To strengthen the flap mechanism support structure in the centre section at Station 197.2. | Applicable to Skyvan Series 3, 3A and 3M prior to Serial No. SH1955 which have exceeded 5000 landings. Compliance required as detailed in Service Bulletin. |
| 0427 PRE 80 | 27–66 | *Flight Controls* – Inspection of pin securing rod end bearing to aileron control rod SC7–45–1304. | Applicable to Skyvan Series 3, 3A and 3M. Compliance required as detailed in Service Bulletin. |
| 0428 PRE 80 | 30–50 | *Ice and Rain* – Revised TKS de-icing pipe run. | Applicable to Skyvan Series 3 fitted with TKS de-icing. Compliance required as detailed in Service Bulletin. |
| 0429 PRE 80 | 31–51 | *Instruments* – To introduce standby static corrected label for ASI (FAA). | Applicable to Skyvan Series 3 (all variant 200 with CMC Mod No. 426 embodied). Compliance required as detailed in Service Bulletin. |
| 0430 PRE 80 | 31–52 | *Instruments* – To introduce standby static corrected label for ASI (BCAR). | Applicable to Skyvan Series 3 (all variant 100 and 300 aircraft except those with either Mod No. 972 (30° flap) or Mod No. 1040 (airspeed label with $V_{MO}$ markings) embodied). |
| 0431 PRE 80 | 31–53 | *Instruments* – To introduce standby static corrected label for altimeter. | Applicable to Skyvan Series 3 with CMC Mod No. 426 embodied. Compliance required as detailed in Service Bulletin. |
| 0432 PRE 80 | 31–54 | *Instruments* – To provide an alternate static system for 2nd pilot's instruments. | Applicable to Skyvan Series 3 passenger-carrying aircraft operating under IFR conditions. For aircraft with auto-pilot see also Service Bulletin 11–57. Compliance required as detailed in Service Bulletin. |
| 0433 PRE 80 | 32–A67 | *Landing Gear* – Examination of brake flange Part No. EH 183712. | Applicable to Skyvan Series 3, 3A and 3M aircraft which have exceeded 3500 landings and are fitted with main undercarriage Part No. EH 1837/8 or where a universal axle Part No. EH 183711 has been installed on undercarriage Part No. EH 1831/2. Compliance required as detailed in Service Bulletin. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 0434 PRE 80 | 51–51 | *Structures* – Essential actions required to extend service life of the aircraft. | Applicable to Skyvan Series 3, 3A and 3M except SH.1847 and SH.1883. Compliance required as detailed in Service Bulletin. |
| 0435 PRE 80 | 53–1 | *Fuselage* – To improve fatigue strength of frame skin shear cleat at bottom corners of Frame 184.4. | Applicable to Skyvan Series 2 aircraft Serial Nos. SH1832 to SH1835 inclusive. Compliance required as detailed in Service Bulletin. |
| 0436 PRE 80 | 53–61 | *Fuselage* – To reinforce the stub wing front spar as part of the requirements of Service Bulletin 51–51. | Applicable to Skyvan Series 3, 3A and 3M. Compliance required as detailed in Service Bulletin. |
| 0437 PRE 80 | 53–62 | *Fuselage* – To reinforce the nose undercarriage lower attachment as part of the requirements of Service Bulletin 51–51. | Applicable to Skyvan Series 3, 3A and 3M. Compliance required as detailed in Service Bulletin. |
| 0438 PRE 80 | 55–1 | *Stabilisers* – To introduce mass balance for the rudder tab and increase rudder fixed mass balance. | Applicable to Skyvan Series 2 aircraft Serial No. SH1834. Compliance required as detailed in Service Bulletin. |
| 0439 PRE 80 | 55–53 | *Stabilisers* – To check the Fin/Tailplane attachment for loose bolts. | Applicable to Skyvan Series 3, 3A and 3M. Compliance required as detailed in Service Bulletin. |
| 0440 PRE 80 | 57–1 | *Wings* – To introduce additional rivets attaching mainplane lower skinning to rear spar between Stations 226 and 282 – Port and Starboard. | Applicable to Skyvan Series 2. Compliance required as detailed in Service Bulletin. |
| 0441 PRE 80 | 57–2 | *Wings* – To increase strength of flap and aileron shroud attachment lugs. | Applicable to Skyvan Series 2. Compliance required as detailed in Service Bulletin. |
| 0442 PRE 80 | 57–51 | *Wings* – To increase strength of flap and aileron shroud attachment lugs. | Applicable to Skyvan Series 3. Compliance required as detailed in Service Bulletin. |
| 0443 PRE 80 | 57–59 | *Wings* – To change the shear angle attachments of the lift strut fitting to wing rib 212 as part of the requirements of Service Bulletin 51–51. | Applicable to Skyvan Series 3, 3A and 3M. Compliance required as detailed in Service Bulletin. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 0444 PRE 80 | 57–A61 | *Wings* – To replace outboard hinge arm on inner flap and improve adjacent riveting on bottom surface. | Applicable to Skyvan Series 3, 3A and 3M. Compliance required as detailed in Service Bulletin. |
| 0445 PRE 80 | 57–63 | *Wings* – Examination of wing under-surface for damage at the outboard edge of the lift strut fairing. | Applicable to Skyvan Series 3, 3A and 3M. Compliance required as detailed in Service Bulletin. |
| 0446 PRE 80 | 61–50 | *Propellers* – To embody the requirements of FAA Airworthiness Directive 74–14–01 and Hartzell Propeller Inc. Service Bulletin No. 105A. | Applicable to Skyvan Series 3. Compliance required as detailed in Service Bulletin. |
| 0447 PRE 80 | 61–51 | *Propellers* – To embody the requirements of FAA Airworthiness Directive 78–18–01 and Hartzell Propeller Inc. Service Bulletin No. 123A. | Applicable to Skyvan Series 3, 3A and 3M. Compliance required as detailed in Service Bulletin. |
| 0448 PRE 80 | 71–50 | *Power Plant* – Replacement of engine mounting shock absorber – Left Front. | Applicable to Skyvan Series 3 without Mod. No. 763 incorporated. Compliance required as detailed in Service Bulletin. |
| 0449 PRE 80 | 71–56 | *Power Plant* – To introduce flexible drain pipes between engine plenium and bottom heat shield. | Applicable to Skyvan Series 3. Compliance required as detailed in Service Bulletin. |
| 0450 PRE 80 | 72–61 | *Engine* – To embody the requirements of FAA Airworthiness Directive 70–19–2. | Applicable to Skyvan Series 3. Compliance required as detailed in Service Bulletin. |
| 0451 PRE 80 | 72–63 | *Engine* – To perform visual and laboratory inspections of oil samples and engine oil filter as required in FAA Airworthiness Directive 71–5–7. | Applicable to Skyvan Series 3 and 3A. Compliance required as detailed in Service Bulletin. |
| 0452 PRE 80 | 72–64 | *Engine* – To embody the requirements of FAA Airworthiness Directive 78–05–02. | Applicable to Skyvan Series 3, 3A and 3M. Compliance required as detailed in Service Bulletin. |
| 0453 PRE 80 | 72–65 | *Engine* – To embody the requirements of FAA Airworthiness Directive 78–04–05. | Applicable to Skyvan Series 3, 3A and 3M. Compliance required as detailed in Service Bulletin. |
| 0454 PRE 80 | 72–66 | *Engine* – To embody the requirements of FAA Airworthiness Directive 78–25–08. | Applicable to Skyvan Series 3, 3A and 3M. Compliance required as detailed in Service Bulletin. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 0455 PRE 80 | 76–51A | *Engine Controls* – To renew split pin on ground/ air lever. | Applicable to Skyvan Series 3 until Service Bulletin No. 76–52 (Mod No 1043) is embodied. Compliance required as detailed in Service Bulletin. |
| 0456 PRE 80 | 76–A56 | *Engine Controls* – To check the security of the spring heel block on the air/ground lever. | Applicable to Skyvan Series 3, 3A and 3M. Compliance required as detailed in Service Bulletin. |
| 0457 PRE 80 | 76–57 | *Engine Controls* – To improve locking of the rod end bearing on feather control rods in roof console. | Applicable to Skyvan Series 3, 3A and 3M. Compliance required as detailed in Service Bulletin. |
| 0458 PRE 80 | Dowty Rotol SB 32–4M | *Landing Gear* – Nose undercarriage – Special inspections for life extension. | Applicable to Skyvan and Skyliner – all marks. Compliance required as detailed in Dowty Rotol Service Bulletin 32–4M. |
| 0459 PRE 80 | CAA Airworthiness Notice No. 81 | Emergency power supply for electrically-operated gyroscopic bank and pitch indication (Artificial Horizons). | Applicable to all Series. Compliance required as detailed in Airworthiness Notice. |
| 0460 PRE 80 | CAA Airworthiness Notice No. 82 | *Electrical Generation Systems* – Aircraft not exceeding 5700 kg maximum authorised weight. | Applicable to all Series. Compliance required as detailed in Airworthiness Notice. |
| 0461 PRE 80 | Maintenance Manual | Mandatory Life Limitations. | The limitations listed in the Maintenance Manual are mandatory for aircraft on the United Kingdom Register. |
| 006–11–80 | 52–65 | *Doors* – To establish adequate engagement of locking pins on aircraft fitted with a one piece cargo door. | Applicable to Skyvan 3, 3A and 3M aircraft. Serial Nos. as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. |
| 027–12–80 | 57–62 | *Flight Controls* – Outer flap – To reinforce attachment ribs at the inboard hinge arm and operating arm and to improve the adjacent bottom surface skin riveting. | Applicable to Skyvan 3, 3A and 3M aircraft. Compliance required as detailed in Service Bulletin. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 066–12–80 | 22–A61 | *Auto-Pilot* – To embody the requirements of Bendix Service Bulletin No. M–4D–060 (Mod. 4) Auto-Pilot Servo clutch replacement. | Applicable to Skyvan 3, 3A and 3M aircraft fitted with Bendix M–4C or M–4D Auto-Pilot. Compliance required as detailed in Service Bulletin. |
| 067–12–80 | 76–58 | *Engine Controls* – Improved locking for the spring heel block retaining pin on the ground/air lever. | Applicable to Skyvan 3, 3A and 3M aircraft. Compliance required as detailed in Service Bulletin. |
| 004–04–81 | Dowty Rotol SB 32–7M | *Landing Gear* – Main undercarriage – New shock absorber attachment pin, (Mod. No. (c) AC 95 52). | Applicable to Skyvan Series 3, 3A, 3M and Skyliner. Compliance required as detailed in Dowty Rotol Service Bulletin 32–7M. |
| 019–09–81 | 51–52 Revision 4 | *Structure* – Fatigue Life Limitations applicable to Skyvans SH 1883, SH 1845, SH 1847, SH 1960 SH 1889 and SH 1943 subjected to special flight profiles. | Applicable to Skyvan SH 1883, SH 1845, SH 1847 SH 1960, SH 1889 and SH 1943. Compliance required as detailed in Service Bulletin. |
| 017–12–81 | Dowty Rotol SB 32–10M | *Landing Gear* – Main undercarriage – Inspection of brake flange. | Applicable to Skyvan Series 3, 3A, 3M and Skyliner. Compliance required as detailed in Dowty Rotol Service Bulletin 32–10M. |
| 002–04–82 | Dowty Rotol SB 32–6M | *Landing Gear* – Main undercarriage – Lifting Requirements. | Applicable to all Skyvan and Skyliner aircraft. Compliance required as detailed in Dowty Rotol Service Bulletin 32–6M. |
| 007–07–82 | 72–68 | *Engine* – To embody the requirements of FAA Airworthiness Directive 82–10–05 as directed by the UK Civil Aviation Authority. | Applicable to Skyvan Series 3, 3A and 3M. Compliance required as detailed in Service Bulletin. |
| 006–07–83 | 22–63 | *Auto-Flight* – To fit cover over aileron servo motor. | Applicable to Skyvan 3, 3A and 3M aircraft fitted with Bendix M4C or M4D Auto-Pilot. Compliance required as detailed in Service Bulletin. |
| 002–09–83 | 61–52 | *Propellers* – To embody the requirements of FAA Airworthiness Directive 83–08–01 as directed by the UK Civil Aviation Authority. | Applicable to Skyvan Series 3, 3A and 3M. Compliance required as detailed in Service Bulletin. |
| 005–12–83 | Dowty Rotol SB 32–14M | *Landing Gear* – Main undercarriage shock absorber attachment lug cracking. | Applicable to Skyvan 3, 3A, 3M, and Skyliner. Compliance required in accordance with Service Bulletin. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 003–03–86 | Dowty Rotol SB 32–9M | *Landing Gear* – Main undercarriage – Inspection for cracking in lever sub-assembly. | Applicable to Skyvan 3, 3A, 3M and Skyliner. Compliance required as detailed in Service Bulletin. |
| 009–03–86 | 28–58 | *Fuel* – Replacement of flexible fumeproof shrouds and inspection of fuel pipes. | Applicable to Skyvan 3, 3A and 3M. Compliance required as detailed in Service Bulletin. |
| 008–03–95 | 27–74 | *Flight Controls* – To inspect rods in flight control systems. | Applicable to Skyvan SC7 Series aircraft. Compliance required as detailed in Service Bulletin. |
| 007–04–95 | 53–65 | *Fuselage* – To inspect wing attachment bushes in fuselage rear spar frame for migration. | Cancelled and superseded by AD009–01–96. |
| 005–11–95 | 32–71 | *Landing Gear* – To embody the requirements of Dunlop Ltd Service Bulletin 32–1108 Brake Unit – Introduction of inspection to find if the friction pads are fully worn with a changed full pad wear indication limit. | Applicable to Skyvan SC7 Series aircraft with units as detailed in Dunlop Ltd Service Bulletin 32–1108. Compliance required as detailed in Service Bulletin. |
| 009–01–96 | 53–68 | *Fuselage* – To inspect wing attachment bushes in fuselage front and rear spar frames for migration and replace if required. | Applicable to Skyvan SC7 Series aircraft. Compliance required as detailed in Service Bulletin. |
| 011–04–2000 | 27–76 | *Flight Controls* – To inspect flight control trim chains and cable/chain assemblies for manufacture using 'Spring Clip' connecting links. | Applicable to Skyvan SC7 Series aircraft. Compliance required as detailed in Service Bulletin. |
| 005–02–2003 | 27–77 | *Flight Controls* – To inspect all rods in flight control systems. | Applicable to Skyvan SC7 aircraft, except aircraft which are being inspected in compliance with Service Bulletin 27–74 (CAA AD 008–03–95). Compliance required as detailed in Service Bulletin. |

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## SLINGSBY AVIATION T67 SERIES AIRCRAFT

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 013–11–85 | SB 008<br>MB M162 | Inspection and modification of rudder/toe brake assembly hexagon socket cap screws. | Applicable to all T67B, C, D, M, M–Mk II and M200 aircraft. Inspect in accordance with Service Bulletin 008 until Mod. 162 is incorporated. Modify in accordance with Mod. Bulletin M162 within 20 hours flying time. |
| 012–02–86 | MB M192 | Improved tailplane attachment bolt locking. | Applicable to T67B and M aircraft Serial Nos. as detailed in Mod. Bulletin. Compliance is required in accordance with Mod. Bulletin within 100 hours flying time. |
| 003–05–87 | SB 013 | Main undercarriage top mounting block. | Applicable to all T67B, M, M–MkII, and M200 aircraft post Mod M198A. Inspect in accordance with Service Bulletin before each day's flying. Mod M239A or M239C being introduced at or before 50 hour check. |
| 004–05–87 | SB 014 | Bearings in control column aileron tie rod. | Applicable to all T67A, B, M, M–MkII, and M200 aircraft. Inspect in accordance with Service Bulletin at next 50 hr inspection and 150 hr inspections thereafter. |
| 005–05–87 | SB 015 | Rudder pedal to sidewall and rudder cable clearances. | Applicable to all GRP T67 aircraft embracing Works Numbers 2000 to 2020 and 2023 to 2034. Inspect in accordance with Service Bulletin before further flight and thereafter every 50 flying hours. |
| 011–05–87 | SB 012 | Inspection for battery acid leakage and/or damage. | Applicable to all T67M aircraft pre Mod 117 or pre Mod 114B. Inspect in accordance with Service Bulletin before next flight and at each subsequent 50 hr inspection. |
| 012–05–87 | SB 017 | Aft tailplane location brackets. | Applicable to T67A aircraft Works Numbers 1988 to 1997. Inspect in accordance with Service Bulletin at next 150 hr check and at each subsequent 150 hr check unless Mod M255 has been carried out. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 013–05–87 | MB M117 | Addition of battery overboard vent applicable to Gill PS12–11M battery. | Applicable to T67M aircraft. Compliance required as detailed in Modification Bulletin. |
| 014–05–87 | MB M227 | Introduction of improved earthing/bonding system. | Applicable to T67A aircraft Works Numbers as detailed in Modification Bulletin. Compliance required as detailed in Modification Bulletin. |
| 015–05–87 | MB M228 | Introduction of lengthened stop for wing tank selector valve control. | Applicable to T67D, M–MkII and M200 aircraft Works Numbers as detailed in Modification Bulletin. Compliance required as detailed in Modification Bulletin. |
| 016–05–87 | MB M237 | Introduction of limitations placard containing maximum 'G' loads for temperatures above and below 50°C. | Applicable to T67B, M–MkII and M200 aircraft Works Numbers as detailed in Modification Bulletin. Compliance required as detailed in Modification Bulletin. |
| 017–05–87 | MB M239 | Improvements to top location hole in wing for main undercarriage legs. | Applicable to all GRP T67 Series aircraft. Compliance required as detailed in Modification Bulletin. |
| 018–05–87 | MB M245 | Introduction of battery tray with electrolyte drain facility. | Applicable to T67B, C, D, M and M–MkII aircraft Works Numbers as detailed in Modification Bulletin. Compliance required as detailed in Modification Bulletin. |
| 013–07–87 | SB 019 | Deletion of Mod M067, shoulder strap extensions. | Applicable to T67A aircraft with Mod M067 fitted. Compliance required as detailed in Service Bulletin. |
| 004–07–88 | MB M363 | Introduction of improved pin location – Rudder pedal adjustment. | Applicable to all T67 GRP Series aircraft. Compliance required as detailed in Modification Bulletin. |
| 014–11–88 | MB M371 | Introduction of additional rudder cable support. | Applicable to T67A and T67 GRP aircraft Works Numbers as detailed in Modification Bulletin. Compliance required as detailed in Modification Bulletin. The requirement for T67 GRP aircraft has been superseded by Modification Bulletin M444B, CAA AD 006–03–94. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 024–03–89 | SB 029 | Recall of Aeroquip 601 type hose. | Applicable to T67 GRP aircraft as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. |
| 017–06–90 | MB M366A | Introduction of glass rope trailing edge reinforcement, starboard elevator. | Applicable to all T67 GRP Series aircraft. Compliance required as detailed in Modification Bulletin. |
| 018–06–90 | SB 036 | Inspection of nose undercarriage sliding leg weld. | Applicable to all T67 aircraft. Compliance required as detailed in Service Bulletin. |
| 002–01–93 | SB 42<br>MB M510 | Inspection of aileron support rib outboard (Rib 8). | Applicable to T67B, T67C, T67M, T67M Mk II, T67M200 and T67M260 Series aircraft. Compliance required as detailed in Service Bulletin and Modification Bulletin. |
| 003–01–93 | SB 001 | Aileron control circuit inspection. | Applicable to T67A Series aircraft. Compliance required as detailed in Service Bulletin. |
| 004–01–93 | SB 002 | Exhaust heat exchanger – Asbestos seal carb heat. | Applicable to T67A Series aircraft. Compliance required as detailed in Service Bulletin. |
| 005–01–93 | SB 007 | Oil level limitations for aerobatic flight. | Applicable to T67A Series aircraft. Compliance required as detailed in Service Bulletin. |
| 006–01–93 | SB 010 | Inspection of tailplane attachment bolts. | Applicable to T67GRP Series aircraft. Compliance required as detailed in Service Bulletin. |
| 007–01–93 | SB 018 | Inspection of flap centre drive brackets. | Applicable to T67 Series aircraft. Compliance required as detailed in Service Bulletin. |
| 008–01–93 | SB 020 | Service Life. | Applicable to T67B, C, D, M, M–Mk II and M200 type GRP Series aircraft. Compliance required as detailed in Service Bulletin. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 009–01–93 | SB 024 | Propeller fitting. | Applicable to T67M200 Series aircraft with construction numbers prior to 2058. Compliance required as detailed in Service Bulletin. |
| 010–01–93 | SB 025 | Flight in thunderstorm and lightning activity. | Applicable to T67 GRP Series aircraft with Mod 272B or Mod 177B fitted. Compliance required as detailed in Service Bulletin. |
| 011–01–93 | SB 028 | Special inspection – A125D/66 stiffnuts. | Applicable to T67 aircraft Series aircraft construction numbers 2045 to 2061 and 2063. Compliance required as detailed in Service Bulletin. |
| 012–01–93 | SB 031 | Special inspection – Safety harness (Negative 'G' strap). | Applicable to T67 Series aircraft construction numbers as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. |
| 013–01–93 | SB 032 | King radio KCS 55A slaved gyrocompass system – Erroneous readings. | Applicable to T67M–Mk II and T67M200 Series aircraft. Compliance required as detailed in Service Bulletin. |
| 014–01–93 | SB 033 | Special inspection of rudder bar pedal support lugs. | Applicable to T67 Series aircraft except Works No. 1999. Compliance required as detailed in Service Bulletin. |
| 015–01–93 | SB 034 | Rudder upper and lower hinge support angles – Inspection. | Applicable to Slingsby T67 Series aircraft. Compliance required as detailed in Service Bulletin. |
| 016–01–93 | SB 037 | Inspection of main undercarriage torque link bolts. | Applicable to Slingsby T67 Series aircraft. Compliance required as detailed in Service Bulletin. |
| 017–01–93 | SB 040 | Special inspection of throttle cable. | Cancelled and superseded by CAA AD 005–04–94. |
| 018–01–93 | SB 041 | Special inspection of throttle cable. | Applicable to Slingsby T67B Series aircraft. Compliance required as detailed in Service Bulletin. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 019–01–93 | MB M400 | Introduction of re-routed bonding cable between control column elevator stop and seat mounting tube. | Applicable to Slingsby T67 GRP Series aircraft Works Nos. 2000, 2002 to 2004, 2008 to 2011, 2013 to 2018, 2020 to 2063, 2066 and 2067. Compliance required as detailed in Modification Bulletin. |
| 015–03–93 | SB 43 | Engine settings to alleviate engine stop in spin. | Applicable to Slingsby T67C Series aircraft. Compliance required as detailed in Service Bulletin. |
| 004–03–94 | SB 44<br>MB M575 | Check clearance between forward u/c leg and engine mounting frame. | Applicable to Slingsby T67C Series aircraft Post Mod. M468 and T67M–MkII aircraft. Compliance required as detailed in Service Bulletin and Modification Bulletin. |
| 005–03–94 | MB M567 | Introduction of flop tube support spring to fuel system. | Applicable to Slingsby T67C Wing Tank Series, T67M–Mk II and T67M200 Series aircraft. Compliance required as detailed in Modification Bulletin. |
| 006–03–94 | MB M444B | Introduction of improved additional rudder cable support. | Applicable to T67 GRP Series aircraft. Compliance required as detailed in Modification Bulletin. |
| 011–03–94 | SB 48 | Windscreen de-misting duct routing check. | Applicable to T67B, T67C Series, T67M, T67M–MkII and T67M200 aircraft (Pre Mod M515). Compliance required as detailed in Service Bulletin. |
| 015–03–94 | SB 51 | Inspection of rudder cable to link plate socket head cap screw. | Applicable to all T67 GRP Series aircraft Post Mod 95. Compliance required as detailed in Service Bulletin. |
| 004–04–94 | SB 22 | Checks on fuel flow: aerobatic flight. | Applicable to T67M–Mk II, T67M200 and T67C aircraft with wing fuel tanks (Mod. 156). Compliance required as detailed in Service Bulletin. |
| 005–04–94 | SB 55<br>MB M496 | Special inspection of throttle cable – T67 GRP aircraft. | Applicable to T67C (Pre Mod. 480), T67M, T67M MkII and T67M200 aircraft. Compliance required as detailed in Service Bulletin and Modification Bulletin. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 010–05–94 | SB 52 | Elevator horn water ingress. | Applicable to T67B, T67C Serles, T67M, T67M–Mk II, T67M200, T67M260 and T67M260–T3A aircraft. Compliance required as detailed in Service Bulletin. |
| 011–05–94 | SB 54<br>MB M593 | Inspection of wing fuel tank drain valves. | Applicable to T67M–Mk II aircraft Works Nos 2116 to 2122 and T67M260–T3A aircraft Works Nos 2109, 2110, 2123 to 2130. Compliance required as detailed in Service Bulletin and Modification Bulletin. |
| 013–05–94 | MB M576 | Introduction of rudder pedal pad with chamfered side plate. | Applicable to T67 GRP Series aircraft Works Nos 2000, 2002 to 2004, 2008 to 2011, 2013 to 2018, 2020, 2021, 2023 to 2028, 2031 to 2033, 2035 to 2052, 2054 to 2057, 2059 to 2061, 2063, 2066 to 2069, 2072 to 2087, 2099 to 2125. Compliance required as detailed in Modification Bulletin.<br>NOTE: This entry was inadvertently omitted from the May 1994 amendment to this CAP. |
| 009–09–94 | SB 60 | Isolation of low fuel sensor units. | Cancelled and superseded by AD 007–10–94. |
| 007–10–94 | MB M636 | Introduction of improved low level fuel sensor. | Applicable to T67M260–T3A aircraft Works Nos. 2109, 2110 and 2123 to 2156. Compliance required as detailed in Modification Bulletin. |
| 005–11–94 | SB 62 | Flap lever proof test. | Applicable to all T67M260–T3A aircraft. Compliance required as detailed in Service Bulletin. |
| 006–11–94 | SB 64 | Inspection of elevator bearing plate. | Applicable to all T67M260–T3A aircraft. Compliance required as detailed in Service Bulletin. |
| 001–12–94 | SB 65<br>MB M646 | Nose landing gear inspection and modification. | Applicable to all T67 Post Mod M468 aircraft, T67M260–T3A aircraft and all T67M260 aircraft. Compliance required as detailed in Service Bulletin and Modification Bulletin. |
| 012–03–95 | SB 70 | Inspection of manifold/pressure gauge to pipe connections. | Applicable to T67M, T67M–Mk 11, T67M200, T67M260 and T67M260–T3A series aircraft. Compliance required as detailed in SB. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 008–04–95 | SB 79 | Inspection of the Control Column to seat clearance and seat attachment integrity. | Applicable to all T67C and T67M–Mk II aircraft (Post Mod M445), T67M260 and T67M260–T3A aircraft. Compliance required as detailed in Service Bulletin. |
| 009–04–95 | MB M665 | Introduction of locating spigot on seat. | Applicable to all T67C and T67M–Mk II aircraft (Post Mod M445), T67M260 and T67M260–T3A aircraft, Works Nos. 2079, 2080, 2084 to 2086, 2102 to 2177 and 2179. Compliance required as detailed in Modification Bulletin. |
| 009–07–95 | SB 82 | Inspection of wing walkway areas. | Applicable to T67B, T67C Series, T67M, T67M–Mk II and T67M200 aircraft. Compliance required as detailed in Service Bulletin. |
| 010–07–95 | SB 84 | Inspection of rib 2 lower flange bond to wing skin. | Applicable to all T67M260 and T67M260–T3A aircraft. Compliance required as detailed in Service Bulletin. |
| 002–09–95 | SB 87 | Reduced structural temperature limitation from 55°C to 50°C and prohibited flight temperature limitation from 65°C to 55°C. | Applicable to T67M260 and T67M260–T3A aircraft. Compliance required as detailed in Service Bulletin. |
| 002–10–95 | MB M571 | Introduction of wiring modification to allow starter motor to be stopped in event of solenoid welding closed. | Applicable to T67B, T67C Series, T67M, T67M–Mk II and T67M200 aircraft. Compliance required as detailed in Modification Bulletin. |
| 006–02–96 | SB 83 | Inspection for foul between No. 2 rudder pedal pad pivot and nosewheel steering rod arm. | Applicable to T67B, T67C Series, T67M (excluding Works No. 1999), T67M–Mk II, T67M200, T67M260 and T67M260–T3A aircraft. Compliance required as detailed in Service Bulletin. |
| 007–02–96 | SB 102 | Inspection of and wiring of roll pin on fuel selector torque tube. | Applicable to T67M260 and T67M260–T3A aircraft. Compliance required as detailed in Service Bulletin. |
| 005–04–96 | SB 106 | Inspection of brake cylinder for correct stroke. | Applicable to T67M260 and T67M260–T3A aircraft. Compliance required as detailed in Service Bulletin. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 007–07–96 | SB 94 | Inspection of elevator pushrod to control column assembly pivot bolt to seat clearance. | Applicable to T67M260–T3A aircraft pre Mod M695. Compliance required as detailed in Service Bulletin. |
| 007–08–96 | SB 88 | Rudder pedal to mixture lever potential foul. | Applicable to T67M260 and T67M260–T3A aircraft pre Mod M687. Compliance required as detailed in Service Bulletin. |
| 012–01–97 | SB 120 | Inspection of rudder bar support brackets. | Applicable to T67B, T67C Series, T67M (Works No. 1999 not applicable), T67M–MkII, T67M200, T67M260 and T67M260–T3A. Compliance required as detailed in Service Bulletin. |
| 010–03–97 | SB 121 | Inspection of SAB type nose undercarriage leg. | Applicable to pre Mod M425 and pre Mod M468 aircraft i.e. SAB type undercarriaged T67A, T67B, T67C Series, T67M, T67M–MkII and T67M200. Compliance required as detailed in Service Bulletin. |
| 005–06–97 | MB M773 | Introduction of brake master cylinder with improved piston 'O' ring seal. | Applicable to T67M260 aircraft. Compliance required as detailed in Modification Bulletin. |
| 005–07–97 | SB 127 | Inspection of aluminium fittings for exfoliation corrosion. | Cancelled and superseded by G–2004–0013. |
| 005–08–97 | M810 | Introduction of canopy latch check placard for single piece canopy aircraft. | Applicable to T67A, T67B and pre Mod M129/M129B T67C, T67M and T67M200 aircraft Works Nos. as detailed in Modification Bulletin. Compliance required as detailed in Modification Bulletin. |
| 002–09–97 | SB 132 | Inspection for water in bump stop. | Applicable to T67M260 and T67M200 aircraft post Mod M675. Compliance required as detailed in Service Bulletin. |
| 003–09–97 | SB 139 | Inspection of steering arm on Fairey Hydraulics nose leg. | Applicable to T67M260 and T67M260–T3A aircraft post Mod M468 T67C and T67M–Mk II and post Mod M791 T67M–Mk II. Compliance required as detailed in Service Bulletin. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 002–12–97 | SB 150 | Inspection of elevator lever pivot stiffnut at frame 7. | Applicable to T67A, T67B, T67C Series, T67M, T67M–MkII, T67M200, T67M260 and T67M260–T3A aircraft. Compliance required as detailed in Service Bulletin. |
| 009–03–99 | MB M754 | Introduction of alternative diode for master switch solenoid. | Applicable to T67A, T67B, T67C Series, T67M, T67M–Mk II, T67M200, T67M260 and T67M260–T3A aircraft Works Nos. as detailed in Modification Bulletin. Compliance required as detailed in Modification Bulletin. |
| 003–01–2000 | MB M888 | Introduction of Airborne 2B6–89 electrical fuel pump. | Applicable to T67M260 aircraft. Compliance required as detailed in Modification Bulletin. |
| 010–02–2000 | MB M898 | Deletion of fuel filter drain ref. SAIC fuel modification. | Applicable to T67M260–T3A aircraft. Compliance required as detailed in Modification Bulletin. |
| 005–10–2000 | MB M890 | Introduction of re-routed fuel tank vent system, re-introduction of low fuel warning lights and electric fuel pump limited to 35 lb per square inch output pressure. | Applicable to T67M260–T3A aircraft Post Mod. M830. Compliance required as detailed in Modification Bulletin. |
| 005–03–2001 | SB 165 | Inspection for water in leading edge of rudder plus addition of drain hole. | Applicable to T67B, T67C, T67M, T67M–Mk II, T67M200, T67M260 and T67M260–T3A aircraft. Compliance required as detailed in Service Bulletin. |
| 005–07–2002 | SB 175 | Inspection of control column housing brazing. | Applicable to T67A, T67B, T67C, T67M, T67M–MkII, T67M200, T67M260 and T67M260–T3A aircraft. Compliance required as detailed in Service Bulletin. |
| 001–12–2002 | SB 179 | Inspection of tailplane attachment brackets. | Applicable to T67A, T67B, T67C, T67M, T67M–Mk II, T67M200, T67M260 and T67M260–T3A aircraft. Compliance required as detailed in Service Bulletin. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 005–03–2003 | MB M992 | Introduction of fasteners to front of Frame 2 to 3 trim panel for added security. | Applicable to T67B, T67C, T67M, T67M–Mk II, T67M200, T67M260 and T67M260–T3A aircraft. Compliance required as detailed in Modification Bulletin. |
| 008–04–2003 | SB 180 | Inspection of alternator/starter wiring loom 'p'-clipping at engine. | Applicable to T67A, T67B, T67C, T67M, T67M Mk II, T67M200, T67M260 and T67M260–T3A aircraft. Compliance required as detailed in Service Bulletin. |

# United Kingdom Civil Aviation Authority

# AIRWORTHINESS DIRECTIVE

## AD No: G-2004-0013

Issue Date: 21 June 2004

This AD is issued by the UK CAA acting for and on behalf of the European Aviation Safety Agency as the Primary Aviation Authority (ICAO Annex 8 Authority of State of Design) for the affected product(s).

Approved by the European Aviation Safety Agency under approval number on 2004-6425 on 17 June 2004.

In accordance with Article 9(7)(b) of the Air Navigation Order 2000 as amended the following action required by this Airworthiness Directive (AD) is mandatory for applicable aircraft registered in the United Kingdom.
No person may operate an aircraft to which an AD applies except in accordance with the requirements of that AD unless otherwise agreed with the Authority of the State of Registry.

| Type Approval Holders Name: | Type/Model Designation(s): |
|---|---|
| **SLINGSBY AVIATION LIMITED** | **T67A, T67B, T67C SERIES, T67M, T67M-MKII, T67M200, T67M260 AND T67M260-T3A** |

**Type Certificate Data Sheet No:** BA17

**Superseded/ Revised ADs:** 005-07-97

### ATA 51 - STRUCTURES - INSPECTION OF ALUMINIUM COMPONENTS FOR EXFOLIATION

**Manufacturer(s):** Slingsby Aviation Ltd

**Applicability:** T67A, T67B, T67C Series, T67M, T67M-MKII, T67M200, T67M260 and T67M260-T3A aeroplanes, certificated in any category.

**Reason:** Reports of a case of exfoliation (layer corrosion) in the forward tailplane attachment brackets, flap centre drive brackets and seat belt attachment brackets of a T67A aircraft previously lead to the issue of CAA AD 005-07-97. A recent report of exfoliation on the tailplane mounted, fuselage to tailplane aft attachment brackets on a T67C aircraft has resulted in the need to supersede AD 005-07-97. This AD extends applicability to include additional T67 aircraft models, revises inspection criteria and reiterates repetitive inspection intervals.

**Effective Date:** 8 July 2004

**Compliance/Action:** At the next Annual check after the effective date of this AD, and thereafter at intervals not to exceed 12 months, inspect the aluminium fittings detailed in Slingsby Aviation Service Bulletin 127 Issue 3 or later EASA approved revision. If corrosion is found as a result of these inspections, replace the affected component(s) before further flight.

**Reference Publications:** Slingsby Aviation Service Bulletin 127, dated 12 May 2004, may be obtained from Slingsby Aviation Limited, Kirkbymoorside, York YO62 6EZ, United Kingdom.

**Remarks:** Enquiries regarding this Airworthiness Directive should be directed to Civil Aviation Authority, Safety Regulation Group, Certification and Approvals Department, Aviation House, Gatwick Airport South, West Sussex, RH6 0YR, United Kingdom. Phone: +44(0) 1293 573306 FAX: +44(0) 1293 573976 E-mail: alistair.maxwell@srg.caa.co.uk.

## SLINGSBY GLIDERS AND MOTOR GLIDERS

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 0147 PRE 80 | 96 | To introduce modified shoulder harness attachment. | Applicable to all Skylark 2 – Type 41 gliders having canvas type seat backs. |
| 0148 PRE 80 | 97 | To introduce modified shoulder harness attachment. | Applicable to all Skylark 2 – Type 41 gliders not fitted with canvas type seat backs. |
| 0149 PRE 80 | 98 | To introduce improved canopy catch. | Applicable to all Skylark 2 – Type 41 gliders having canopies which lift off. |
| 0150 PRE 80 | 99 | To introduce improved canopy catch. | Applicable to all Skylark 2 – Type 41 gliders fitted with hinged canopies. |
| 0151 PRE 80 | 96 | To introduce modified shoulder harness attachment. | Applicable to all Skylark 3 – Type 43 gliders having canvas type seat backs. |
| 0152 PRE 80 | 97 | To introduce modified shoulder harness attachment. | Applicable to all Skylark 3 – Type 43 gliders not fitted with canvas seat belts. |
| 0153 PRE 80 | 99 | To introduce improved canopy catch. | Applicable to all Skylark 3 – Type 43 gliders fitted with hinged canopies. |
| 0154 PRE 80 | 10 | To introduce improved canopy catch. | Applicable to all Swallow – Type 45 gliders. |
| 0155 PRE 80 | – | Inspection of main wing spar for corrosion. | Applicable to all T51 Dart gliders fitted with metal reinforced spars. Technical Instruction No. 58 refers. |
| 0156 PRE 80 | 11 | Replacement of mounting bracket for elevator lever (rear control box). | Applicable to all T53B gliders. Technical Instruction No. 36 refers. |
| 0157 PRE 80 | 15 | Change of tailplane incidence. | Applicable to all T53B gliders. Technical Instruction No. 40 refers. |
| 0158 PRE 80 | – | Inspection of wing centre section. | Applicable to all T53B gliders and later variants YS 53. Technical Instruction No. 66 refers. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 0159 PRE 80 | 4 | Modification of canopy catch spigot mounting. | Applicable to all T59 gliders. Technical Instruction No. 43 refers. |
| 0160 PRE 80 | – | Antisymmetric wing bending vibration of 17 m and 19 m Kestrel gliders. | Applicable to all Slingsby built T59A, T59D, T59E and T59F gliders. Technical Instruction No. 54 refers. |
| 0161 PRE 80 | – | Mandatory inspection of wings. | Applicable to all T59 gliders. Technical Instruction No. 62 refers. |
| 0162 PRE 80 | – | Inspection of elevator actuator fitting. | Applicable to all T59 gliders. Technical Instruction No. 63 refers. |
| 0163 PRE 80 | 18 | Replacement of elevator actuator bracket. | Applicable to all T59 gliders. Technical Instruction No. 65 refers. |
| 0164 PRE 80 | – | Dive Brake Operating limitations. | Applicable to all T59A, B, C, D, E and F gliders. Technical Instruction No. 72 refers. |
| 0165 PRE 80 | 28 | Fitting of improved dive-brake control mechanism. | Applicable to all T59A, B, C, D, E and F gliders. Compliance required not later than 31 December 1975. In the interim, Technical Instruction No. 72 must be complied with. Technical Instruction No. 75 refers. |
| 0166 PRE 80 | 31 | Fixing of Unibal bearings into aluminium housings on root ribs. | Applicable to all T59A, B, C, D, E and F gliders. Compliance required not later than 31 December 1975. Technical Instruction No. 76 refers. |
| 0167 PRE 80 | 33 | Introduction of stop to restrict forward travel of rudder pedals. | Applicable to all T59A, B, C, D, E and F gliders. Technical Instruction No. 78 refers. |
| 0168 PRE 80 | – | Inspection of rudder cables. | Applicable to all T59A, B, C, D, E and F gliders. Technical Instruction No. 77 refers. |
| 0169 PRE 80 | – | Inspection of critical areas for loose bolts. | Applicable to all T59 gliders. Technical Instruction No. 89 refers. |
| 0170 PRE 80 | 3 | Change of elevator control rigging pin. | Applicable to all T61A gliders. Technical Instruction No. 42 refers. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 0171 PRE 80 | 10 | Renewal of engine mounting studs. | Applicable to T61 Falke gliders which have 10 mm engine studs on the lower engine pick-ups. Technical Instruction No. 45 refers. |
| 0172 PRE 80 | 15 | Addition of mechanical fasteners to secure canopy moulding to frame. | Applicable to all T61 Falke gliders. Technical Instruction No. 50 refers. |
| 0173 PRE 80 | 16 | Inspection and replacement of centre elevator hinge. | Applicable to all T61 Falke gliders. Technical Instruction No. 53 refers. |
| 0174 PRE 80 | – | Inspection of tab hinge mounting. | Applicable to all T61 Falke gliders. Technical Instruction No. 55 refers. |
| 0175 PRE 80 | – | Inspection of aileron actuator for fouling. | Applicable to all T65A gliders. Technical Instruction No. 84 refers. |
| 0176 PRE 80 | MOD 12 | Modification of flap/airbrake control. | Applicable to all T65A gliders which do not have Mod. 12 incorporated. Compliance required not later than six months of receipt of Technical Instruction No. 85. |
| 0177 PRE 80 | – | Restriction on filling of water ballast bays. | Applicable to all T65A gliders. Technical Instruction No. 86 refers. |
| 0178 PRE 80 | – | Change of Wing Tang Spigots. | Applicable to all T65A gliders after and including No. 1904. Technical Instruction No. 87 refers. |
| 0179 PRE 80 | 27 | Main spar web reinforcement. | Applicable to all T65A gliders up to and including Serial No. 1920. Compliance required not later than 31 March 1980. Until this time the aircraft may fly with the following restriction:<br>1 Those aircraft registered with CAA may only fly in the special category.<br>2 VNE and rough airspeed are restricted to 95 kt.<br>3 Maximum all-up weight is limited to 775 lb. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 0180 PRE 80 | – | Inspection of critical areas for loose bolts. | Applicable to all T65 Vega gliders. Technical Instruction No. 89 refers. |
| 0181 PRE 80 | – | Pre-flight inspection and replacement of elevator actuator pivot plate pin. | Applicable to all T65A Vega gliders fitted with circlip retained pin – Work Nos. 1885 to 1920 inclusive. Technical Instruction No. 91 refers. |
| 011–10–80 | MOD 17 | Inspection and modification of aileron operating lever. | Applicable to all T61A, T61B, T61C and T61D Falke gliders. Technical Instruction No. 79 refers. |
| 012–10–80 | MOD 18 | Reduction of length of rudder pedal foot stops. | Applicable to all T61A, T61B, T61C and T61D gliders. Technical Instruction No. 80 refers. |
| 009–11–80 | – | Inspection of the wing root fitting/pin attachment fitting. | Applicable to all T61A, T61B, T61C and T61D aircraft. Technical Instruction No. 94 refers. |
| 037–12–80 | – | Introduction of mass balance to the ailerons. | Applicable to all T65A and T65D Vega gliders except Work Nos 1889, 1890 and 1903. Compliance required as detailed in Technical Instruction No. 95. On embodiment of this modification the restrictions as laid down in Slingsby Technical Instruction No. 92 are lifted and the glider resumes its original flight limits. |
| 002–05–81 | MOD 36 | Strengthening of wing centre section. | Applicable to all T53B gliders and to later variant YS 53. Modify in accordance with Technical Instruction No. 68. On embodiment of this modification the restrictions imposed by Technical Instruction No. 66 are lifted and the glider resumes its original flying limits. |
| 003–05–81 | – | Inspection of attachment of wing centre section to frame 6. | Applicable to all T53B gliders and to later variant YS 53. Inspect in accordance with Technical Instruction No. 69 before next flight and thereafter at intervals of 5 flight hours. The aircraft is to be flown only in the Non-Cloud flying, Non-Aerobatic Category until such time as a modification is issued. |

AD (continued overleaf)

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 004–05–81 | MOD 37 | Replacement of aft attachment fitting in the wing centre section. | Applicable to all T53B gliders and to later variant YS 53. Modify in accordance with Technical Instruction No. 70. On embodiment of this modification the restrictions imposed by Technical Instruction No. 69 are lifted and the glider resumes its original flying limits. |
| 005–05–81 | – | Inspection of attachment of wing centre section to Frame 6. | Cancelled and replaced by Technical Instruction No. 100/T53. |
| 001–01–82 | T.I.No. 100/T53 | Inspection of attachment of wing centre section to Frame 6. | Applicable to all T53B and later Variant YS.53 aircraft. Compliance required as detailed in Technical Instruction. |
| 002–01–82 | T.I.No. 101/T59 | Inspection of rudder actuator. | Applicable to all T59A, B, C, D, E, F, G, H and J aircraft, all spares held in stores and all rudder assemblies pre and post mod.25. Compliance required as detailed in Technical Instruction. |
| 003–01–82 | T.I.No.102/T61 | Inspection of forward tailplane bracket. | Applicable to all T61 Falke aircraft and all variants and all spares held in stores. Compliance required as detailed in Technical Instruction. |
| 004–01–82 | T.I.No.92 | Reduction of VNE pending modifications of aileron circuit. | Applicable to all T65A and D aircraft. Compliance required as detailed in Technical Instruction. |
| 003–06–82 | Nil | Inspection of main wing centre pin. | Applicable to all T61 Series motor gliders and Scheibe SF25 and SF28 Series motor gliders. Compliance is required as detailed below.<br>1 Before further flight after receipt of this Directive. |

(AD continued overleaf)

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 003–06–82 (continued) | | | 1.1 (a) With the main rigging pin pulled fully upwards by means of the Tee handle, such that the safety pin is hard against the lower face of the top boom lug fitting inspect the amount of plain portion of main pin shank protruding below the port bottom boom lug fitting.<br><br>(b) If difficulty is encountered in establishing para 1.1 (a) inspection due to poor access the wings must be removed and port wing inspected in accordance with para 1.1 (a).<br><br>(c) Inspect the main pin in situ, with the pin pushed downwards fully home. Establish whether more than one safety pin hole exists in the main pin. If more than one safety pin hole exists the aircraft must not be flown until the correct hole has been established by compliance with inspection to para 1.1 (a) or 1.1 (b), and the redundant hole made unusuable.<br><br>1.2 Should no plain shank be visible protruding below the port bottom boom lug fitting the aircraft shall not fly until the cause has been established, and rectified.<br><br>2 At Each Rigging<br><br>2.1 Accomplish the inspection contained in paragraph 1.1 (a) or 1.1 (b) and 1.1 (c).<br><br>2.2 Extreme care must be exercised when aligning the male/female lug fittings to ensure that female fittings are not splayed during mainplane rigging, following inspection to 1.1 (b). |

(AD continued overleaf)

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 003–06–82 (continued) | | | 3 Inform the CAA General Aviation Section if any of the following conditions are found:<br>(a) Pin fails to protrude through bottom lug.<br>(b) An additional safety pin hole exists.<br>(c) Any damage likely to have a detrimental effect upon the airworthiness of the aircraft.<br>NOTE: This Directive was issued because under certain circumstances the main wing centre pin can move out of complete engagement with the lower half of the port bottom boom lug fitting, resulting in a serious degradation of wing bending strength. |
| 001–07–82 | T.I. No.103/T61 | Inspection of wing centre joint and additional limitations | Applicable to all T61A, B, C and D motor gliders and Scheibe SF25 and SF28 Series motor gliders. Compliance is required as detailed below.<br>1 Before further flight after receipt of this Directive.<br>NOTE: Aircraft inspected to CAA AD 003–06–82 or Slingsby TI 103/T61 will be deemed to be in compliance with this paragraph.<br>1.1<br>(a) With the main rigging pin pulled fully upwards by means of the Tee handle, such that the safety pin is hard against the lower face of the top boom lug fitting establish that the plain untapered portion of main pin shank protrudes below the port bottom boom lug fitting. |

(AD continued overleaf)

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 001–07–82 (continued) | | | (b) If difficulty is encountered in establishing para 1.1 (a) inspection, due to poor access the wings must be removed and port wing inspected in accordance with para 1.1 (a).<br><br>1.2 Should no plain untapered shank be visible protruding below the port bottom boom lug fitting the aircraft shall not fly until the cause has been established, and rectified.<br><br>1.3 Establish whether more than one safety pin hole exists in the main pin. If more than one safety pin hole exists the aircraft must not be flown until the correct hole has been established by compliance with inspection to para 1.1 (a) or 1.1 (b) and the redundant hole made unusable.<br><br>2 At Each Rigging<br><br>NOTE: Aircraft inspected to CAA AD 003–06–82 or Slingsby TI 103/T61 will be deemed to be in compliance with this paragraph.<br><br>2.1 Accomplish the inspection contained in paragraph 1.1 (a) or 1.1 (b). Extreme care must be exercised when aligning the fittings to ensure that the lugs are not splayed during mainplane rigging, following inspection to 1.1 (b).<br><br>2.2 Should no plain untapered shank be visible protruding below the port bottom boom lug fitting the aircraft shall not fly until the cause has been established, and rectified.<br><br>(AD continued overleaf) |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 001–07–82 (continued) | | | 3 Inform Slingsby Aviation if: |
| | | | 3.1 Plain portion of pin does not protrude. |
| | | | 3.2 Additional safety pin hole exists. |
| | | | 3.3 Any damage likely to have a detrimental effect upon the airworthiness of the aircraft is found. |
| | | | 4 Additional Flight Limitations |
| | | | 4.1 Turns steeper than 60° angle of bank, Loops, Chandelles, Spins or winch launches are prohibited on aircraft fitted with: |
| | | | 4.1.1 Main pin No. 653B–51–514. |
| | | | 4.1.2 Main pin with bottom end radius greater than 3 mm. |
| | | | 4.1.3 Main pin with more than one safety locking pin hole or where the safety locking pin hole exceeds .125" diameter. |
| | | | 4.1.4 Safety locking pins made from less than 12 SWG (.104") piano wire (spring steel). |
| | | | 4.2 A placard prohibiting manoeuvres stated in paragraph 4.1 shall be installed in full view of the pilot/s if any of the conditions contained in 4.1.1, 4.1.2 or 4.1.3 and 4.1.4 are not met. |

(AD continued overleaf)

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 001–07–82 (continued) | | | 4.3 If compliance under 4.1 permits aerobatic manoeuvres the aircraft shall be placarded in accordance with Airworthiness Notice No 51 Issue 1 Paragraph 3.2 and 3.3 and it is strongly recommended that an accelerometer red-lined at +3.5g be fitted in this event. |
| 008–08–82 | T.I. No.104/T65 | Inspection of tailplane/elevator assembly and canopy emergency jettison mechanism. | Applicable to all T65A, C and D aircraft. Compliance required as detailed in Technical Instructions. |
| 006–09–82 | T.I. No.105/T65 | Inspection of canopy jettison mechanism. | Applicable to all T65A, B, C, and D aircraft. Compliance required as detailed in Technical Instruction. |
| 019–01–87 | T.I. No.106/T59 | Inspection of elevator push rod. | Applicable to all T59A, B, C, D, E, F, G, H and J aircraft. Compliance required as detailed in Technical Instruction. |
| 001–07–87 | T.I. No. 107/T50 | Inspection of aft fin spars at longeron cutouts. | Applicable to all T50 aircraft. Compliance required as detailed in Technical Instructions. |
| 001–09–87 | T.I. No. 108/T65 | Inspection of universal joint at flap/airbrake handle forward attachment. | Applicable to all T65A and D gliders. Compliance required as detailed in Technical Instructions. |
| 005–09–97 | T.I. No. 109/T51 | Inspection of Dart 15/17M aluminium alloy (Dural) spar booms. | Applicable to T51 Dart aircraft with aluminium alloy spar booms. Compliance required as detailed in Technical Instruction. |

## THUNDER AND COLT GA–42 AIRSHIP

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 008–10–91 | Service Bulletin No. 1 | Inspection of the envelope for signs of abnormal fabric discolouration. | Applicable to GA–42 airships. Compliance required as detailed in Service Bulletin. |

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## TRAGO MILLS SAH 1 SERIES AIRCRAFT

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 004-01-86 | Maintenance Manual | Mandatory Life Limitations. | The limitations listed in Section 2 of the Maintenance Manual are mandatory for aircraft on the United Kingdom Register. |

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## WESTLAND BELL 47 SERIES HELICOPTERS

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 2293 PRE 80 | SIC47G–4A–22–1 | *Main rotor* – Gimbal ring – limitation of service life. | Applicable to all Westland Bell 47G-4A. Compliance as detailed in SIC. |
| 2294 PRE 80 | SIC47G–4A–23–1 | *Tail rotor blade* – Introduction of improved blade. | Applicable to all Westland Bell 47G–4A. Compliance as detailed in SIC. |
| 2295 PRE 80 | CAA letter refs 9/31/RWE 608 dated 28–10–76 and 9–11–76 | 1 Inspection of Tail Rotor Drive Gear Assembly Part No 47–620–568–1 for backlash and end float.<br>2 Replacement of Bearings Part No 47–620–556–1. | Applicable to all Westland Bell 47G–3B1. Inspection to be carried out daily.<br>To be carried out within 100 hours flying from 1 November 1976, or at the next 600 hours flying inspection, whichever occurs first. |
| 2296 PRE 80 | CAA letter ref. 9/31/RWE608 dated 15–4–77 | 1 Inspection of tail rotor gear box drive shaft Part No 47–645–216–5.<br>2 Inspection of main rotor gimbal ring pillow block pin Part No 47–120–141–2.<br>3 Inspection of main rotor head pitch control support and swash plate assembly link plate Part No 47–150–252–1.<br>Note: These above inspections apply to ex-military Agusta Bell 47G–3B1. | All Westland Bell 47G–3B1 which have not complied with Bell Service Bulletin 47–76–2 or Agusta Technical Bulletin 47–120. To be carried out at 25 flying hour intervals.<br>All Westland Bell 47G–3B1. To be carried out by 15 June 1977.<br>All Westland Bell 47G–3B1. To be carried out by 15 May 1977. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 2297 PRE 80 | – | All FAA or RAI Airworthiness Directives and CAA Additional Directives applicable to Bell and Agusta Bell 47 Series are also applicable to Westland Bell 47 Series, as appropriate. | |
| 039–04–83 | Maintenance and Overhaul Instructions | Mandatory Life Limitations | The limitations listed in the Maintenance & Overhaul Instructions are mandatory for aircraft on the United Kingdom Register. |
| 001–09–83 | CAA Letter 9/97/CtAw/12/33/ 227 dated 15 September 1983 | Failure of wire drive input rod to servo valves. | Cancelled and superseded by AD 010–02–84. |
| 002–12–83 | CAA Letter 9/97/CtAw/12/33 /227 dated 13 December 1983 | Inspection and, if required, Modification of fuel vent and drain lines. | Cancelled by the CAA on 6 May 2004. |
| 010–02–84 | Bell ASB 47–83–9 | Pt I. Upgrading of Hydraulic Service Actuators to latest standard in accordance with Flight Accessory Service Bulletin SB–004.<br><br>Pt II. Inspection of Hydraulic Servo input lever bolts for corrosion and freedom of movement in accordance with Bell ASB. | Cancelled by the CAA on 6 May 2004. |
| 017–02–86 | CAA Letter 9/97/CtAw/33 | Repetitive eddy current inspection of all main rotor blade grips. | Superseded by FAA AD 2000–18–51. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 017–02–86 | CAA Letter 9/97/CtAw/33 | Repetitive eddy current inspection of all main rotor blade grips. | Superseded by FAA AD 2000–18–51. |

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# 2 ENGINES AND PROPELLERS

## ALVIS LEONIDES ENGINES

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 1467 PRE 80 | 57 | Restricted boost gauge connection. | Applicable to Series 501 and 502. Compliance required before flight. |
| 1468 PRE 80 | 60 | Strengthened clutch cover. | Applicable to Series 524/1. Compliance required before flight. |
| 1469 PRE 80 | Leonides Major 114 SU Mod 1172 | Introduction of fuel injection pump, type SUX 801. | Applicable to Leonides Major 755/1 engines in Westland S55 Series 2 helicopter. Compliance required before flight. |

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## ROLLS-ROYCE AVON ENGINES

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 0237 PRE 80 | 3307 | Engine turbine wheels and shaft-locking keys for HP, IP and LP turbine blades. | Applicable to Avon 524B, 525B, 527, 527B, 531B, 532R–B and 533R. Compliance required by 31 December 1973. Service Bulletin Av 72–284 refers. |
| 0238 PRE 80 | 3617 | LP fuel filter to fuel pump pipe with adaptor to provide additional linear movement. | Applicable to all Marks. Compliance required as called for in Alert Service Bulletin Av 73–49. |
| 0239 PRE 80 | 3639 | Cooling Air Manifold – fitment of reinforcing strap around manifold rear section. | Compliance required as called for in Alert Service Bulletin. Av 72–381. Not applicable if Mod. 3653 (Service Bulletin Av 72–376) embodied. |
| 0240 PRE 80 | 3653 | Engine nozzle box and guide vanes – Introduction of Nimonic 80A studs in turbine rear casing front flange. | Applicable to Avon 524B, 525B, 527, 527B, and 531B. Compliance required by 31 December 1972. Service Bulletin Av 72–376 refers. |
| 0241 PRE 80 | Av 72–440 | Engine – Compressor casings and stators – Front to intermediate casing joint inspection. | Applicable to Avon 542B, 542C, 525B, 525C, 527B, 531B, 532RB and 533R. Compliance required as detailed in maintenance manual. |
| 0242 PRE 80 | Av 72–454 Part 1 | Engine – Turbine Wheels and Shaft – Turbine discs with increased blending radius on firtree root bucket groove – Mod. 4064. | Applicable to Avon 524B, 524C, 525B, 525C, 527B, 531B, 532R–B and 533R. Compliance required by 31 December 1976. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 0243 PRE 80 | Av 72–455 | Check 0 to 1 compressor rotor wheel spacer – Part No. BR 64663. | Applicable to Avon 531B, 532R–B and 533R. Compliance required at the next exposure of the affected area or by 31 December 1978, whichever is the earlier. |
| 0244 PRE 80 | Av 72–A462 | Compressor disc inspection. | Applicable to Avon 524B, 524C, 525B and 525C (Comet installations) and Avon 527B, 531B, 532R–B and 533R (Caravelle installations). Compliance required as detailed in Service Bulletin. |
| 0245 PRE 80 | Av 72–464 | Check on Compressor Discs which have been incorrectly electrolytically Processed. | Applicable to Avon 524B, 524C, 525B, 525C, 527B, 531B, 532R–B and 533R. Compliance required as detailed in Service Bulletin Av 72–464. |

## ROLLS-ROYCE (BRISTOL SIDDELEY) CENTAURUS 661 ENGINES

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 1466 PRE 80 | Special Instruction B26 | Cylinder Base Nuts – Inspection for looseness. | Applicable to Mark 661 engines not incorporating Modification No. CE1256. Compliance required as detailed in Special Instruction No. B26. |

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## ROLLS-ROYCE (BRISTOL SIDDELEY) CHEETAH ENGINES

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 1457 PRE 80 | E792 | Auxiliary drive shaft oil hole deleted. | Applicable to types 9, 15 and 19 installed in Anson aircraft only. Compliance required before flight. |
| 1458 PRE 80 | E722 | Improved air intake heater muff. | Applicable to type 10 only. Compliance required before flight. |
| 1459 PRE 80 | E763 | Strengthened air intake heater muff clamping straps. | Applicable to types 9, 10, 19, 15 and 17. Not applicable when Mods. E793 and E800 are fitted. Compliance required before flight. |
| 1460 PRE 80 | E769 | Alteration of jet sizes when air cleaner cowlings installed. | Applicable to type 9 with Modifications E740, 744 and 745 embodied. Compliance required before flight. |
| 1461 PRE 80 | E786 | Deletion of slow running pressure balance duct. | Applicable to types 9, 10, 15 and 19 with Claudel Hobson type AV70M or ME carburettors. Compliance required before flight. |
| 1462 PRE 80 | E809 | Protective gauze screens for hot and cold air intake. | Applicable to types 9, 10, 19, 15 and 17. Compliance required before flight. |
| 1463 PRE 80 | E820 | New Magneto timing (port 19° BTDC) (stbd. 21° BTDC). | Applicable to types 15 and 17. Compliance required before flight. |
| 1464 PRE 80 | E832 | Increased capacity auxiliary rear scavenge pump. | Applicable to types 15, 17, 9, 10 and 19 (only if Heywood Compressor is fitted). Compliance required before flight. |
| 1465 PRE 80 | E834 | Higher range main jet and deletion of power valve cam. | Applicable to type 15 with Claudel Hobson carburettor type AV70MG fitted. Compliance required before flight. |

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## ROLLS-ROYCE CONTINENTAL SERIES ENGINES

On the 1 August 1982 the Type responsibility for all Rolls-Royce Continental Series engines was transferred to Teledyne Continental Motors of the United States. The CAA ADs below are still applicable to Rolls-Royce Continental Series engines.

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 0001 PRE 80 | Marvel Schebler SB No. 12–60 | Additional cotter pin safety on the accelerator pump link. | Applies to all C90, 0–200 and 0–300 series engines. The Civil Aviation Authority requires compliance with this Bulletin as follows: At the next 25 hour inspection after receipt of this publication determine whether the carburettor accelerator pump link has a cotter pin fitted at each end. If affirmative record this fact in the engine log book. If negative incorporate Marvel Schebler Service Bulletin 12–60 not later than the next 25 hour inspection and record compliance in the engine log book. |
| 0002 PRE 80 | FAA AD 72–6–5 | Inspect and safety wire throttle arm on Marvel Schebler carburettors. | Applies to Rolls-Royce Continental C90, 0–200, 0–240 and 0–300 engines in addition to Teledyne Continental engines. |
| 0003 PRE 80 | Rolls-Royce SB T200 | Oil pump drive gear backlash check and replacement. | Applies to C90, 0–200 and 0–300 series engines. |
| 0004 PRE 80 | Rolls-Royce SB T244/1 | Exhaust valve guide – Inspection for correct fitment. | Applicable to 0–200 and 0–300 series engines identified in the Bulletin. |
| 0005 PRE 80 | Rolls-Royce SB T362 (TCM Bulletin 77–12) | Change in magneto timing and baffle inspection. | Cancelled, mandatory requirement no longer required. |
| 0006 PRE 80 | Rolls-Royce SB T363 | Crankcase – Identification, inspection and replacement. | Applicable to IO–520A, B, BA, C, D, E, F, J, K, L and M; TSIO–520–B, C, D, E, G, H, J, K, L and N; GTSIO–520–C, D, F and H. Compliance as detailed in Service Bulletin. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 0007 PRE 80 | Rolls-Royce SB T375/1 | Flexible elbow TCM, Part No. 635930 – Separation from intake manifold elbows. | Applicable to TSIO–520–J, TSIO–520–N series engines. Compliance as detailed in Service Bulletin. |
| 0008 PRE 80 | Rolls-Royce SB T398 | Aircraft/Engine certification. | Applicable to 0–240–A and E Model engines. |
| 0009 PRE 80 | Rolls-Royce SB T408 | Compliance with Slick Bulletin 1–80. | Applicable to all models with Slick Models listed installed. |
| 002–07–80 | Rolls-Royce SB T416 | Crankshaft inspection. | Applicable to 0–240 engines and any crankshafts held as spares before fitment. |
| 005–06–81 | Rolls-Royce S.I.L. Cvr 1 | AC Fuel Pump Screen restriction. | Applicable to C90, 0–200, 0–240 and 0–300 Series engines with AC Fuel Pumps Part No. 40585, 40695 or 631391 installed. INSPECT in accordance with Continental Aircraft Engine Service Bulletin M.81–8. |
| 012–09–81 | Rolls-Royce S.I.L. Cvr 2 | Oil pump drive gear nut. | Applicable to IO–360C, D, G, H, J, K and TSIO–360C, D Series engines manufactured by Rolls-Royce Motors Ltd and identified by Serial Nos. 50R001 to 50R505 inclusive. |
| 001–03–82 | Rolls-Royce S.I.L. Cvr 3 | Crankshaft Inspection. | Applicable to 0–240 Series engines. Engines subject to the repetitive inspections detailed in Service Bulletin T416/1 Section 8 will not be permitted to operate after 31 December 1982 unless a new crankshaft is fitted. |

## ROLLS-ROYCE CONWAY ENGINES

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 1953 PRE 80 | Co 71–A213 | *Engine* – Suspension – checking for cracks in the right-hand front cone bolt. | Applicability and compliance required as detailed in Service Bulletin. |
| 1954 PRE 80 | Co 72–393 | *Engine* – Flame tubes and discharge nozzles – inspection. | Applicability and compliance required as detailed in Service Bulletin. This Service Bulletin supersedes ASB Co 72–A688. |
| 1955 PRE 80 | Co 72–514 | *Engine* – Flame tubes and discharge nozzles – inspection. | Applicability and compliance required as detailed in Service Bulletin. This Service Bulletin supersedes ASB Co 72–A688. |
| 1956 PRE 80 | Co 72–A580 | *Engine* – Recommended Procedure for engines incorporating HP Compressor location bearings to Mod 1538, 1602, 1603, 2560, 2561 or 2563 standards with or without Mod 2559. | Applicability and compliance required as detailed in Service Bulletin. |
| 1957 PRE 80 | Co 72–627 | *Engine* – HP Compressor rotating assembly – thickened rotor discs and reduced rim gaps – Mod 2635. | Applicability and compliance required as detailed in Service Bulletin. |
| 1958 PRE 80 | Co 72–647 | *Engine* – Bypass duct – Introduction of LP turbine blade containment shield – Mod 2707. | Applicability and compliance required as detailed in Service Bulletin. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 1959 PRE 80 | Co 72–A665 | *Engine* – LP and HP compressor assemblies – replacement of LP wheels stages 3 to 5 and HP wheels stages 3 to 9. | Applicability and compliance required as detailed in Service Bulletin. |
| 1960 PRE 80 | Co 72–A704 | *Engine* – LP2 Turbine Disc – Reduction of life. | Applicability and compliance required as detailed in Service Bulletin. |
| 1961 PRE 80 | Co 72–A707 | *Engine* – LP1 Nozzle Guide Vanes – Inspection on 'In Service' Engines. | Applicable to Conway 550B. Compliance required as detailed in Alert Service Bulletin. |
| 1962 PRE 80 | Co 72–732 | *Engine* – HP compressor thrust bearing – life limitation of bearing cage. | Applicable to Conway 508 and 509. Compliance required as detailed in Service Bulletin. |
| 1963 PRE 80 | Co 76–A12 | *Engine Controls* – Emergency Fuel Shut-off Cock Device – False Operation. | Applicable to Conway 540, 550. Compliance as detailed in Service Bulletin. |
| 1964 PRE 80 | Co 77–28 | *Engine Indicating* – Revised EGT Trimming procedure – Mod 2857. | Applicable to Conway 540, 550B. Compliance as detailed in Service Bulletin. Co 72–740 (Mod 2945) is an acceptable alternative to Co 77–28. |
| 1965 PRE 80 | Co 78–165 | *Exhaust* – Thrust Reverser Selector/Sequencing Valve – Checking for wear in spherical bearing location on selector piston. | Applicability and compliance required as detailed in Service Bulletin. |

## ROLLS-ROYCE DART SERIES ENGINES

With effect from 7 January 2002, the responsibilities of the Type Design Organisation for the Rolls-Royce Dart Series engines transferred from Rolls-Royce plc to Rolls-Royce Deutschland. Coincident with this the ICAO Annex 8 responsibilities of the Authority of the State of Design transferred from the United Kingdom Civil Aviation Authority (CAA) to the German Luftfahrt-Bundesamt (LBA). From that date LBA became responsible for mandating and promulgating Airworthiness Directives for the Rolls-Royce Dart Series engines. The following CAA Airworthiness Directives had been issued at the time of design transfer and are still applicable to aircraft on the UK register.

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 1927 PRE 80 | 612 | Introduction of anti-tear straps with positive location for pre-modification 553 aircasing. | Should have been embodied by 1 August 1962. TCA Project No. VU61 04–1092/34 and BEA Mod. P–45–46 are acceptable alternatives. |
| 1928 PRE 80 | 653 | Modified oil system to ensure the registering of the low oil pressure at the rear of the engine. | Applicable to 520. To be embodied before flight. |
| 1929 PRE 80 | Notice to Operators No. 86 | Deletion of Mod. 604 (Attenuator RK 22688). | Notice to Operators cancelled therefore AD is now cancelled. |
| 1930 PRE 80 | SB Da 61–12 | *Low Torque Switch* – In Service functional test and revised overhaul. | Applicability and compliance required as detailed in Service Bulletin. |
| 1931 PRE 80 | ASB Da 71–A2 | Restricted engine speed range during flight and ground running. | Requirement cancelled – Information now contained in Maintenance Manual and Operating Instruction Manual. |
| 1932 PRE 80 | SB Da 72–297 | Engine reduction gear fitment of retaining plates to contain a failed annulus gear – Mod. 1431. | Applicability and compliance required as detailed in Service Bulletin. |
| 1933 PRE 80 | SB Da 72–367 | Inspection of propeller shafts in installed engines. | Applicability and compliance required as detailed in Service Bulletin. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 1934 PRE 80 | SB Da 72–347 | *Turbine Wheels and Shaft LP* – Turbine disc retaining bolt in low Brinell Hykro material with improved corrosion protection and reduced torque load – Mod. 1557. | Applicability and compliance required as detailed in Service Bulletin. |
| 1935 PRE 80 | SB Da 72–348 | *Engine* – Reduction Gear – Fitment of feathering probe and retaining ring to contain a failed annulus gear – Mod. 1550. | Applicability and compliance required as detailed in Service Bulletin. |
| 1936 PRE 80 | ASB Da 73–A54 | Removal of fuel burners to Mod. 827 and 1224 standard. | Applicability and compliance required as detailed in Service Bulletin. |
| 1937 PRE 80 | SB Da 72–383 | *Compressor Casing* – Loss of retention of compressor inter stage guide vane casing to front inner casing retaining bolts and nuts. | Applicability and compliance required as detailed in Service Bulletin. This bulletin supersedes ASB Da 72–A383. |
| 1938 PRE 80 | SB Da 72–384 | Top mounting foot cracking and mounting foot stud pulling on fracture. | Applicability and compliance required as detailed in Service Bulletin. |
| 1939 PRE 80 | SB Da 72–A391 | LP impeller failure. | Superseded by ASB Da 72–A401. |
| 1940 PRE 80 | SB Da 72–A401 | LP impeller life changes. | Superseded by SB Da 72–463. |
| 1941 PRE 80 | ASB Da 72–A413 | Flame tube suspension inspection. | Superseded by 006–08–84. |
| 1942 PRE 80 | SB Da 72–417 | Flame tube suspension inspection. | Superseded by 006-08-84. |
| 1943 PRE 80 | SB Da 72–420 | Flame tube suspension inspection. | Applicability and compliance required as detailed in Service Bulletin. |
| 1944 PRE 80 | SB Da 72–425 | Mod. 1455 LP impellers reworked from Mod. 797 standard. | Superseded by ASB Da 72–A445 and SB Da 72–463. |
| 1945 PRE 80 | SB Da 72–430 | *Impellers and Shafts* – Fitment of anti-frettage shim to LP impeller hub rear face – Mod. 1732. | Applicability and compliance required as detailed in Service Bulletin. |
| 1946 PRE 80 | SB Da 72–431 | Flame tube suspension inspection. | Applicability and compliance required as detailed in Service Bulletin. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 1947 PRE 80 | SB Da 72–A445 | LP impeller inspection. | Applicability and compliance required as detailed in Service Bulletin. |
| 1948 PRE 80 | SB Da 73–68 | Failure of fuel burner shroud nuts. | Applicability and compliance required as detailed in Service Bulletin. |
| 1949 PRE 80 | SB Da 73–73 | Inspection of Mod. 1587 Aeroquip type fuel pipes. | Applicability and compliance required as detailed in Service Bulletin. |
| 1950 PRE 80 | SB Da 76–16 | *Engine – Controls* – Control Box mounting bolts in improved material and with increased shank diameter – Mod. 1761. | Applicability and compliance required as detailed in Service Bulletin. |
| 1951 PRE 80 | ASB Da 76–A17 | Inspection of control box mounting bolts. | Applicability and compliance required as detailed in Alert Service Bulletin. |
| 1952 PRE 80 | SB Da 82–16 | *Water Injection* – Operating limitations – amendment to water methanol check pressure – Mod. 1649. | Applicable to 531. Compliance required as detailed in Service Bulletin. |
| 002–02–82 | SB Da 72–A471 | *Combustion Chambers* – Air casing inspection. | Applicability and compliance required as detailed in Alert Service Bulletin. |
| 004–02–82 | SB Da 73–A75 | Failure of Dart Mod. 1587 Aeroquip fuel pipe RK 38451A (Fuel Manifold Assembly – No. 7 to No. 6 Bulkhead connection). | Applicability and compliance required as detailed in Alert Service Bulletin. |
| 018–04–82 | SB Da 72–472 | *Engine* – Flame tube suspension inspection. | Applicability and compliance required as detailed in Service Bulletin. |
| 007–05–82 | SB Da 72–451 | *Engine* – Nozzle box and guide vanes – HP Non-locating nozzle guide vanes with increased platform width. | Applicability and compliance required as detailed in Service Bulletin. |
| 008–05–82 | SB Da 72–470 | *Engine* – Flame tube suspension inspection. | Applicability and compliance required as detailed in Service Bulletin. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 002–10–82 | SB Da 72–475 | *Engine* – Combustion equipment – fitment of full length commonised anti-tear straps. | Applicability and compliance required as detailed in Service Bulletin. |
| 005–02–83 | ASB Da 73–A76 | *Engine Fuel and Control* – Inspection of Dart Mod. 1587 Aeroquip fuel pipes. | Applicability and compliance required as detailed in Service Bulletin. |
| 006–08–84 | SB Da 72–485 | Flame tube suspension inspection. | Applicability and compliance required as detailed in Service Bulletin. |
| 011–10–84 | SB Da 72–A488 | Low pressure impeller – backplate inspection. | Applicability and compliance required as detailed in Service Bulletin. |
| 001–05–86 | SB Da77–A12 | Engine Indicating – Failure of Smiths torque pressure transmitter type 5302 KPT–01 (RR Mod. 1867). | Applicability and compliance required as detailed in Service Bulletin. |
| 005–08–86 | SB Da72–423 | Engine – Combustion equipment – Fitment of snubber screws to expansion chambers for flame tube head location – Mod. 1736. | Applicability and compliance required as detailed in Service Bulletin. |
| 006–08–86 | SB Da72–496 | Engine – High pressure (HP) impeller life limitations. | Applicability and compliance required as detailed in Service Bulletin. |
| 007–08–86 | SB Da72–497 | Engine – Oil cooler matrix tube failure. | Applicability and compliance required as detailed in Service Bulletin. |
| 014–11–86 | SB Da73–A81 | Engine Fuel and Control – Mod. 1625 fuel burner shroud nut hardness check. | Applicability and compliance required as detailed in Service Bulletin. |
| 008–06–89 | SB Da72–A512 | Engine – Failure of low pressure turbine disc. | Applicability and compliance required as detailed in Service Bulletin. |
| 009–06–89 | SB Da72–513 | Engine – Air intake cowling – Acoustically lined air intake (Mod. 1800) – Deletion from Gulfstream G1 engines only. | Applicability and compliance required as detailed in Service Bulletin. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 008–03–93 | SB Da73–A86 | Engine Fuel and Control – Inspection of servo pipe from fuel pump to control unit. | Applicable to 506, 510, 511, 514, 515, 520, 525, 526, 527, 528, 529, 530, 532, 533, 534, 535, 536, 542, 543, 550 and 552 series engines. Compliance required as detailed in Service Bulletin. |
| 004–09–94 | SB Da72–307 | Engine – Impeller and shafts – High Pressure (HP) impeller with increased frequency in the '5000' mode of vibration. | Applicability and compliance required as detailed in Service Bulletin. |
| 002–12–96 | SB Da61–13 | Low torque switch – Inservice inspection to eliminate currently unapproved switches. | Applicable to 506, 510, 511, 514, 515, 520, 525, 526, 529, 530, 531, 532, 533, 534, 535, 536, 542, 543, 550 and 552 series engines. Compliance required as detailed in Service Bulletin. |
| 002–05–98 | SB Da72–530 | Engine – Inspection and rework of H.P. turbine blades (Pre D.R.S. 611 standard engines only). | Applicable to 500 series engines as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. |
| 003–05–98 | SB Da73–A87 | Engine Fuel and Control – Initial (and repetitive) fuel burner fuel flow calibration checks ('as received condition') and associated life limitation. | Cancelled and superseded by LBA AD 2002–365. |
| 007–02–2001 R1 | SB Da72–533 | Engine – Turbine wheels and shafts – HP turbine disc – Introduction of seal arm nip and improved corrosion protection. | Cancelled and superseded by LBA AD 2001–116/5. |

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## ROLLS-ROYCE GEM SERIES ENGINES

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 006–08–92 | SB 73–24 | *Engine Fuel and Control* – Hydromechanical fuel flow control unit – Inspection for fuel leakage and replacement of packing (sealing ring) and back-up retaining ring. | Applicable to Gem Mk 530 and 531 engines fitted on Westland 30 helicopters. Compliance required as detailed in Service Bulletin. |

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## ROLLS-ROYCE GNOME ENGINES

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 1777 PRE 80 | 1115 | *Engine* – Reduction gearbox – Rear High speed shaft gear – bore chamfer reduced. | Should have been embodied in accordance with Service Bulletin No. 72–10. |
| 1778 PRE 80 | 1243 | *Engine Fuel and Control* – Thermister – Introduction of rubber sealing compound. | Should have been embodied in accordance with Service Bulletin No. 73–8. |
| 1779 PRE 80 | 1677 or 1244 Part 1 | *Engine* – Reduction gearbox – Oil feed pipe with flanged sleeve introduced. | Should have been embodied in accordance with Service Bulletin No. 72–221. |
| 1780 PRE 80 | 1754 | *Engine Fuel and Control* – improved over-speed trip governor. | Should have been embodied in accordance with Service Bulletin No. 73–150. |
| 1781 PRE 80 | 1974 | *Engine* – Stage 1 and 2 turbine Wheels – increase fillet radii at base of cooling-air plate spigot recesses. | Compliance required in accordance with Service Bulletin No. 72–251. |
| 1782 PRE 80 | 2121 | *Engine Fuel and Control* – Computer – design change. | Applicability and compliance required as detailed in Alert Service Bulletin 73–A223. |
| 1783 PRE 80 | SB 72–A271 | *Engine* – Power turbine and exhaust – wire-locking of exhaust clamp. | Applicable to Gnome MK 510 and 610 engines. Compliance as detailed in Service Bulletin. |
| 1784 PRE 80 | SB 73–179 | Serviceability check of fuel pipe assembly Part No. 565817 or 565878. | Applicable to Gnome H1000 Mark 501. Compliance required as detailed in Service Bulletin. |
| 1785 PRE 80 | SB 73–A229 | *Engine Fuel and Control* – fuel pump and flow control unit – blockage of hydro-mechanical governor filter. | Applicability and compliance required as detailed in Alert Service Bulletin. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 009–01–82 | 72–A426 | *Engine* – Compressor Spool – Inspect. | Applicable to Gnome engines as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. |
| 005–05–83 | 72–A386 | *Engine* – Combustion chamber fuel and burner manifold – Inspection for evidence of fretting. | Applicable to Gnome engines as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. |
| 008–11–85 | 72–A465 | *Engine* – Power turbine wheel and shaft in Rex 448 material – Inspect. | Applicable to Gnome engines as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. |
| 002–01–87 | 72–A474 | *Engine* – Coupling gearbox oil cooler. Oil return pipe damage. | Applicable to Gnome engines as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. |

## ROLLS-ROYCE M45H-501 ENGINES

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 013–01–85 | SB 73–23 | *Engine* – Fuels and controls – Manifold supply hose replacement and imposition of life limitation. | Compliance required as detailed in Service Bulletin. |
| 002–07–85 | SB 72–A105 | *Engine* – Low pressure turbine assembly – Reduction in cyclic flight lives for 1st, 2nd and 3rd stage discs. | Compliance required as detailed in Service Bulletin. |
| 003–07–85 | SB 72–A106 | *Engine* – Low pressure turbine – Reduction in the cyclic flight life of the 2nd stage disc. | Compliance required as detailed in Service Bulletin. . |
| 004–07–85 | SB 72–A139 | *Engine* – Low pressure fan discs and blades – reduction in cyclic flight life for 1st stage rotor disc. | Compliance required as detailed in Service Bulletin. |
| 005–07–85 | SB 72–A140 | *Engine* – Intermediate pressure compressor rotor drum and blades – reduction in cyclic flight lives. | Compliance required as detailed in Service Bulletin. |
| 006–07–85 | SB 73–20 | *Engine Fuel and Control* – Fuel manifold drain hose – inspection/check – Imposition of life limitation. | Compliance required as detailed in Service Bulletin. |
| 007–07–85 | SB 73–A10 | *Engine Fuel and Control* – Fuel pump and control unit – engine acceleration check. | Compliance required as detailed in Service Bulletin. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 007–10–88 | SB 72–A147 | *Engine* – Intermediate pressure compressor module – Restriction of threshold sample to 3000 hours. | Compliance required as detailed in Service Bulletin. |

## ROLLS-ROYCE (BRISTOL) PROTEUS 750/760 SERIES ENGINES

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 1966 PRE 80 | 396 | Introduction of turbine centre bolts in S106 material in place of BACE material together with a new labyrinth seal and associated parts. | Applicable to 705 and 755 engines. Compliance required as detailed in modification leaflet. |
| 1967 PRE 80 | 440 | Introduction of propeller control unit type No. PAY 81409 embodying De Havilland Mod No. 6739. | Applicable to 755 engines. Compliance required as detailed in modification leaflet. |
| 1968 PRE 80 | 447 | Introduction of Smiths fuel pressure warning light switch mounted on the fuel filter head together with associated changes. | Applicable to 755 engines. Compliance required as detailed in modification leaflet.<br>NOTE: Modifications PPP292 and Britannia 1150 introduce the complementary electric cables to go with this modification. |
| 1969 PRE 80 | 455 | Introduction of revised drive shaft and driven coupling gear (inner and outer) to generator drive. | Applicable to 755 and 756 engines. Compliance required as detailed in modification leaflet. |
| 1970 PRE 80 | 456 | Introduction of turbine heat shield together with a new turbine exhaust annulus unit without instrument bosses. | Applicable to 705, 755 and 756 engines. Compliance required as detailed in modification leaflet. |
| 1971 PRE 80 | CPP 632 | Introduction of a modified feathering pump. | Applicable to 757, 765 and 766 engines. Compliance required before 1 January 1972. |
| 1972 PRE 80 | 687 | Introduction of a new 2nd stage diaphragm unit. | Applicable to Series as detailed in modification leaflets. Compliance required as detailed in modification leaflets. |
| | or 690 | Introduction of a new 2nd stage diaphragm unit including a diaphragm hub. | |
| | or 1033 | Introduction of 2nd stage diaphragm unit incorporating a redesigned inner ring. | |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 1973 PRE 80 | 774 | Introduction of shortened water injection nozzles. | Applicable to 757 engines. Compliance required as detailed in modification leaflet. |
| 1974 PRE 80 | 797 | Introduction of propeller control units to De Havilland Mod No. B11445 standard. | Applicable to Series as detailed in modification leaflet. Compliance required before 1 January 1960. |
| 1975 PRE 80 | 994 | Introduction of propeller control units to De Havilland Mod No. 24195, 24196, 14877 and 14952 standards. | Applicable to Series as detailed in modification leaflet. Compliance required as detailed in modification leaflet. |
| 1976 PRE 80 | 1017 | Introduction of propeller control units to De Havilland Mod No. 11513 standard. | Applicable to Series as detailed in modification leaflet. Compliance required as detailed in modification leaflet. |
| 1977 PRE 80 | B7 | Combustion Chamber Outer Casings – Inspection for cracking. | Applicable to all Series engines. Compliance required as detailed in Proteus Bulletin. |
| 1978 PRE 80 | B18 | Combustion Chamber Rear Air Casings – Inspection for bulging or breakthrough. | Applicable to 750/760 Series engines. Compliance required as detailed in Proteus Bulletins. |
| 1979 PRE 80 | B46 | *Turbine* – Hirth Serration cracking on 2nd stage turbine discs. | Applicable to 750/760 Series engines. Compliance required as detailed in Proteus Bulletin. |
| 016-04-81 | Bulletin No. C12 | Inspection of burner manifold flexible pipes. | Applicable to 750/760 Series engines. Compliance required as detailed in Proteus Bulletin. |

## ROLLS-ROYCE RB211 ENGINES

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 0010 PRE 80 | 72–2651 | HP Turbine Disc (Pre-SB 72–2024 standard) – reduction in declared life. | Since all RB211–22, –22C and 22CA engines are now superseded by RB211–22B engines, and SB RB211–72–2024 is a D.I.S. feature on –22B engines, Service Bulletin 72–2651 is now cancelled. (See Revision 3 dated 13 February 1981.) |
| 0011 PRE 80 | 72–A2655 | Life limitation of pre-SB 72–2981 LP compressor (fan) discs. | Applicable to RB211–22C, RB211–22CA, RB211–22B series engines. Compliance required as detailed in Service Bulletin. |
| 0012 PRE 80 | 72–3074 | IP compressor rotor shaft – stage 1 to 5 life limitation. | Applicable to RB211–22C, RB211–22CA, RB211–22B series engines. Compliance required as detailed in Service Bulletin. |
| 0013 PRE 80 | 73–A2653 | Fuel Manifold – failure of support bracket with possible fracture of burner primary fuel manifold tubes. | Service Bulletin cancelled at Revision 4 therefore AD is now cancelled. |
| 0014 PRE 80 | 78–A2656 | Inspection of hot stream spoiler lock indicator rods. | Since all RB211–22 and –22C engines are now superseded by RB211–22B engines, and SB RB211–78–2969 is incorporated on all RB211–22B engines, Service Bulletin 78–2656 is cancelled. (See Revision 1 dated 13 February 1981.) |
| 0015 PRE 80 | 72–3062 | LP compressor rotor – identification of rotor (fan) discs produced from the bottom end of the ingot ('B' material). | Applicable to RB211–22B series engines. Compliance required as detailed in Service Bulletin. |
| 0016 PRE 80 | 72–A3077 | *Engine* – Compressor intermediate case – Inspection of aluminium cases. | Applicability and compliance required as detailed in Alert Service Bulletin. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 0017 PRE 80 | 73–2999 | P1 probe with increased diameter exit nozzle. | Applicable to RB211–P503 series pods, fitted to RB211–22CA, RB211–2B series engines. Compliance required as detailed in Service Bulletin. |
| 0018 PRE 80 | 71–3319 | *Power Plant* – Engine light duty electrical harness – IP compressor speed governor unit made operative. | Applicability as detailed in Service Bulletin. Compliance required not later than 31 May 1976. |
| 0019 PRE 80 | 72–3326 | *Engine* – IP compressor – variable inlet guide vane (VIGV) actuating mechanism with low friction material. | Applicability as detailed in Service Bulletin. Compliance required by 31 December 1975. |
| 0020 PRE 80 | 72–3335 | *Engine* – IP compressor – variable inlet guide vanes with trailing edge cut back 20%. | Applicability as detailed in Service Bulletin. Compliance required by 31 December 1975. |
| 0021 PRE 80 | 72–3482 | *Engine* – IP compressor case and vanes – stages 4 & 5 stator vanes with cut back trailing edge. | Applicability as detailed in Service Bulletin. Compliance required by 31 December 1975. |
| 0022 PRE 80 | 72–3533 | *Engine* – HS external gear-box – oil tank filler with additional fail safe seal. | Applicability as detailed in Service Bulletin. Compliance required by 1 July 1975. |
| 0023 PRE 80 | 72–3650 | *Engine* – compressor intermediate case with sleeved oil return line. | Applicability as detailed in Service Bulletin. Compliance required by 1 July 1975 unless Service Bulletin 72–3681 is incorporated when compliance is required by 1 January 1976. SB 72–3720 supersedes this Service Bulletin with respect to diametral clearance between the sleeve and casing. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 0024 PRE 80 | 78–A3672 | *Exhaust* – Cold Stream translating cowl – check for unlocked condition. | Applicability and compliance required as detailed in Alert Service Bulletin.<br>Note: The inspections detailed are not required when Service Bulletins 78–3753, 78–3769 and 72–4073 are embodied. |
| 0025 PRE 80 | 73–3673 | *Engine Fuel and Control* – Scheduled maintenance checks of speed and temperature governing system. | Applicable to all RB211 engines incorporating SB RB211–71–3319 or 71–3641. Compliance required in accordance with para 1D of Service Bulletin within 750 flight hours and at intervals not exceeding 750 flight hours thereafter. |
| 0026 PRE 80 | 72–4300 | *Engine* – HP turbine disc – life limitation. | Applicable to all RB211–22B engines fitted with any HP turbine disc listed in the Appendix of the Service Bulletin. Compliance as detailed in Service Bulletin. |
| 0027 PRE 80 | 72–A4301 | *Engine* – HP turbine rotor – Inspection of HP turbine disc bore. | Applicable to RB211–22B engines with HP turbine discs not incorporating Service Bulletin RB211–72–4447. Compliance as detailed in Service Bulletin. |
| 0028 PRE 80 | 72–4303 | *Engine* – HP turbine rotor – Inspection of HP turbine disc bore. | Applicable to RB211–22B engines with HP turbine discs not already inspected or reworked in accordance with the requirements of Service Bulletin RB211–72–A4301. Compliance as detailed in Alert Service Bulletin. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 0029 PRE 80 | 72–4304 | *Engine* – HP turbine disc – life limitation. | Applicable to RB211–22B engines fitted with any HP turbine disc listed in Appendix of Service Bulletin RB211–72–4304. Subject HP turbine discs to be removed on or before attaining 2900 flight cycles. |
| 0030 PRE 80 | 73–4305 | *Engine* – fuel and control – scheduled maintenance checks – speed governing system. | Applicable to all RB211 engines as detailed in Service Bulletin. Compliance required in accordance with para 1D of Service Bulletin within 750 flight hours following incorporation of SB RB211–73–4622 and at intervals not exceeding 750 flight hours thereafter. |
| 0031 PRE 80 | 73–4776 | *Engine* – Fuel and control – HP and LP fuel pumps – revised actuator valve sleeve metering slots and spill valve damping orifice. | Applicable to *Lockheed L–1011*. RB211–22B–02, –22B–02/10, –22B–02/11, –22B-02/14, –22B–02/16, –22B–02/17 engines prior to Serial No. 10626. Compliance as detailed in Service Bulletin. |
| 0032 PRE 80 | 75–4818 | *Engine* – compressor bleed valve control system – linked high set IP compressor bleed valves – Mod. No. 75–4818. | Applicable to RB211–524B–19 and –524B–19/10 engines prior to Serial No. 12021. Compliance as detailed in Service Bulletin. |
| 0033 PRE 80 | 75–4844 | *Engine* – airflow control LH bleed valve – airflow control bleed valve with introduction of calibration G-Mod, 75–4844 (Plessey SB IGV 75–36–2435, Mod 2435). | Applicable to RB211–524B–19 and –524B–19/10 engines prior to Serial No. 12021. Compliance as detailed in Service Bulletin. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 0034 PRE 80 | 75–4869 | *Engine* – airflow control – VIGV controller with reduced tolerances on the production acceptance test schedule Mod. 75–4869 (Plessey SB IGV 75–39–2440 Mod. 2440). | Applicable to RB211–524B–19 and –524B–19/10 engines prior to Serial No. 12021. Compliance as detailed in Service Bulletin. |
| 0035 PRE 80 | 72–4871 | *Engine* – handling above 35,000 feet. | Applicable to RB211–524B–19 and –524B–19/10 engines. Compliance as detailed in Service Bulletin. |
| 0036 PRE 80 | 72–4873 | *Engine* – Combustion lines – inspection of miniflares. | Service Bulletin cancelled at Revision 1 therefore AD is now cancelled. |
| 0037 PRE 80 | 72–5201 | *Engine* – HP compressor rotor – Inspection of HP compressor stage 4 to 6 rotor shaft for electron beam weld impingement on the front face of the stage 5 disc. | Applicable to:<br>*Lockheed L1011* RB211–524–02 and –524B–02 engines fitted with HP compressor stage 4 to 6 rotor shafts with Serial Nos. prior to 13923.<br>*Boeing 747* RB211–524B–19, –524B2–19, –524C–19 and –524B2–39 engines fitted with HP compressor stage 4 to 6 rotor shafts with Serial Nos. prior to 13923. Compliance as detailed in Service Bulletin. |
| 0038 PRE 80 | 75–5203 | *Engine* – VIGV controller interchangeability. | Service Bulletin RB 211–75–5203 is cancelled by Revision 2. There is no longer a service requirement to use alternative marks of VIGVs. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 0039 PRE 80 | 72–A5722 | *Engine* – HP compressor – Withdrawal of specific HP compressor rotor stage 1 and 2 disc assemblies from service. | Applicable to RB211–22B engines as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. |
| 016–03–81 | 72–A5885 | *Engine* – HP compressor – Withdrawal of specific HP compressor rotor stage 1 and 2 disc assemblies from service. | Applicable to Lockheed L1011 aircraft fitted with RB211–22B–02, –524–02, –524B–02, –524B3–02 and –524B4–02 engine variants and Boeing 747 aircraft fitted with RB211–524B2–19, –524C–19 and –524B2–39 engine variants. Compliance required as detailed in Service Bulletin. |
| 019–03–81 | 73–5184 | *Engine Fuel and Control* – Introduction of fuel filter in HP fuel line to burner manifold. | Applicable to RB211–22B, –524, –524B, –524C and –524D engines as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. |
| 018–08–81 | 77–A6422 | *Engine Indicating* – Airborne. Vibration Monitoring (AVM) System – Minimum Equipment List (MEL) Limitations, Operating procedures and Related maintenance procedures. | Applicable to Lockheed L1011 aircraft fitted with RB211–22B–02, –524–02, –524B–02 and RB211–524B3–02 and –524B4–02 engines. Compliance required as detailed in Service Bulletin. |
| 009–09–81 | 77–A6424 | *Engine Indicating* – Airborne. Vibration Monitoring (AVM) System – Minimum Equipment List (MEL) Limitations, Operating procedures and Related maintenance procedures. | Applicable to Boeing 747 aircraft fitted with RB211–524B2–19, –524C2–19, –524B2–39 and –524D4–19 engines. Compliance required as detailed in Service Bulletin. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 010–03–82 | 72–A6429 | *Engine* – LP Compressor – Withdrawal of specific LP compressor shafts from service for inspection. | Superseded by S.B. 72–A6820. |
| 013–03–82 | 72–6574 | *Engine* – LP Compressor – LP compressor rotor (fan) axial retention. | Applicable to Lockheed L–1011 aircraft fitted with RB211–22B–02 and 524B–02 engines and Boeing 747 aircraft fitted with RB211–524B2–19, 524B2–39 and 524C2–19 engines. Compliance required as detailed in Service Bulletin. |
| 014–03–82 | 72–6576 | *Engine* – LP Compressor – LP compressor (fan) axial retention. | Applicable to Lockheed L–1011 aircraft fitted with RB211–524B3–02 and 524B4–02 engines and Boeing 747 aircraft fitted with 524D4–19 engines. Compliance required as detailed in Service Bulletin. |
| 005–05–82 | 72–6427 | *Engine* – IP Compressor – IP Compressor Stage 6 to 7 rotor assemblies reworked to S.B. RB211–72–5126 life limitations. | Applicable to Lockheed L–1011 aircraft fitted with RB211–22B–02 engine variants. Compliance required as detailed in Service Bulletin. |
| 006–05–82 | 72–A6820 | *Engine* – LP Compressor – Withdrawal of LP compressor rotor (fan) shafts from service for inspection. | Applicable to Lockheed L–1011 aircraft fitted with RB211–524B3–02 and 524B4–02 engines and Boeing 747 aircraft fitted with RB211–524D4–19 engines. Compliance required as detailed in Service Bulletin. |
| 009–06–82 | 72–5887 | *Engine* – IP Compressor Rotor and IP Turbine Discs – Withdrawal from service of IP Compressor Rotor drums and IP Turbine Discs which have been subjected to N2 overspeeds in excess of 115%. | Applicable to Lockheed L–1011 aircraft fitted with RB211–22B and –524 engines and Boeing 747 and Boeing 767 aircraft fitted with RB211–524 engines. Compliance required as detailed in Service Bulletin. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 004–09–82 | 72–6420 | *Engine* – HP Compressor – Compressor Rotor Stage 4 to 6 – Shaft assembly life limitation. | Requirements deleted by Revision 1 of Service Bulletin. Extensive laboratory work by Rolls-Royce Ltd has established that the life limitation imposed by this Service Bulletin can be removed. |
| 016–11–82 | 72–5884 | *Engine* – LP Turbine Shaft – Life limitations. | Service Bulletin cancelled at Revision 1 therefore AD is cancelled. |
| 006–08–83 | 73–7135 | *Engine Fuel and Control* – Dedicated generator stator. | Applicable to Boeing 757 aircraft fitted with RB211–535C engines. Compliance required as detailed in Service Bulletin. |
| 018–11–83 | 71–7380 | *Powerplant* – Adjustment Test, revised acceleration times. | Cancelled and superseded by AD 010–05–84. |
| 010–05–84 | 71–7383 | *Powerplant* – Adjustment Test – Fuel flow regulator (F.F.R.) health check. | Applicable to RB211–524D4–19 and –39 engines installed in Boeing 747 aircraft. Compliance as detailed in Service Bulletin. |
| 012–05–84 | 72–6847 | *Engine* – IP and LP Compressor location bearings – LP Compressor location bearing retained by 7.92 mm diameter bolts and revised seal arrangement. | Applicable to RB211–22B and –524 engines, installed in Lockheed L–1011 and Boeing 747 aircraft. Compliance as detailed in Service Bulletin. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 003–11–84 | 77–A7386 | *Engine Indicating* – Airborne vibration monitoring and engine oil pressure indicating system – Minimum Equipment List. Limitations and related maintenance procedures. | Applicable to RB211–524 B–19, B2–39, C2–19, D4–19, D4–39 engines installed in Boeing 747 aircraft. Compliance as detailed in Service Bulletin. |
| 012–03–85 | 73–7951 | *Engine* – Fuel and Control – Fuel systems air tubes rerun P1 airline incorporating a relief valve and water drain facility with screwed blanking feature. | Applicable to RB211–535E4 engines. Compliance required as detailed in Service Bulletin. |
| 013–03–85 | 73–7905 | *Engine* – Fuel Control – FFG – Blanking of the P1 vent orifice in the altitude bias sensor. | Applicable to RB211–535E4 engines. Compliance required as detailed in Service Bulletin. |
| 006–06–85 | 72–A7774 | *Engine* – HP Compressor – Withdrawal of specific HP compressor rotor stage 1 to 2 disc assemblies from service. | Applicable to RB211–22B, 524B–02, 524B3–02, 524B4–02, 524B2–19, 524C2–19, 524D4–19, 524D4–39 and 535C engines. Compliance required as detailed in Service Bulletin.<br><br>NOTE: Revision 1 to the Alert Service Bulletin made significant changes to disc assembly applicability and inspection compliance times. |
| 008–07–85 | SB 72–7775 | *Engine* – Combustion outer casing – on wing crack inspection at the HP6 offtake soleplate. | Applicable to RB211 535 E4 engines. Compliance required as detailed in Alert Service Bulletin. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 001–07–86 | SB 75–8285 | *Air* – HP bleed valve solenoid, low set – Introduction of a revised pressure relief valve – Mod. 75–8285 (Dunlop S.B. 75–21 Mod. E523). | Applicable to Boeing 757 aircraft fitted with RB 211 engines as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. |
| 003–07–86 | SB 72–8301 | *Engine* – LP turbine – Stage 2 nozzle vane – Inner seal with extended lock ring and seal housing with thickened section – Mod. 72–8301. | Applicable to Lockheed L–1011 and Boeing 747 aircraft fitted with RB211 engines as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. |
| 004–08–86 | SB 77–8235 | *Engine Indicating* – Thermocouple harness – Introduction of a revised value of turbine gas temperature (TGT) trim ballast resistor to code W–Mod. 77–8235. | Applicable to Boeing 757 aircraft fitted with RB211–535C–37, –535C–37/10, –535C–37/11 engines prior to Serial No 30104. Compliance required as detailed in Service Bulletin. |
| 009–02–87 | SB 72–8249 | *Engine* – HP compressor – Engine life management policy and revised operating procedures to reduce the possibility of compressor surge during take-off. | Applicable to Boeing 757 aircraft fitted with RB 211–535C engines. Compliance required as detailed in Service Bulletin.<br><br>Note: Compliance with Service Bulletin 72–8251 is an alternative to this Bulletin. |
| 002–05–87 | SB 72–8251 | *Engine* – Health check to establish HP compressor surge margin and revised operating procedures to reduce the possibility of compressor surge on take-off. | Applicable to Boeing 757 aircraft fitted with RB211–535C engines. Compliance required as detailed in Service Bulletin.<br><br>Note: This Bulletin is an alternative to compliance with Service Bulletin 72–8249. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 002–05–88 | SB 77–A8443 | *Engine Indicating* – Airborne vibration monitoring (AVM) system and engine oil pressure indication system – Minimum equipment list (MEL) limitations, operating procedures and related maintenance procedures. | Applicable to Lockheed L–1011 aircraft fitted with RB211–22B–02, –524–02, –524B–02, –524B3–02 and –524B4–02 series engines incorporating Service Bulletin 72–6847. Compliance required as detailed in Service Bulletin.<br>NOTE: This Bulletin is a conditional alternative to compliance with Service Bulletin 77–A6422. |
| 003–05–88 | SB 77–A6828 | *Engine Indicating* – Airborne vibration monitoring (AVM) system and engine oil pressure indication system – Minimum equipment list (MEL) limitations and related maintenance procedures. | Applicable to Lockheed L–1011 aircraft fitted with RB211 engines as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin.<br>NOTE: This Bulletin is a conditional alternative to compliance with Service Bulletin 77–A6422. |
| 004–05–88 | SB 77–A8445 | *Engine Indicating* – Airborne vibration monitoring (AVM) system and engine oil pressure indicating system – Minimum equipment list (MEL) limitations, operating procedures and related maintenance procedures. | Applicable to Boeing 747 aircraft fitted with RB211–524B2–19, –524C2–19 and –524D4–19 series engines incorporating Service Bulletin 72–6847. Compliance required as detailed in Service Bulletin.<br>NOTE: This Bulletin is a conditional alternative to compliance with Service Bulletin 77–A6424. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 005–05–88 | SB 77–A8446 | *Engine Indicating* – Airborne vibration monitoring (AVM) system and engine oil pressure indication system – Minimum equipment list (MEL) limitations, operating procedures and related maintenance procedures. | Applicable to Boeing 747 aircraft fitted with RB211–524B2–19, –524C2–19 and –524D4–19 series engines incorporating Service Bulletin 72–6847. Compliance required as detailed in Service Bulletin. NOTE: This Bulletin is a conditional alternative to compliance with Service Bulletin 77–A7386. |
| 008–05–88 | SB 77–A8444 | *Engine Indicating* – Airborne vibration monitoring (AVM) system and engine oil pressure indication system – Minimum equipment list (MEL) limitations, operating procedures and related maintenance procedures. | Applicable to Lockheed L–1011 aircraft fitted with RB211–22B–02, –524–02, –524B–02, –524B3–02 and –524B4–02 series engines incorporating Service Bulletin 72–6847. Compliance required as detailed in Service Bulletin. NOTE: This Bulletin is a conditional alternative to compliance with Service Bulletin 77–A6828. |
| 010–01–90 | SB 72–8963 | *Engine* – IP compressor 1–5 rotor shaft – Incorrect accomplishment of SB RB211–72–7037, oil drain holes in stage 1 spacer. | Applicable to RB211–22B engines modified to Service Bulletin RB211–72–7037 by rework. Compliance required as detailed in Service Bulletin. |
| 016–02–90 | SB 73–8763 | *Engine Fuel and Control* – Pump and governor – N3 governor with improved wear resistant features – Mod. 73–8763 (Lucas SB PAG100–73–6715, Mod. CP6715). | Applicable to Boeing 747 aircraft fitted with RB211–524G2–19, –524G2–19/11, –524G2–19/15, –524G3–19, –524G3–19/15 engines prior to Serial No. 13118. Compliance required as detailed in Service Bulletin. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 014–03–90 | SB 71–9270 | *Power Plant* – Fuel Metering Unit – An on-wing test to determine the serviceability of the fuel metering unit (FMU) metering valve torque motor on units pre SB 73–9282 (Increased rating inlet filter mesh). | Applicable to Boeing 747 aircraft fitted with RB211–524G2–19/11, –524G2–19/15, –524G3–19/15 and –524H2–19/15 series engines and Boeing 767 aircraft fitted with RB211–524H–36/11 series engines. Compliance required as detailed in Service Bulletin. |
| 029–04–90 | SB 75–9159 | *Air* – IP cabin air offtake ducting – Inspection/ torque check. | Applicable to RB211–524G, –524G–T, –524H and –524H–T engines incorporating SB 72–8827 and not incorporating SB 75–9285 fitted to Boeing 747 and Boeing 767 aircraft. Compliance required as detailed in Service Bulletin. |
| 007–07–90 | SB 76–9170 | *Engine Controls* – Throttle control – New lower teleflex gearbox cover bracket – Mod. 76–9170. | Applicable to Boeing 757 aircraft fitted with RB211–535E4–37, –535E4–37/10, –535E4–37/11, –535E4–37/12, –535E4–37/14, –535E4–37/15 and –535E4–37/16 engines prior to Serial No. 30751. RB211–535E4–B–37 and –535E4–B–37/15 engines prior to Serial No. 31029. Compliance required as detailed in Service Bulletin. |
| 019–10–90 | SB 78–9274 | *Exhaust* – Thrust reverser – Function test following abandoned take-off. | Applicable to Boeing 747 and 767 aircraft fitted with RB211–524G/G–T and –524H/H–T engines. Compliance required as detailed in Service Bulletin. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 018–11–90 | SB 78–9365 | *Exhaust* – Thrust reverser cowl position. | Service Bulletin cancelled at Revision 2, requirement superseded by fleet wide incorporation of FAFC modification 73–9474. |
| 010–01–92 | SB 72–9569 | *Engine* – IP Compressor – Stage 6 disc cracking. | Service Bulletin cancelled at Revision 2. Superseded by CAA AD 003–01–99. |
| 011–01–92 | SB 72–9571 | *Engine* – IP Compressor – Stage 6 disc cracking. | Service Bulletin cancelled at Revision 3. Superseded by CAA AD 003–01–99. |
| 007–06–92 | SB 78–9574 | *Exhaust* – Thrust reverser cowl position resolver inspection and rigging. | Applicable to RB211–524G/G–T and –524H/H–T engines post Service Bulletin RB211–73–9474 and pre Service Bulletin RB211–78–9344 fitted to Boeing 747 aircraft and –524H–36 and –524H–36/11 engines pre Service Bulletin RB211–78–9344 fitted to Boeing 767 aircraft. Compliance required as detailed in Service Bulletin. |
| 002–07–92 | SB 71–9276 | *Power Plant* – Fuel metering unit – An on-wing test to demonstrate an acceptable fuel metering valve calibration. | Applicable to Boeing 747 and Boeing 767 aircraft fitted with RB211–524 Series engines as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. |
| 003–07–92 | SB 71–9546 | *Power Plant* – Engine front mount – Centre thrust link catcher pin with positive retention. | Applicable to RB211–524H–36 series engines. Compliance required as detailed in Service Bulletin. |
| 005–10–92 | SB 73–9363 | *Fuel and Control* – Fuel flow governor – Incorrect standard of 'O' ring seals. | Service Bulletin cancelled at Revision 1 therefore AD is now cancelled. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 019–10–92 | SB 72–9672 | Engine – Low pressure (L.P.) turbine – Stage 2 nozzle vanes and seal assembly with 24 vane core inserts. | Applicable to RB211–524 series engines as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. |
| 009–03–93 | SB 73–9664 | Engine Fuel and Control – Inspection of L.P. fuel tube ferrule retainer. | Service Bulletin cancelled at Revision 4. Superseded by CAA AD 007–10–97. |
| 016–03–93 | SB 73–9761 | Engine Fuel and Control – Fuel system tubes and fittings – Removal of retaining rings from H.P. pump end of the L.P. fuel tube from the L.P. filter. | Applicable to Boeing 757 aircraft fitted with RB211–535E4–37, –37/10, –37/11, –37/12, –37/14, –37/15, –37/16, –37/17, –37/18, –37/19 engines prior to serial no. 30893 and RB211–535E4–B–37, –535E4–B–37/15 engines prior to serial no. 31167; and Tupolev TU204 aircraft fitted with RB211–535E4–B–75 engines prior to serial no. 31167. Compliance required as detailed in Service Bulletin. |
| 015–10–93 | SB 77–A9663 | Engine Indicating – Airborne vibration monitoring (AVM) system – Confirmation of vibration indication before engine shut down. | Applicable to Boeing 747 aircraft fitted with RB211–524D4–19 engines incorporating SB RB211–72–7836 and SB 241–77–002. Compliance required as detailed in Service Bulletin. |
| 004–01–94 | SB 72–9661 | Engine – H.P. compressor – Stage 3 disc revised lives for rework. | Applicable to RB211–22B, –524, –535E4 and –535E4–B engines. Compliance required as detailed in Service Bulletin. |
| 008–07–94 | SB 73–B048 | Engine Fuel and Control – Fuel system tubes and fittings – L.P. fuel tube from L.P. filter to H.P. pump with flexible sections. | Applicable to Boeing 757 aircraft fitted with RB211–535 series engines as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 004–07–95 | SB 73–B483 | Engine Fuel and Control – Fuel metering unit (FMU) – Servovalve Inspection. | Service Bulletin cancelled at Revision 4 therefore AD is now cancelled. |
| 005–07–95 | SB 72–B482 | Engine – Combustion section – Inspection of front combustion liner head section and meterpanel assembly for potential failure. | Applicable to Boeing 747–200, –300 and –400 aircraft and Lockheed L–1011–500 aircraft fitted with RB211–524 Series engines as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. |
| 001–10–95 | SB 73–B681 | Engine Fuel and Control – Fuel manifold to burner fuel tube assembly – Lifing Policy. | Applicable to Airbus A330 aircraft fitted with Trent 768 and 772 engines not incorporating SB RB211–73–B593 and SB RB211–73–B747. Compliance required as detailed in Service Bulletin. |
| 011–09–95 | SB 78–B709 | Exhaust – Thrust reverser 'C' duct structure – Improved fire resistance of the front frame/inner fixed structure liaison. | Applicable to RB211 Trent 768–60 and 772–60 engines fitted to Airbus A330 aircraft – TR621 thrust reverser units prior to unit No. 34. Compliance required as detailed in Service Bulletin. |
| 005–05–96 | SB 73–B869 | Fuel and Control – Fuel flow governor (F.F.G.) – Introduction of an F.F.G. with increased low idle fuel flow. | Applicable to Boeing 757 aircraft fitted with RB211–535 series engines as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. |
| 004–10–96 | SB 73–C090 | Fuel and Control – Fuel spray nozzles – Inspection of nozzles for cracking. | Applicable to Airbus A330 aircraft fitted with Trent 768 and 772 engines incorporating SB RB211–73–B580 and Boeing 777 aircraft fitted with Trent 875, 877, 884 and 892 engines 51001 onwards. Compliance required as detailed in Service Bulletin. |
| 001–11–96 | SB 72–C089 | Engine – Inspection of angled drive upper shroud tube for frettage. | Service Bulletin cancelled at Revision 2 therefore AD is now cancelled. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 004–01–97 | SB 72–C129 | *Engine* – Inspection of step aside gear box housing for cracking. | Service Bulletin cancelled at Revision 4 therefore AD is cancelled. |
| 007–01–97 | SB 73–B987 | *Fuel and Control* – Inspection of L.P. fuel tube flexible sections. | Service Bulletin cancelled at Revision 5. Superseded by CAA AD 007–10–97. |
| 008–02–97 | SB 79–C093 | *Engine – Oil system* – Inspection of magnetic chip detector. | Service Bulletin cancelled at Revision 3 therefore AD is cancelled. |
| 008–03–97 | SB 78–B115 | *Thrust reverser* – C-duct – Inspection of rear hinge lugs. | Applicable to Airbus A330 aircraft fitted with Trent 700 Series engines C-ducts. Compliance required as detailed in Service Bulletin. |
| 001–05–97 Revision 1 | SB 79–C135 | *Engine – Oil system* – Inspection of magnetic chip detector. | Applicable to Rolls-Royce RB211 Trent 768 and 772 engines fitted to Airbus A330–341 and A330–342 aircraft. Revision 2 to Service Bulletin RB.211–79–C135 downgraded the compliance status of the bulletin to 'Recommended' in August 1998 therefore AD 001–05–97 is cancelled at Revision 1. |
| 002–06–97 | SB 72–C270 | *Engine* – External gearbox drive shaft fittings – Introduction of a repositioned bevel gearshaft ball bearing oil jet. | Applicable to Airbus A330 aircraft fitted with Trent 768 and 772 engines. Compliance required as detailed in Service Bulletin. |
| 001–07–97 | SB 72–C286 | *Engine* – L.P. Compressor spinner assembly attachment bolts – Inspection for correct torque tightening. | Service Bulletin cancelled at Revision 1 therefore AD is cancelled. |
| 007–08–97 | SB 72–C288 | *Engine* – H.P. turbine disc – Life reduction. | Service Bulletin cancelled at Revision 2 therefore AD is cancelled. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 007–10–97 | SB 73–C297 | *Fuel and Control* – L.P. fuel filter to H.P. pump – Improved integrity – Flexible pipe manufacturer re-specified. | Applicable to Boeing 757 and Tupolev TU204 aircraft fitted with RB 211 engines as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. |
| 012–10–97 | SB 72–C323 | *Engine* – L.P. Compressor fan blade and disc fir tree root serration inspections. | Applicable to Boeing 747 aircraft fitted with RB211 engines as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. |
| 009–01–98 | SB 72–9764 | *Engine* – Combustion section – Improved phase 2 combustion liner with strengthened head and improved heatshields. | Applicable to Boeing 767 aircraft fitted with RB 211–524H–36 engines. Compliance required as detailed in Service Bulletin. |
| 003–04–98 | SB 72–C445 | *Engine* – L.P. Compressor blades – Ultrasonic inspection of fan blade roots. | Applicable to Boeing 777 aircraft fitted with Trent 875, 877, 884 and 892 engines. Compliance required as detailed in Service Bulletin. |
| 004–04–98 | SB 72–C329 | *Engine* – Inspection for I.P. turbine shaft spline wear. | Applicable to Airbus aircraft fitted with Trent 768 and 772 engines. Compliance required as detailed in Service Bulletin. |
| 003–01–99 | SB 72–C538 | *Engine* – IP compressor stage 6–7 rotor shaft assembly – Bolt hole cracking. | Applicable to Lockheed L–1011, Boeing 747 and 767 aircraft fitted with RB 211–22B and –524 engines as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. |
| 004–03–99 | SB 72–C729 | *Engine* – HP compressor to HP turbine joint bolt – Inspection of HP order vibration level to detect bolt failure. | Applicable to Airbus A330 aircraft fitted with Trent 768 and 772 engines. Compliance required as detailed in Service Bulletin. |
| 010–03–99 | SB 72–C224 | *Engine* – LP turbine module – Introduction of a stiffener to the LP turbine case rear flange. | Applicable to Airbus A330 aircraft fitted with Trent 700 series engines  Compliance required as detailed in Service Bulletin. |
| 006–05–99 | SB 72–C810 | *Engine* – Radial drive steady bearing. | Cancelled and superseded by AD 004–12–99. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 003–07–99 | SB 79–C850 | *Oil* – Oil system tubes and fittings – LP compressor case – Introduction of a filter screen into the engine breather oil return line. | Applicable to Boeing 777 aircraft fitted with Trent 800 series engines as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. |
| 005–07–99 | SB 72–C815 | RB211–535 radial drive steady bearing. | Applicable to Boeing 757 and Tupolev TU204 aircraft fitted with RB211 engines as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. |
| 004–10–99 | SB 72–C491 | *Engine* – HP compressor shaft – Introduction of revised HP compressor rotor shaft to HP turbine rotor disc retaining bolts. | Applicable to Airbus A330 and Boeing 747 aircraft fitted with RB211 engines as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. |
| 007–10–99 | SB 72–C818 | *Engine* – LP compressor blades – Inspection of fan blade dovetail root. | Applicable to Boeing 747 and Boeing 767 aircraft fitted with RB211–524 series engines. Compliance required as detailed in Service Bulletin. |
| 003–11–99 | SB 72–C878 | *Engine* – LP compressor blades `– Ultrasonic inspection of fan blade roots. | Applicable to Airbus A330 aircraft fitted with Trent 700 series engines as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. |
| 003–12–99 | SB 72–C817 | *Engine* – HP turbine disc – Eddy current inspection of cooling air holes. | Applicable to Boeing 757 and Tupolev TU204 aircraft fitted with RB211–535 series engines as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. |
| 004–12–99 | SB 72–C930 | *Engine* – Radial drive steady bearing. | Applicable to Boeing 757 and Tupolev TU204 aircraft fitted with RB211 engines as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. |
| 002–01–2000 | SB 72–C879 | *Engine* – LP compressor blades – Inspection of fan blade roots. | Applicable to Boeing 757 and TU204 aircraft fitted with RB211–535 series engines as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 004–01–2000 | SB 72–C877 | *Engine* – HP turbine disc – Eddy current inspection of cooling air holes. | Applicable to Lockheed L–1011 aircraft fitted with RB211–22B engines as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. |
| 005–01–2000 | SB 78–C955 | *Power Plant* – Cold stream nozzle – On-wing check for cracking. | Applicable to Boeing 747–200 and –300 aircraft fitted with RB211–524D4 series engines as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. |
| 002–05–2000 | SB 78–D011 | *Engine Exhaust* – Thrust reverser – LH C-duct forward hold open rod – Revised stowage procedure and inspection of No. 14 fuel spray nozzle supply tube for frettage against LH C-duct forward hold open rod. | Compliance down graded to Recommended at Revision 2 therefore AD is now cancelled. |
| 005–06–2000 | SB 78–C931 | *Engine Exhaust* – Common nozzle assembly – Inspection of exit nozzle for cracking and loss of fasteners. | Applicable to Airbus A330 aircraft fitted with Trent 700 series engines. Compliance required as detailed in Service Bulletin. |
| 004–08–2000 R1 | SB 71–5291 | *Power Plant* – Engine front and rear mount inspections. | Cancelled and superseded by CAA AD 005–04–2002. |
| 004–09–2000 | SB 72–D176 | *Engine* – RB211–535 radial drive steady bearing. | Applicable to Boeing 757 aircraft fitted with RB211–535C–37, E4–37 and E4–B–37 engines and Tupolev Tu 204 aircraft fitted with RB211–E4–B–75 engines. Compliance required as detailed in Service Bulletin. |
| 001–10–2000 | SB 72–DO85 | *Engine* – HP compressor stage 4–6 rotor shaft subjected to grit blast overspray. | Applicable to Boeing 757 aircraft fitted with RB211–535E4 series engines. Compliance required as detailed in Service Bulletin. |
| 001–12–2000 | SB 72–D021 | *Engine* – IP and LP compressor location bearings – Introduction of a new standard of LP location bearing. | Applicable to Boeing 747 aircraft fitted with RB211–524C2 series engines as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 005–01–2001 | SB 72–D342 | *Engine* – IP turbine disc cooling holes – Inspection and Service Management. | Applicable to Boeing 747 aircraft fitted with RB211–524 H2 engine Serial No. 13703 and RB211–524H–T engine Serial No. 13697. Compliance required as detailed in Service Bulletin. |
| 001–02–2001 | SB 72–D344 | *Engine* – LP compressor blades – Inspection of fan blade roots. | Applicable to Boeing 777 aircraft fitted with Trent 875, 877, 884, 884B–17, 892, 892B and 895 engines incorporating Service Bulletins 72–C629, (standard blade part numbers FK30838, FK30840 or FK30842) or 72–C905 (standard blade part numbers FW12960, FW12961, FW12962 or FW13175). Compliance required as detailed in Service Bulletin. |
| 001–03–2001 | SB 72–D347 | *Engine* – LP compressor blades – Re-application of dry film lubricant to blade roots. | AD Cancelled and superseded by CAA AD G-2003-0015. |
| 005–04–2001 | SB 72–D184 | *Engine* – LP compressor blades – Removal of fan blades due to root damage as a consequence of ineffective masking during polishing operation. | Applicable to Boeing 747 and Boeing 767 aircraft fitted with RB 211–524G and –524H Series engines. Compliance required as detailed in Service Bulletin. |
| 006–05–2001 | SB 72–D181 | *Engine* – LP turbine rotor – Stage 2 turbine disc reduced cyclic life – Engine management and on wing inspection. | Applicable to Boeing 757 and Tupolev Tu204 aircraft fitted with RB211–535E4 engines as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. |
| 005–08–2001 | SB 73–D578 | *Engine* – Inspection of LP fuel tube and hydraulic pipe separation. | Applicable to Airbus A330 aircraft fitted with RB211 Trent engines as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. |
| 003–09–2001 | SB 72–D339 | *Engine* – Inspection for IP turbine shaft spline wear. | Applicable to Boeing 777 aircraft fitted with Trent 875, 877, 884, 892, 892B and 895 Series engines. Compliance required as detailed in Service Bulletin. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 005–09–2001 | SB 71–D509 | *Power Plant* – HP compressor surge margin – Acceptance test. | AD Cancelled and superseded by CAA AD G-2003-0014. |
| 003–12–2001 | SB 72–D586 | *Engine* – HP compressor drum – Life management. | Applicable to Airbus A330 aircraft fitted with Trent 768, 772 and 772B engines. Compliance required as detailed in Service Bulletin. |
| 006–12–2001 | SB 72–C963 | *Engine* – Front bearing support – Introduction LP compressor shaft extreme axial movement detector system. | Applicable to Lockheed L–1011 aircraft fitted with RB211–524B Series engines. Compliance required as detailed in Service Bulletin. |
| 006–02–2002 | SB 72–C863 | *Engine* – Front bearing support – Introduction of LP compressor shaft extreme axial movement detector system. | Applicable to Lockheed L–1011 aircraft fitted with RB211–22B Series engines. Compliance required as detailed in Service Bulletin. |
| 005–04–2002 | SB 71–D437 | *Power Plant* – Engine mount, front – Introduction of revised centre thrust link spherical bush. | Applicable to aircraft as detailed in Service Bulletin fitted with RB211–22B, 524 and 535 Series engines. Compliance required as detailed in Service Bulletin. |
| 006–04–2002 | SB 72–D428 | *Engine* – IP Compressor – Stage 5 compressor disc – Disc inspection for cooling air hole cracking. | Applicable to Lockheed L–1011, Boeing 747 and Boeing 767 aircraft fitted with RB211–524 Series engines. Compliance required as detailed in Service Bulletin. |
| 002–08–2002 | SB 72–E082 | *Engine* – HP Compressor drum – Life management. | Applicable to Boeing 777 aircraft fitted with Trent 875, 877, 884, 892, 892B and 895 engines. Compliance required as detailed in Service Bulletin. |
| 003–08–2002 | SB 71–E047 | *Power Plant* – Loom, forward core engine speed probes – Introduction of a revised speed probe loom, electrical support assembly. | Applicable to Lockheed L1011 aircraft fitted with RB211–524B Series engines. Compliance required as detailed in Service Bulletin. |
| 002–01–2003 | SB 72–E058 | *Engine* – IP turbine disc – Life management. | Applicable to Boeing 777 aircraft fitted with Trent 875–17, 877–17, 884–17, 884B–17, 892–17, 892B–17 and 895–17 engines. Compliance required as detailed in Service Bulletin. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 004–02–2003 | SB 72–E180 | *Engine* – HP Compressor rotor stage 1 to 6 drum life reduction. | Applicable to Boeing 747 and 767 aircraft fitted with RB211–524 Series engines. Compliance required as detailed in SB. |
| 004–03–2003 | SB 72–E037 | *Engine* – High-speed gearbox rear housing and fittings – Introduction of a revised rotor housing and bearing material. | Applicable to Boeing 747 and 767 aircraft fitted with RB211–524G2, 524G2–T, 524G3, 524G3–T, 524H, 524H2, 524H–T and 524H2–T series engines. Compliance required as detailed in SB. |
| 001–05–2003 | SB 72–E055 | *Engine* – LP compressor blades – Inspection and rework in accordance with SB 72–E044. | Applicable to Boeing 777 aircraft fitted with Trent 875, 877, 884, 884B–17, 892, 892B and 895 engines. Compliance required as detailed in SB. |

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# United Kingdom Civil Aviation Authority

# AIRWORTHINESS DIRECTIVE

## AD No: G-2003-0001

Issue Date: 15 July 2003

This AD is issued by the UK CAA as the Primary Aviation Authority (ICAO Annex 8 Authority of State of Design) for the affected product(s).

In accordance with Article 9(7)(b) of the Air Navigation Order 2000 as amended the following action required by this Airworthiness Directive (AD) is mandatory for applicable aircraft registered in the United Kingdom.
No person may operate an aircraft to which an AD applies except in accordance with the requirements of that AD unless otherwise agreed with the Authority of the State of Registry.

Type Approval Holders Name:

**ROLLS-ROYCE plc**

Type/Model Designation(s):

**RB211 TRENT 556-61**

**Type Certificate Data Sheet No:** 1056

### ATA 73 - ENGINE FUEL CONTROL - FUEL FLOW METER – INSPECTION

**Manufacture(s):** Rolls-Royce plc

**Applicability:** Model RB211 Trent 556-61 engines installed on Airbus A340 aircraft – all engines prior to serial number 71125 except for those serial numbers listed in Rolls-Royce Alert Service Bulletin RB.211-73-AE200 dated 11 July 2003.

**Reason:** Fuel was observed to be running from the engine fan cowl doors during aircraft taxi in. Subsequent investigation identified the source of the fuel leak to be permanent distortion of the face of the fuel tube connecting flanges at the fuel flow meter. The distortion of the flange is not aggravated by service use but exposure to fuel pressures extrudes the seal through the gap between the flanges, leading to a fuel leak, which could rapidly increase in flight.

**Effective Date:** 18 July 2003

**Compliance/Action:** Required within 2 months after the effective date of this Directive, inspect the space between the seal and the HP fuel tube adaptor face on each side of the fuel flow transmitter in accordance with the accomplishment instructions specified in Rolls-Royce Alert Service Bulletin RB.211-73-AE200 dated 11 July 2003 or later CAA approved revision.

**Reference Publications:** Rolls-Royce Alert Service Bulletin RB.211-73-AE200 may be obtained from Rolls-Royce plc, Technical Publications, PO Box 31, Derby, DE24 8BJ, United Kingdom. Phone: +44 (0)1332 242424, Fax: +44 (0)1332 249936.

**Remarks:** Enquiries regarding this Directive should be directed to the Civil Aviation Authority, Propulsion Department, Safety Regulation Group, Aviation House, Gatwick Airport South, West Sussex, RH6 0YR, United Kingdom. Phone: +44 (0)1293 573641 Fax: +44 (0) 1293 573979. For questions regarding the technical content of this Directive contact Rolls-Royce plc at the address shown above.

**Note:** This Directive was issued as an Emergency AD on 15 July 2003.

# United Kingdom Civil Aviation Authority

# AIRWORTHINESS DIRECTIVE

## AD No: G-2003-0003

Issue Date: 25 November 2003

This AD is issued by the UK CAA as the Primary Airworthiness Authority (ICAO Annex 8 Authority of State of Design) for the affected product(s).

In accordance with Article 9(7)(b) of the Air Navigation Order 2000 as amended the following action required by this Airworthiness Directive (AD) is mandatory for applicable aircraft registered in the United Kingdom.
No person may operate an aircraft to which an AD applies except in accordance with the requirements of that AD unless otherwise agreed with the Authority of the State of Registry.

| Type Approval Holders Name: | Type/Model Designation(s): |
|---|---|
| **ROLLS-ROYCE plc** | **RB211 TRENT 800** |

**CORRECTION** to AD No G-2003-0003 dated 18 September 2003

**Type Certificate Data Sheet No:** 1051

### ATA 72 - ENGINE – GROUP A (CRITICAL) PARTS – FOCUSED INSPECTIONS

**Manufacturer(s):** Rolls-Royce plc

**Applicability:** Model RB211 Trent 800 Series engines installed on, but not limited to, Boeing 777 aeroplanes certificated in any category.

**Reason:** To prevent Group A (Critical) rotating engine part failure, which could result in an uncontained engine failure and damage to the aeroplane.

Reason for correction:
This correction has been issued to clarify that compliance action should only be carried out at an appropriate level of engine workshop visit, and to ensure common text with the Time Limits Manual reference.

**Effective Date:** 26 September 2003

**Compliance/Action:**

**A** Within 40 days from the effective date of this Directive, at each engine workshop visit inspect the Group A components listed in Table 1 of the Directive when these components are disassembled to piece-part level. This shall be carried out in accordance with the disassembly procedures contained in the Engine Manual and referenced in Time Limits Manual 05-20-01, dated 1 October 2002.

The inspections to be carried out on these Group A components are those referred to as, “Focus Inspect” in the relevant Engine Manual inspection task, and are applicable when the following conditions are satisfied:

(1) The component has been completely disassembled to piece-part level in accordance with the appropriate disassembly procedures contained in the Engine Manual,
**and …..**
The part has accumulated in excess of 100 flight cycles in service since the last piece-part inspection,

**or …..**

(2) The component removal was for damage or a cause directly related to its removal,

**or …..**

(3) Where serviceable used components, for which the inspection history is not fully known, are being returned to service.

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The list of Group A Parts is specified below:

| Part Nomenclature | Part No. | Engine Manual Inspection Task |
|---|---|---|
| Low Pressure Compressor Rotor Disc | All | 72-31-16-200-801 |
| Low Pressure Compressor Rotor Shaft | All | 72-31-20-200-801 |
| Intermediate Pressure Compressor Rotor Shaft | All | 72-32-31-200-801 |
| Intermediate Pressure Rear Shaft | All | 72-33-21-200-801 |
| High Pressure Compressor Stage 1 to 4 Rotor Discs Shaft | All | 72-41-31-200-801 |
| High Pressure Compressor Stage 5 & 6 Discs and Cone | All | 72-41-31-200-802 |
| High Pressure Turbine Rotor Disc | All | 72-41-51-200-801 |
| Intermediate Pressure Turbine Rotor Disc | All | 72-51-31-200-801 |
| Intermediate Pressure Turbine Rotor Shaft | All | 72-51-33-200-801 |
| Low Pressure Turbine Stage 1 Rotor Disc | All | 72-52-31-200-801 |
| Low Pressure Turbine Stage 2 Rotor Disc | All | 72-52-31-200-802 |
| Low Pressure Turbine Stage 3 Rotor Disc | All | 72-52-31-200-803 |
| Low Pressure Turbine Stage 4 Rotor Disc | All | 72-52-31-200-804 |
| Low Pressure Turbine Stage 5 Rotor Disc | All | 72-52-31-200-805 |
| Low Pressure Turbine Rotor Shaft | All | 72-52-33-200-801 |

**Table 1**

**B** Unless already accomplished, operators must amend their Approved Maintenance Programmes to reflect the inspection requirements stated above.

**C** Operators must maintain records of the Mandatory inspections arising from this Directive, as they are accomplished throughout the life of each Group A component.

**Reference Publications:** Rolls-Royce RB211 Trent 800 series Time Limits Manual Reference 05-20-01, dated 1 October 2002 or later CAA approved revision. Copies may be obtained from Rolls-Royce plc, Technical Publications, PO Box 31, Derby, DE24 8BJ, United Kingdom. Phone: +44 (0) 1332 242424, Fax: +44 (0) 1332 249936.

**Remarks:** Enquiries regarding this Airworthiness Directive should be directed to the Civil Aviation Authority, Safety Regulation Group, Propulsion Department, Aviation House, Gatwick Airport South, West Sussex, RH6 0YR Phone: +44 (0) 1293 573856 Fax: +44 (0) 1293 573979 E-mail: pete.woollacott@srg.caa.co.uk.

# United Kingdom Civil Aviation Authority

# AIRWORTHINESS DIRECTIVE

## AD No: G-2003-0004

Issue Date: 25 November 2003

This AD is issued by the UK CAA as the Primary Airworthiness Authority (ICAO Annex 8 Authority of State of Design) for the affected product(s).

In accordance with Article 9(7)(b) of the Air Navigation Order 2000 as amended the following action required by this Airworthiness Directive (AD) is mandatory for applicable aircraft registered in the United Kingdom.
No person may operate an aircraft to which an AD applies except in accordance with the requirements of that AD unless otherwise agreed with the Authority of the State of Registry.

Type Approval Holders Name: **ROLLS-ROYCE plc**

Type/Model Designation(s): **RB211 Trent 700**

**CORRECTION** to AD No G-2003-0004 dated 18 September 2003

**Type Certificate Data Sheet No:** 1050

### ATA 72 - ENGINE – GROUP A (CRITICAL) PARTS – FOCUSED INSPECTIONS

**Manufacturer(s):** Rolls-Royce plc

**Applicability:** Model RB211 Trent 700 Series engines installed on, but not limited to, Airbus A330 aeroplanes certificated in any category.

**Reason:** To prevent Group A (Critical) rotating engine part failure, which could result in an uncontained engine failure and damage to the aeroplane.

Reason for correction:
This correction has been issued to clarify that compliance action should only be carried out at an appropriate level of engine workshop visit, and to ensure common text with the Time Limits Manual reference.

**Effective Date:** 26 September 2003

**Compliance/Action:**

**A** Within 40 days from the effective date of this Directive, at each engine workshop visit inspect the Group A components listed in Table 1 of the Directive when these components are disassembled to piece-part level. This shall be carried out in accordance with the disassembly procedures contained in the Engine Manual and referenced in Time Limits Manual 05-20-01, dated 20 September 2002.

The inspections to be carried out on these Group A components are those referred to as, “Focus Inspect” in the relevant Engine Manual inspection task, and are applicable when the following conditions are satisfied:

(1) The component has been completely disassembled to piece-part level in accordance with the appropriate disassembly procedures contained in the Engine Manual,
**and …..**
The part has accumulated in excess of 100 flight cycles in service since the last piece-part inspection,

**or …..**

(2) The component removal was for damage or a cause directly related to its removal,

**or …..**

(3) Where serviceable used components, for which the inspection history is not fully known, are being returned to service.

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The list of Group A Parts is specified below:

| Part Nomenclature | Part No. | Engine Manual Inspection Task |
|---|---|---|
| Low Pressure Compressor Rotor Disc | All | 72-31-16-200-801 |
| Low Pressure Compressor Rotor Shaft | All | 72-31-20-200-801 |
| Intermediate Pressure Compressor Rotor Shaft | All | 72-32-31-200-801 |
| Intermediate Pressure Rear Shaft | All | 72-33-21-200-801 |
| High Pressure Compressor Rotor Shaft | All | 72-41-31-200-801 |
| High Pressure Turbine Rotor Disc | All | 72-41-51-200-801 |
| Intermediate Pressure Turbine Rotor Disc | All | 72-51-31-200-801 |
| Intermediate Pressure Turbine Rotor Shaft | All | 72-51-33-200-801 |
| Low Pressure Turbine Stage 1 Rotor Disc | All | 72-52-31-200-801 |
| Low Pressure Turbine Stage 2 Rotor Disc | All | 72-52-31-200-802 |
| Low Pressure Turbine Stage 3 Rotor Disc | All | 72-52-31-200-803 |
| Low Pressure Turbine Stage 4 Rotor Disc | All | 72-52-31-200-804 |
| Low Pressure Turbine Rotor Shaft | All | 72-52-33-200-801 |

**Table 1**

**B** Unless already accomplished, operators must amend their Approved Maintenance Programmes to reflect the inspection requirements stated above.

**C** Operators must maintain records of the Mandatory inspections arising from this Directive, as they are accomplished throughout the life of each Group A component.

**Reference Publications:** Rolls-Royce RB211 Trent 700 series Time Limits Manual Reference 05-20-01, dated 20 September 2002 or later CAA approved revision. Copies may be obtained from Rolls-Royce plc, Technical Publications, PO Box 31, Derby, DE24 8BJ, United Kingdom. Phone: +44 (0) 1332 242424, Fax: +44 (0) 1332 249936.

**Remarks:** Enquiries regarding this Airworthiness Directive should be directed to the Civil Aviation Authority, Safety Regulation Group, Propulsion Department, Aviation House, Gatwick Airport South, West Sussex, RH6 0YR Phone: +44 (0) 1293 573856 Fax: +44 (0) 1293 573979 E-mail: pete.woollacott@srg.caa.co.uk.

# United Kingdom Civil Aviation Authority

# AIRWORTHINESS DIRECTIVE

## AD No: G-2003-0005

Issue Date: 25 November 2003

This AD is issued by the UK CAA as the Primary Airworthiness Authority (ICAO Annex 8 Authority of State of Design) for the affected product(s).

In accordance with Article 9(7)(b) of the Air Navigation Order 2000 as amended the following action required by this Airworthiness Directive (AD) is mandatory for applicable aircraft registered in the United Kingdom.
No person may operate an aircraft to which an AD applies except in accordance with the requirements of that AD unless otherwise agreed with the Authority of the State of Registry.

| Type Approval Holders Name: | Type/Model Designation(s): |
|---|---|
| **ROLLS-ROYCE plc** | **RB211 Trent 500** |

**CORRECTION** to AD No G-2003-0005 dated 18 September 2003

**Type Certificate Data Sheet No:** 1056

### ATA 72 - ENGINE – GROUP A (CRITICAL) PARTS – FOCUSED INSPECTIONS

**Manufacturer(s):** Rolls-Royce plc

**Applicability:** Model RB211 Trent 500 Series engines installed on, but not limited to, Airbus A340 aeroplanes certificated in any category.

**Reason:** To prevent Group A (Critical) rotating engine part failure, which could result in an uncontained engine failure and damage to the aeroplane.

This correction has been issued to clarify that compliance action should only be carried out at an appropriate level of engine workshop visit, and to ensure common text with the Time Limits Manual reference.

**Effective Date:** 26 September 2003

**Compliance/Action:**

**A** Within 40 days from the effective date of this Directive, at each engine workshop visit inspect the Group A components listed in Table 1 of the Directive when these components are disassembled to piece-part level. This shall be carried out in accordance with the disassembly procedures contained in the Engine Manual and referenced in Time Limits Manual 05-20-01, dated 05 November 2002.

The inspections to be carried out on these Group A components are those referred to as, “Focus Inspect” in the relevant Engine Manual inspection task, and are applicable when the following conditions are satisfied:

(1) The component has been completely disassembled to piece-part level in accordance with the appropriate disassembly procedures contained in the Engine Manual,
**and …..**
The part has accumulated in excess of 100 flight cycles in service since the last piece-part inspection,

**or …..**

(2) The component removal was for damage or a cause directly related to its removal,

**or …..**

(3) Where serviceable used components, for which the inspection history is not fully known, are being returned to service.

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The list of Group A Parts is specified below:

| Part Nomenclature | Part No. | Engine Manual Inspection Task |
|---|---|---|
| Low Pressure Compressor Rotor Disc | All | 72-31-16-200-801 |
| Low Pressure Compressor Rotor Shaft | All | 72-31-20-200-801 |
| Intermediate Pressure Compressor Rotor Shaft | All | 72-32-31-200-801 |
| Intermediate Pressure Rear Shaft | All | 72-33-21-200-801 |
| High Pressure Compressor Stage 1 to 4 Rotor Discs Shaft | All | 72-41-31-200-803 |
| High Pressure Compressor Stage 5 and 6 Discs and Cone | All | 72-41-31-200-801 |
| High Pressure Turbine Rotor Disc | All | 72-41-51-200-801 |
| High Pressure Turbine Front Coverplate | All | 72-41-51-200-806 |
| Intermediate Pressure Turbine Rotor Disc | All | 72-51-31-200-801 |
| Intermediate Pressure Turbine Rotor Shaft | All | 72-51-33-200-801 |
| Low Pressure Turbine Stage 1 Rotor Disc | All | 72-52-31-200-801 |
| Low Pressure Turbine Stage 2 Rotor Disc | All | 72-52-31-200-802 |
| Low Pressure Turbine Stage 3 Rotor Disc | All | 72-52-31-200-803 |
| Low Pressure Turbine Stage 4 Rotor Disc | All | 72-52-31-200-804 |
| Low Pressure Turbine Stage 5 Rotor Disc | All | 72-52-31-200-805 |
| Low Pressure Turbine Rotor Shaft | All | 72-52-33-200-801 |

**Table 1**

**B** Unless already accomplished, operators must amend their Approved Maintenance Programmes to reflect the inspection requirements stated above.

**C** Operators must maintain records of the Mandatory inspections arising from this Directive, as they are accomplished throughout the life of each Group A component.

**Reference Publications:** Rolls-Royce RB211 Trent 500 series Time Limits Manual Reference 05-20-01, dated 5 November 2002 or later CAA approved revision. Copies may be obtained from Rolls-Royce plc, Technical Publications, PO Box 31, Derby, DE24 8BJ, United Kingdom. Phone: +44 (0) 1332 242424, Fax: +44 (0) 1332 249936.

**Remarks:** Enquiries regarding this Airworthiness Directive should be directed to the Civil Aviation Authority, Safety Regulation Group, Propulsion Department, Aviation House, Gatwick Airport South, West Sussex, RH6 0YR Phone: +44 (0) 1293 573856 Fax: +44 (0) 1293 573979 E-mail: pete.woollacott@srg.caa.co.uk.

# United Kingdom Civil Aviation Authority

# AIRWORTHINESS DIRECTIVE

## AD No: G-2003-0006

Issue Date: 25 November 2003

This AD is issued by the UK CAA as the Primary Airworthiness Authority (ICAO Annex 8 Authority of State of Design) for the affected product(s).

In accordance with Article 9(7)(b) of the Air Navigation Order 2000 as amended the following action required by this Airworthiness Directive (AD) is mandatory for applicable aircraft registered in the United Kingdom.
No person may operate an aircraft to which an AD applies except in accordance with the requirements of that AD unless otherwise agreed with the Authority of the State of Registry.

| Type Approval Holders Name: | Type/Model Designation(s): |
|---|---|
| **ROLLS-ROYCE plc** | **RB211–22B** |

**CORRECTION** to AD No G-2003-0006 dated 18 September 2003

**Type Certificate Data Sheet No:** 1039

### ATA 72 - ENGINE – GROUP A (CRITICAL) PARTS – FOCUSED INSPECTIONS

**Manufacturer(s):** Rolls-Royce plc

**Applicability:** Model RB211–22B Series engines installed on, but not limited to, Lockheed L-1011 aeroplanes certificated in any category.

**Reason:** To prevent Group A (Critical) rotating engine part failure, which could result in an uncontained engine failure and damage to the aeroplane.

This correction has been issued to clarify that compliance action should only be carried out at an appropriate level of engine workshop visit, and to ensure common text with the Time Limits Manual reference.

**Effective Date:** 26 September 2003

**Compliance/Action:**

**A** Within 40 days from the effective date of this Directive, at each engine workshop visit inspect the Group A components listed in Table 1 of the Directive when these components are disassembled to piece-part level. This shall be carried out in accordance with the disassembly procedures contained in the Engine Manual and referenced in Time Limits Manual 05-20-01, dated 1 July 2002.

The inspections to be carried out on these Group A components are those referred to as, “Focus Inspect” in the relevant Engine Manual inspection task, and are applicable when the following conditions are satisfied:

(1) The component has been completely disassembled to piece-part level in accordance with the appropriate disassembly procedures contained in the Engine Manual,
**and …..**
The part has accumulated in excess of 100 flight cycles in service since the last piece-part inspection,

**or …..**

(2) The component removal was for damage or a cause directly related to its removal,

**or …..**

(3) Where serviceable used components, for which the inspection history is not fully known, are being returned to service.

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The list of Group A Parts is specified below:

| Part Nomenclature | Part No. | Engine Manual Inspection Task |
|---|---|---|
| Low Pressure Compressor Rotor Disc | All | 72-31-12-200-006 |
| Low Pressure Compressor Rotor Shaft | All | 72-31-20-200-000 |
| Intermediate Pressure Compressor Rotor Shaft Stages 1 to 5 | All | 72-32-31-200-000 |
| Intermediate Pressure Compressor Rotor Shaft Stages 6 to 7 | All | 72-32-31-200-001 |
| Intermediate Pressure Compressor Rotor Rear Stubshaft | All | 72-33-21-200-000 |
| High Pressure Compressor Rotor Stage 1 to 2 Disc Shaft | All | 72-41-31-200-000 |
| High Pressure Compressor Rotor Stage 3 Disc | All | 72-41-31-200-001 |
| High Pressure Compressor Rear Rotor Shaft Assembly | All | 72-41-31-200-002 |
| Compressor/Turbine Joint Flange Support Disc | All | 72-41-31-200-003 |
| High Pressure Turbine Disc | All | 72-41-51-200-000 |
| Intermediate Pressure Turbine Disc | All | 72-51-31-200-000 |
| Intermediate Pressure Turbine Shaft | All | 72-51-33-200-000 |
| Low Pressure Stage 1 Turbine Disc | All | 72-51-61-200-000 |
| Low Pressure Stage 2 Turbine Disc | All | 72-51-61-200-001 |
| Low Pressure Stage 3 Turbine Disc | All | 72-51-61-200-002 |
| Low Pressure Turbine Shaft | All | 72-51-63-200-000 |

**Table 1**

**B** Unless already accomplished, operators must amend their Approved Maintenance Programmes to reflect the inspection requirements stated above.

**C** Operators must maintain records of the Mandatory inspections arising from this Directive, as they are accomplished throughout the life of each Group A component.

**Reference Publications:** Rolls-Royce RB211–22B series Time Limits Manual Reference 05-20-01, dated 1 July 2002 or later CAA approved revision. Copies may be obtained from Rolls-Royce plc, Technical Publications, PO Box 31, Derby, DE24 8BJ, United Kingdom. Phone: +44 (0) 1332 242424, Fax: +44 (0) 1332 249936.

**Remarks:** Enquiries regarding this Airworthiness Directive should be directed to the Civil Aviation Authority, Safety Regulation Group, Propulsion Department, Aviation House, Gatwick Airport South, West Sussex, RH6 0YR Phone: +44 (0) 1293 573856 Fax: +44 (0) 1293 573979 E-mail: pete.woollacott@srg.caa.co.uk.

# United Kingdom Civil Aviation Authority

# AIRWORTHINESS DIRECTIVE

## AD No: G-2003-0007

Issue Date: 25 November 2003

This AD is issued by the UK CAA as the Primary Airworthiness Authority (ICAO Annex 8 Authority of State of Design) for the affected product(s).

In accordance with Article 9(7)(b) of the Air Navigation Order 2000 as amended the following action required by this Airworthiness Directive (AD) is mandatory for applicable aircraft registered in the United Kingdom.
No person may operate an aircraft to which an AD applies except in accordance with the requirements of that AD unless otherwise agreed with the Authority of the State of Registry.

| Type Approval Holders Name: | Type/Model Designation(s): |
|---|---|
| **ROLLS-ROYCE plc** | **RB211-535** |

**CORRECTION** to AD No G-2003-0007 dated 18 September 2003

**Type Certificate Data Sheet No:** 1044 and 1049

### ATA 72 - ENGINE – GROUP A (CRITICAL) PARTS – FOCUSED INSPECTIONS

**Manufacturer(s):** Rolls-Royce plc

**Applicability:** Model RB211-535 Series engines installed on, but not limited to, Boeing 757 and Tupolev Tu-204 aeroplanes certificated in any category.

**Reason:** To prevent Group A (Critical) rotating engine part failure, which could result in an uncontained engine failure and damage to the aeroplane.

This correction has been issued to clarify that compliance action should only be carried out at an appropriate level of engine workshop visit, and to ensure common text with the Time Limits Manual reference.

**Effective Date:** 26 September 2003

**Compliance/Action:**

**A** Within 40 days from the effective date of this Directive, at each engine workshop visit inspect the Group A components listed in Table 1 of the Directive when these components are disassembled to piece-part level. This shall be carried out in accordance with the disassembly procedures contained in the Engine Manual and referenced in Time Limits Manual 05-20-01, dated 1 July 2002.

The inspections to be carried out on these Group A components are those referred to as, “Focus Inspect” in the relevant Engine Manual inspection task, and are applicable when the following conditions are satisfied:

(1) The component has been completely disassembled to piece-part level in accordance with the appropriate disassembly procedures contained in the Engine Manual,
**and …..**
The part has accumulated in excess of 100 flight cycles in service since the last piece-part inspection,

**or …..**

(2) The component removal was for damage or a cause directly related to its removal,

**or …..**

(3) Where serviceable used components, for which the inspection history is not fully known, are being returned to service.

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The list of Group A Parts is specified below:

| Part Nomenclature | Part No. | Engine Manual Inspection Task |
|---|---|---|
| Low Pressure Compressor Rotor Disc | All | 72-31-12-200-000 |
| Low Pressure Compressor Shaft | All | 72-31-20-200-000 |
| Intermediate Pressure Compressor Rotor Shaft | All | 72-32-31-200-001 |
| Intermediate Pressure Compressor Rotor Rear Stubshaft | All | 72-33-21-200-000 |
| High Pressure Compressor Rotor Disc Stages 1 & 2 | All | 72-41-31-200-000 |
| High Pressure Compressor Rotor Disc Stage 3 | All | 72-41-31-200-001 |
| High Pressure Compressor Rear Rotor Shaft Assy. | All | 72-41-31-200-002 |
| Compressor/Turbine Joint Flange Support Disc (Applicable to –535C only) | All | 72-41-31-200-003 |
| High Pressure Turbine Disc | All | 72-41-51-200-000 |
| Intermediate Pressure Turbine Rotor Disc | All | 72-51-31-200-000 |
| Intermediate Pressure Turbine Shaft | All | 72-51-33-200-000 |
| Low Pressure Turbine Disc Stage 1 | All | 72-51-61-200-000 |
| Low Pressure Turbine Disc Stage 2 | All | 72-51-61-200-001 |
| Low Pressure Turbine Disc Stage 3 | All | 72-51-61-200-002 |
| Low Pressure Turbine Shaft | All | 72-51-63-200-000 |

**Table 1**

**B** Unless already accomplished, operators must amend their Approved Maintenance Programmes to reflect the inspection requirements stated above.

**C** Operators must maintain records of the Mandatory inspections arising from this Directive, as they are accomplished throughout the life of each Group A component.

**Reference Publications:** Rolls-Royce RB211-535 series Time Limits Manual Reference 05-20-01, dated 1 July 2002 or later CAA approved revision. Copies may be obtained from Rolls-Royce plc, Technical Publications, PO Box 31, Derby, DE24 8BJ, United Kingdom. Phone: +44 (0) 1332 242424, Fax: +44 (0) 1332 249936.

**Remarks:** Enquiries regarding this Airworthiness Directive should be directed to the Civil Aviation Authority, Safety Regulation Group, Propulsion Department, Aviation House, Gatwick Airport South, West Sussex, RH6 0YR Phone: +44 (0) 1293 573856 Fax: +44 (0) 1293 573979 E-mail: pete.woollacott@srg.caa.co.uk.

# United Kingdom Civil Aviation Authority

# AIRWORTHINESS DIRECTIVE

## AD No: G-2003-0009

Issue Date: 25 November 2003

This AD is issued by the UK CAA as the Primary Airworthiness Authority (ICAO Annex 8 Authority of State of Design) for the affected product(s).

In accordance with Article 9(7)(b) of the Air Navigation Order 2000 as amended the following action required by this Airworthiness Directive (AD) is mandatory for applicable aircraft registered in the United Kingdom.
No person may operate an aircraft to which an AD applies except in accordance with the requirements of that AD unless otherwise agreed with the Authority of the State of Registry.

| Type Approval Holders Name: | Type/Model Designation(s): |
|---|---|
| **ROLLS-ROYCE plc** | **RB211-524** |

**CORRECTION** to AD No G-2003-0009 dated 19 September 2003

**Type Certificate Data Sheet No:** 1043, 1046 and 1048

### ATA 72 ENGINE – GROUP A (CRITICAL) PARTS – FOCUSED INSPECTIONS

**Manufacturer(s):** Rolls-Royce plc

**Applicability:** Model RB211-524 Series engines installed on but not limited to Boeing 747, 767 and Lockheed L-1011 aeroplanes certificated in any category.

**Reason:** To prevent Group A (Critical) rotating engine part failure, which could result in an uncontained engine failure and damage to the aeroplane.

This correction has been issued to clarify that compliance action should only be carried out at an appropriate level of engine workshop visit, and to ensure common text with the Time Limits Manual reference.

**Effective Date:** 26 September 2003

**Compliance/Action:**

**A** Within 40 days from the effective date of this Directive, at each engine workshop visit inspect the Group A components listed in Table 1, 2 and 3 of the Directive when these components are disassembled to piece-part level. This shall be carried out in accordance with the disassembly procedures contained in the Engine Manual and referenced in Time Limits Manual 05-20-01, dated 1 July 2002.

The inspections to be carried out on these Group A components are those referred to as, “Focus Inspect” in the relevant Engine Manual inspection task, and are applicable when the following conditions are satisfied:

(1) The component has been completely disassembled to piece-part level in accordance with the appropriate disassembly procedures contained in the Engine Manual,
**and …..**
The part has accumulated in excess of 100 flight cycles in service since the last piece-part inspection,

**or …..**

(2) The component removal was for damage or a cause directly related to its removal,

**or …..**

(3) Where serviceable used components, for which the inspection history is not fully known, are being returned to service.

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The list of Group A Parts is specified below:

**Table 1 - RB211-524B/B3/B4 (on L1011)**

| Part Nomenclature | Part No. | Engine Manual Inspection Task |
|---|---|---|
| Low Pressure Compressor Rotor Disc | All | 72-31-12-200-05 (CONFIG 1)<br>72-31-12-200-013 (CONFIG 2) |
| Low Pressure Compressor Rotor Shaft | All | 72-31-20-200-000 |
| Intermediate Pressure Compressor Stage 1 Disc | All | 72-32-31-200-000 |
| Intermediate Pressure Compressor Stage 2 Disc | All | 72-32-31-200-000 |
| Intermediate Pressure Compressor Stage 3 Disc | All | 72-32-31-200-000 |
| Intermediate Pressure Compressor Stage 4 Disc | All | 72-32-31-200-000 |
| Intermediate Pressure Compressor Stage 5 Disc | All | 72-32-31-200-001 |
| Intermediate Pressure Compressor Rotor Shaft Stages 6 to 7 | All | 72-32-31-200-001 |
| Intermediate Pressure Compressor Front Stubshaft Drive Cone | All | 72-32-31-200-008 |
| Intermediate Pressure Compressor Rotor Rear Stubshaft | All | 72-33-21-200-010 |
| High Pressure Compressor Rotor Stage 1 to 2 Disc | All | 72-41-31-200-000 |
| High Pressure Compressor Rotor Stage 3 Disc | All | 72-41-31-200-001 |
| High Pressure Compressor Rear Rotor Shaft Assembly | All | 72-41-31-200-002 |
| High Pressure Compressor/Turbine Joint Flange Support Disc | All | 72-41-31-200-006 |
| High Pressure Turbine Bearing Inner Race Support Panel | All | 72-41-51-200-005 |
| High Pressure Turbine Disc | All | 72-41-51-200-019 |
| High Pressure Turbine Conical Shaft | All | 72-41-51-200-021 |
| Intermediate Pressure Turbine Disc | All | 72-51-31-200-003 |
| Intermediate Pressure Turbine Shaft | All | 72-51-33-200-005 |
| Low Pressure Stage 1 Turbine Disc | All | 72-51-61-200-000 (CONFIG 1)<br>72-51-61-200-007 (CONFIG 2) |
| Low Pressure Stage 2 Turbine Disc | All | 72-51-61-200-001 (CONFIG 1)<br>72-51-61-200-008 (CONFIG 2) |
| Low Pressure Stage 3 Turbine Disc | All | 72-51-61-200-002 (CONFIG 1)<br>72-51-61-200-009 (CONFIG 2) |
| Low Pressure Turbine Shaft | All | 72-51-63-200-000 (CONFIG 1)<br>72-51-63-200-003 (CONFIG 2) |

**Table 2 - RB211-524 B2/C2/D4 (on B747SP/-200/-300)**

| Part Nomenclature | Part No. | Engine Manual Inspection Task |
|---|---|---|
| Low Pressure Compressor Rotor Disc | All | 72-31-12-200-013 |
| Low Pressure Compressor Rotor Shaft | All | 72-31-20-200-000 |
| Intermediate Pressure Compressor Stage 1 Disc | All | 72-32-31-200-000 |
| Intermediate Pressure Compressor Stage 2 Disc | All | 72-32-31-200-000 |
| Intermediate Pressure Compressor Stage 3 Disc | All | 72-32-31-200-000 |
| Intermediate Pressure Compressor Stage 4 Disc | All | 72-32-31-200-000 |
| Intermediate Pressure Compressor Stage 5 Disc | All | 72-32-31-200-001 |
| Intermediate Pressure Compressor Rotor Shaft Stages 6 to 7 | All | 72-32-31-200-001 |
| Intermediate Pressure Compressor Front Stubshaft Drive Cone | All | 72-32-31-200-008 |
| Intermediate Pressure Compressor Rotor Rear Stubshaft | All | 72-33-21-200-010 |
| High Pressure Compressor Rotor Stage 1 to 2 Disc | All | 72-41-31-200-000 |
| High Pressure Compressor Rotor Stage 3 Disc | All | 72-41-31-200-001 |
| High Pressure Compressor Rear Rotor Shaft Assembly | All | 72-41-31-200-002 |
| High Pressure Compressor/Turbine Joint Flange Support Disc | All | 72-41-31-200-006 |
| High Pressure Turbine Bearing Inner Race Support Panel | All | 72-41-51-200-005 |
| High Pressure Turbine Disc | All | 72-41-51-200-019 |
| High Pressure Turbine Conical Shaft | All | 72-41-51-200-021 |
| Intermediate Pressure Turbine Disc | All | 72-51-31-200-003 |
| Intermediate Pressure Turbine Shaft | All | 72-51-33-200-005 |
| Low Pressure Stage 1 Turbine Disc | All | 72-51-61-200-007 |
| Low Pressure Stage 2 Turbine Disc | All | 72-51-61-200-008 |
| Low Pressure Stage 3 Turbine Disc | All | 72-51-61-200-009 |
| Low Pressure Turbine Shaft | All | 72-51-63-200-003 |

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The list of Group A Parts is specified below:

**Table 3 RB211-524G/H (on B747-400 & B767)**

| Part Nomenclature | Part No. | Engine Manual Inspection Task |
|---|---|---|
| Low Pressure Compressor Rotor Disc | All | 72-31-12-200-000 |
| Low Pressure Compressor Rotor Shaft | All | 72-31-20-200-000 |
| Intermediate Pressure Compressor Stage 1 Disc | All | 72-32-31-200-000 |
| Intermediate Pressure Compressor Stage 2 Disc | All | 72-32-31-200-000 |
| Intermediate Pressure Compressor Stage 3 Disc | All | 72-32-31-200-000 |
| Intermediate Pressure Compressor Stage 4 Disc | All | 72-32-31-200-000 |
| Intermediate Pressure Compressor Stage 5 Disc | All | 72-32-31-200-000 |
| Intermediate Pressure Compressor Rotor Shaft Stages 6 to 7 | All | 72-32-31-200-001 |
| Intermediate Pressure Compressor Front Stubshaft Drive Cone | All | 72-32-31-200-008 |
| Intermediate Pressure Compressor Rotor Rear Stubshaft | All | 72-33-21-200-010 |
| High Pressure Compressor Rotor Stage 1 to 2 Disc | All | 72-41-31-200-000<br>CONFIG 1 |
| High Pressure Compressor Rotor Stage 3 Disc | All | 72-41-31-200-001<br>CONFIG 1 |
| High Pressure Compressor Rear Rotor Shaft Assembly | All | 72-41-31-200-002<br>CONFIG 1 |
| Compressor/Turbine Joint Flange Support Disc | All | 72-41-31-200-003<br>CONFIG 1 |
| High Pressure Compressor Rotor Shaft Assembly | All | 72-41-31-200-014<br>CONFIG 2 |
| High Pressure Turbine Disc | All | 72-41-51-200-010 (CONFIG 1)<br>72-41-51-200-024 (CONFIG 2) |
| Intermediate Pressure Turbine Disc | All | 72-51-31-200-003 |
| Intermediate Pressure Turbine Shaft | All | 72-51-33-200-005 |
| Low Pressure Stage 1 Turbine Disc | All | 72-51-61-200-007 |
| Low Pressure Stage 2 Turbine Disc | All | 72-51-61-200-008 |
| Low Pressure Stage 3 Turbine Disc | All | 72-51-61-200-009 |
| Low Pressure Turbine Shaft | All | 72-51-63-200-003 |

**B** Unless already accomplished, operators must amend their Approved Maintenance Programmes to reflect the inspection requirements stated above.

**C** Operators must maintain records of the Mandatory inspections arising from this Directive, as they are accomplished throughout the life of each Group A component.

**Reference Publications:** Rolls-Royce RB211-524 series Time Limits Manual Reference 05-20-01, dated 1 July 2002 or later CAA approved revision. Copies may be obtained from Rolls-Royce plc, Technical Publications, PO Box 31, Derby, DE24 8BJ, United Kingdom. Phone: +44 (0) 1332 242424, Fax: +44 (0) 1332 249936.

**Remarks:** Enquiries regarding this Directive should be directed to the Civil Aviation Authority, Safety Regulation Group, Propulsion Department, Aviation House, Gatwick Airport South, West Sussex, RH6 0YR
Phone: +44 (0) 1293 573856 Fax 44 (0) 1293 573979 E-mail: pete.woollacott@srg.caa.co.uk.

# United Kingdom Civil Aviation Authority

# AIRWORTHINESS DIRECTIVE

## AD No: G-2003-0011

Issue Date: 1 October 2003

This AD is issued by the UK CAA as the Primary Aviation Authority (ICAO Annex 8 Authority of State of Design) for the affected product(s).

In accordance with Article 9(7)(b) of the Air Navigation Order 2000 as amended the following action required by this Airworthiness Directive (AD) is mandatory for applicable aircraft registered in the United Kingdom.
No person may operate an aircraft to which an AD applies except in accordance with the requirements of that AD unless otherwise agreed with the Authority of the State of Registry.

| Type Approval Holders Name: | Type/Model Designation(s): |
|---|---|
| **ROLLS-ROYCE plc** | **RB211-524** |

**Type Certificate Data Sheet No:** 1043/1046/1048

**Superseded AD:** 005-07-95

### ATA 72 – ENGINE - COMBUSTION LINER HEAD AND METERPANEL ASSEMBLY – INSPECTION

**Manufacturer(s):** Rolls-Royce plc

**Applicability:** Model RB211-524B2, 524C2, 524D4, 524B-02, 524B3, 524B4 engines incorporating RB211-72-7221 or SB RB211-72-7998 but not incorporating RB211-72-9670 or RB211-72-9764 combustion liners.

Model RB211-524G, 524H engines not incorporating SB RB211-72-9764.

These engines are installed on Boeing 747 series aeroplanes and Lockheed L-1011 series aeroplanes.

**Reason:** An RB211-524B4 engine suffered a combustion case burn-through as a result of combustor head break-up; this engine had been previously inspected within the inspection interval specified in revision 8 of the Rolls-Royce Service Bulletin RB211-72-B482. The revision 9 to Rolls-Royce Service Bulletin RB211-72-B482 is issued as an Alert Service Bulletin RB211-72-AB482 in accordance with the new procedures of JAR39; this revision reduces the inspection interval of RB211-524B series engines from 400 cycles to 200 cycles in line with all other engine marks. There are no other changes to the previous inspection requirements for all other engines.

A terminating action to this Directive is required by 31 December 2012.

This Directive supersedes CAA Airworthiness Directive 005-07-95.

**Effective Date:** 14 October 2003

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**Compliance/Action:**

A. Combustion Liner Head Section

At the threshold and within the intervals detailed below, inspect the combustion head section for break-up in accordance with the Accomplishment Instructions (paragraph 3A) and subject to the Acceptance Limits (paragraph 1E) of Rolls-Royce Alert Service Bulletin RB211-72-AB482 revision 9 dated 28 July 2003.

1. For **RB211-524C2, 524D4, 524G and 524H** engines as defined in the Applicability of this Directive,

a. The head section has not been previously repaired,

**Inspect**, unless already accomplished, the combustion head section between 1400 and 1600 cycles since new. For those combustion head sections, which have exceeded 1600 cycles since new and which have not been previously inspected to Service Bulletin RB211-72-B482 revision 8, inspect within 100 cycles from the effective date of this Directive.
**Repeat** the inspection at intervals not exceeding 200 cycles thereafter.

b. The head section has previously been repaired in accordance with FRS5367/B,

**Inspect**, unless already accomplished, the combustion head section between 1800 and 2200 cycles since the repair FRS5367/B was carried out. For those combustion head sections, which have exceeded 2200 cycles since repair FRS5367/B and which have not been previously inspected to Service Bulletin RB211-72-B482 revision 8, inspect within 200 cycles from the effective date of this Directive.
**Repeat** the inspection at intervals not exceeding 400 cycles thereafter.

c. The head section has been repaired by means other than FRS5367/B,

**Inspect**, unless already accomplished, the combustion head section between 500 and 700 cycles since the last head section repair was carried out. For those combustion head sections, which have exceeded 700 cycles since repair and which have not been previously inspected to Service Bulletin RB211-72-B482 revision 8, inspect within 100 cycles from the effective date of this Directive.
**Repeat** the inspection at intervals not exceeding 200 cycles thereafter.

2. For **RB211-524B-02, 524B2, 524B3 and 524B4** engines as defined in the Applicability of this Directive,

a. The head section has not been previously repaired,

**Inspect**, unless already accomplished, the combustion head section between 3000 and 3200 cycles since new. For those combustion head sections, which have exceeded 3200 cycles since new and which have not been previously inspected to Service Bulletin RB211-72-B482 revision 8, inspect within 200 cycles from the effective date of this Directive.
**Repeat** the inspection at intervals not exceeding 200 cycles thereafter.

b. The head section has previously been repaired in accordance with FRS5367/B,

**Inspect**, unless already accomplished, the combustion head section between 3000 and 3200 cycles since the repair FRS5367/B was carried out. For those combustion head sections, which have exceeded 3200 cycles since repair FRS5367/B and which have not been previously inspected to Service Bulletin RB211-72-B482 revision 8, inspect within 200 cycles from the effective date of this Directive.
**Repeat** the inspection at intervals not exceeding 400 cycles thereafter.

c. The head section has been repaired by means other than FRS5367/B,

**Inspect**, unless already accomplished, the combustion head section between 2000 and 2200 cycles since last head section repair. For those combustion head sections, which have exceeded 2200 cycles since repair and which have not been previously inspected to Service Bulletin RB211-72-B482 revision 8, inspect within 200 cycles from the effective date of this Directive.
**Repeat** the inspection at intervals not exceeding 200 cycles thereafter.

**Note**: If the Operator can confirm with the relevant Overhaul Base or Repair Vendor that the nicrobraze repair, FRS5367, has been applied to all 18 struts, then this is equivalent to FRS5367/B.

**Note**: Head sections repaired by replacement of all 18 struts in accordance with FRS6548 are considered as equivalent to fitting a new head section for the purposes of this Directive.

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B. Meterpanel Assembly

For **RB211-524D4, 524G and 524H** engines incorporating SB72-7998, inspect the meterpanel assembly at the threshold and within the intervals detailed below in accordance with the Accomplishment Instructions (paragraph 3B) and subject to the Acceptance Limits (paragraph 1E) of Rolls-Royce Alert Service Bulletin RB211-72-AB482 revision 9 dated 28 July 2003,

1. The meterpanel assembly has not been previously repaired,

**Inspect**, unless already accomplished, the meterpanel assembly between 1000 and 1200 cycles since new. For those meterpanels, which have exceeded 1200 cycles since new and which have not been previously inspected in accordance with Service Bulletin RB211-72-B482 revision 8, inspect within 50 cycles from the effective date of this Directive.
**Repeat** the inspection at intervals not exceeding 400 cycles.

**Note:** For those operators who do not use RB211-524H rating at any time, the inspection threshold may be increased to between 1800 and 2000 cycles.

2. The meterpanel has previously been repaired,

**Inspect**, unless already accomplished, the meterpanel assembly between 500 and 700 cycles since last repair, if a new meterpanel has not been fitted during this repair. For those meterpanels, which have exceeded 700 cycles since last repair and which have not been previously inspected to Service Bulletin RB211-72-B482 revision 8. inspect within 50 cycles from the effective date of this Directive.
**Repeat** the inspection at intervals not exceeding 400 cycles.

C. Terminating Action

The incorporation of the modifications RB211-72-9670 or RB211-72-9764 in the RB211-524B2, 524C2, 524D4, 524B-02, 524B3, 524B4 engines constitutes the terminating action to the requirements of this Directive.

The incorporation of the modification RB211-72-9764 in the RB211-524G and 524H engines constitutes the terminating action to the requirements of this Directive.

The incorporation of these modifications is required to be accomplished at next shop visit where the 04 module is refurbished or overhaul, but no later than 31 December 2012.

**Reference Publications:** Rolls-Royce Alert Service Bulletin RB211-72-AB482 may be obtained from Rolls-Royce plc, Technical Publications, PO Box 31, Derby, DE24 8BJ, United Kingdom.

**Remarks:** Enquiries regarding this Directive should be directed to the Civil Aviation Authority, Propulsion Department, Safety Regulation Group, Aviation House, Gatwick Airport South, West Sussex, RH6 0YR, United Kingdom. Phone: +44 (0)1293 573641 Fax: +44 (0) 1293 573979

For questions regarding the technical content of this Directive contact Rolls-Royce plc at the address shown above.

# United Kingdom Civil Aviation Authority

# AIRWORTHINESS DIRECTIVE

## AD No: G-2004-0008

Issue Date: 29 April 2004

This AD is issued by the UK CAA acting for and behalf of the European Aviation Safety Agency as the Primary Aviation Authority (ICAO Annex 8 Authority of State of Design) for the affected product(s).

Approved by the European Aviation Safety Agency under Approval Number 2004-2827 on 23 March 2004.

In accordance with Article 9(7)(b) of the Air Navigation Order 2000 as amended the following action required by this Airworthiness Directive (AD) is mandatory for applicable aircraft registered in the United Kingdom.
No person may operate an aircraft to which an AD applies except in accordance with the requirements of that AD unless otherwise agreed with the Authority of the State of Registry.

Type Approval Holders Name:

**ROLLS-ROYCE PLC**

Type/Model Designation(s):

**RB211 TRENT 875-17, 877-17, 884-17, 884B-17, 892-17, 892B-17, 895-17**

**Type Certificate Data Sheet No:** 1051

**Superseded ADs:** 001-02-2001 and G-2003-0015

### ATA 72 – ENGINE – FAN BLADE – INSPECTION/LUBRICATION/MODIFICATION

**Manufacturer(s):** Rolls-Royce plc

**Applicability:** Models RB211 Trent 875-17, 877-17, 884-17, 884B-17, 892-17, 892B-17, 895-17 engines, fitted with fan blades to Rolls-Royce Service Bulletin RB211-72-C629 (part numbers; FK30842, FK 30840, FK30838), RB211-72-C905 (part numbers; FW12960, FW13175, FW12961, FW12962), RB211-72-D390 (part number; FW18548), OR RB211-72-E044 (part number; FW23552) standards installed on Boeing 777 aeroplanes certificated in any category.

**Reason:** There has been one incident of fan blade failure and several instances of fan blade roots found cracked on Trent 800 engines in service. The cracking has been shown to be the result of significant operating stress levels and a breakdown of lubrication between the fan blade root and the fan disc slot. Cracking can be avoided by maintaining lubrication of the fan blade roots. A risk analysis has concluded that mandatory action instructing fan blade root lubrication is necessary to avoid an unacceptable risk of a multiple fan blade failure, which would be a potentially hazardous event.

Airworthiness Directive (AD) G-2003-0015 introduced reduced intervals between re-lubrications (iaw Rolls-Royce Service Bulletin RB211-72-AD347) for SB72-C905, SB72-D390 and SB72-E044 standard fan blades. This change was prompted by observations of poor blade root condition on service run engines, which showed that the rate of deterioration of lubrication was higher than previously believed. A Terminating Action for SB72-C629 and SB72-C905 standard of fan blades was also introduced.

This AD (G-2004-0008) supersedes AD's G-2003-0015 and 001-02-2001, and has been issued for the following reasons:

a) To introduce re-lubrication of fan blade roots to Rolls-Royce Service Bulletin RB211-72-C905, 72-D390 and 72–E044 standards, which have never been removed since delivery of the new engine, to have a 1200 cycle threshold as stated in Rolls-Royce Service Bulletin RB211-72-AD347 R6.

b) To introduce the amended Mandatory repeat inspection requirements of Rolls-Royce Service Bulletin RB211-72-AD344 R7, applicable to Rolls-Royce Service Bulletin RB211-72-C629 and –C905 standard fan blades, thereby superseding the requirements of AD 001-02-2001.

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**Effective Date:** 12 May 2004

**Compliance/Action:**

1) Inspection of Fan Blade Root (in accordance with R-R Alert Service Bulletin RB211-72-AD344 R7)

Fan blades to Rolls-Royce Service Bulletin RB211-72-C629 or RB211-72-C905 standards;
Inspect according to aeroplane type and engine rating combinations, on or before the threshold lives and subsequent repeat intervals not exceeding the intervals specified in Tables 1,2,3 and 4 below. Note that fan blades to Rolls-Royce Service Bulletin RB211-72-D390 (full form root profile) and RB211-72-D672 (laser shock peen) are not subject to this inspection. Fan blades are to be inspected in accordance with Rolls-Royce Alert Service Bulletin RB211-AD344 Revision 7, Section 3 Accomplishment Instructions.

TABLE 1 BLADES NOT FEATURING SB72-C905

| B777 AEROPLANE CATEGORY | GROSS WEIGHT (1000 lbs) | ENGINE RATING | INSPECTION | |
|---|---|---|---|---|
| | | | THRESHOLD (CYCLES) | REPEAT (CYCLES) |
| (1A) -300 | 660 | 892, 884B | 600 | 80 |
| | 632,5 | | | |
| (1B) -200ER | 656 | 895 | | |
| (2) -200ER | 648 | 892,892B | 1200 | 100 |
| | 632,5 | | | |
| (3A) -300 | 580 | 892, 884B | 2000 | 600 |
| (3B) -200ER | 555 | 884 | 2000 | 600 |
| (3C) -200 | 545 | 877 | 2000 | 600 |
| | 535 | 875 | | |

TABLE 2 BLADES NOT FEATURING SB72-C905 BUT RELUBRICATED AT 600 CYCLES FREQUENCY OR LESS

| B777 AEROPLANE CATEGORY | GROSS WEIGHT (1000 lbs) | ENGINE RATING | INSPECTION | |
|---|---|---|---|---|
| | | | THRESHOLD (CYCLES) | REPEAT (CYCLES) |
| (1A) -300 | 660 | 892, 884B | 600 | 80 |
| | 632,5 | | | |
| (1B) -200ER | 656 | 895 | | |
| (2) -200ER | 648 | 892,892B | 1200 | 100 |
| | 632,5 | | | |
| (3A) -300 | 580 | 892, 884B | 2400 | 600 |
| (3B) -200ER | 555 | 884 | 2400 | 600 |
| (3C) -200 | 545 | 877 | 2400 | 600 |
| | 535 | 875 | | |

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TABLE 3 BLADES WHICH (a) INCLUDED SB72-C905 FROM NEW OR (b) WERE REWORKED TO SB72-C905 AT LESS THAN 600 CYCLES SINCE NEW OR PREVIOUS REWORK TO SB72-C629 OR (c) REWORKED TO SB72-C905 WITH VERIFIABLE RE-LUBRICATION AT INTERVALS NOT EXCEEDING 600 CYCLES

| B777 AEROPLANE CATEGORY | GROSS WEIGHT (1000 lbs) | ENGINE RATING | INSPECTION | |
|---|---|---|---|---|
| | | | THRESHOLD (CYCLES) | REPEAT (CYCLES) |
| (1A) -300 | 660 | 892, 884B | 600 | 100 |
| | 632,5 | | | |
| (1B) -200ER | 656 | 895 | | |
| (2) -200ER | 648 | 892,892B | 1200 | 125 |
| | 632,5 | | | |
| (3A) -300 | 580 | 892, 884B | 2400 | 600** |
| (3B) -200ER | 555 | 884 | 2400 | 600** |
| (3C) -200 | 545 | 877 | 2400 | 600** |
| | 535 | 875 | | |

TABLE 4 BLADES REWORKED TO SB72-C905 AT GREATER THAN 600 CYCLES SINCE NEW OR PREVIOUS RE-WORK TO SB72-C629

| B777 AEROPLANE CATEGORY | GROSS WEIGHT (1000 lbs) | ENGINE RATING | INSPECTION | |
|---|---|---|---|---|
| | | | THRESHOLD (CYCLES) | REPEAT (CYCLES) |
| (1A) -300 | 660 | 892, 884B | 600 | 100 |
| | 632,5 | | | |
| (1B) -200ER | 656 | 895 | | |
| (2) -200ER | 648 | 892,892B | 1200 | 125 |
| | 632,5 | | | |
| (3A) -300 | 580 | 892, 884B | 2000 | 600 |
| (3B) -200ER | 555 | 884 | 2000 | 600 |
| (3C) -200 | 545 | 877 | 2000 | 600 |
| | 535 | 875 | | |

2) Re-lubricate fan blade root (in accordance with R-R Alert Service Bulletin RB211-72-AD347 R6)

a) Fan blades to Rolls-Royce Service Bulletin RB211-72-C629, -C905, -D390, and -E044 standards;

Re-lubricate fan blade roots in accordance with Rolls-Royce Alert Service Bulletin RB211-72-AD347 Revision 6, Section 3 Accomplishment Instructions prior to achieving 600 cycles in service since new or last re-lubrication. Subsequently, re-lubricate at repeat intervals not exceeding 600 cycles in service.

b) Fan blades to Rolls-Royce Service Bulletin RB211-72-C905, -D390, and -E044 standards which have never been removed from the engine since delivery of the new engine;

Re-lubricate fan blade roots in accordance with Rolls-Royce Alert Service Bulletin RB211-72-AD347 revision 6, section 3 Accomplishment Instructions on first removal or prior to achieving 1200 cycles in service since new. Subsequently, re-lubricate at repeat intervals not exceeding 600 cycles in service.

c) Fan blades to Rolls-Royce Service Bulletin RB211-72-C905, -D390, and -E044 standards with lives in excess of 400 cycles since new (that are not covered by paragraph b), above) or since last re-lubrication at the Effective Date of this AD, a one-off increased interval is permitted as follows;

Re-lubricate fan blade roots in accordance with Rolls-Royce Alert Service Bulletin RB211-72-AD347 Revision 6, section 3 Accomplishment Instructions prior to achieving a further 200 cycles in service, but not to exceed 1200 cycles since new or since last re-lubrication. Subsequently, re-lubricate at repeat intervals not exceeding 600 cycles in service.

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3) Terminating Action (in accordance with Rolls-Royce Service Bulletin RB211-72-D672)

Fan blades to Rolls-Royce Service Bulletin RB211-72-C629 and RB211-72-C905;
Apply laser shock peen, Metco 58 and dry film lubricant (DFL) in accordance with Rolls-Royce Service Bulletin RB211-72-D672 Initial Issue, Section 3 Accomplishment Instructions at next shop visit where the fan blade is refurbished or overhauled, or prior to 31 December 2009, whichever occurs first. Incorporation of this modification removes the Mandatory requirements to carry out Part 1, root inspection, and Part 2, root re-lubrication, (refer to Remarks Section for details) detailed in the Compliance/Action section of this Airworthiness Directive, and therefore constitutes the terminating action for this AD.

Note: There is currently no terminating action for fan blades to Rolls-Royce Service Bulletins RB211-72-D390 and RB211-72-E044 standards.

Note: Previous compliance with the inspection and lubrication tasks of ADs G-2003-0015, 001-03-2001 and 001-02-2001 are, for the purposes of this Airworthiness Directive, deemed to be equivalent inspection and lubrication tasks.

**Reference Publications:** Rolls-Royce Alert Service Bulletins RB211-72-AD344 Revision 7 and RB211-72-AD347 Revision 6, and Rolls-Royce Service Bulletin RB211-72-D672 initial issue, may be obtained from Publication Services, Rolls-Royce plc. PO Box 31, Derby, DE24 8BJ, United Kingdom. Phone: +44 (0) 1332 242424 Fax: +44 (0) 01332 249936

Note: Later EASA approved Service Bulletin issues than the issues quoted within are also considered to be acceptable to meet the requirements of this Airworthiness Directive.

**Remarks:** Note that while the Terminating Action terminates the requirements of this AD, the re-lubrication remains a recommended action by the manufacturer for SB72-D672 standard fan blades.

The fan blade part numbers associated with the Service Bulletin standards addressed above are as follows;

| SB 72-C629 (Fan blade cutback root profile) | SB 72-C905 (Fan blade Metco58 anti-fret coating) | SB 72-D390 (Full form root profile fan blades) | SB 72-E044 (Fan blade root revised shear key slot) |
|---|---|---|---|
| FK30838<br>FK30840<br>FK30842 | FW12960<br>FW12961<br>FW12962<br>FW13175 | FW18548 | FW23552 |

Enquiries regarding this AD should be directed to Civil Aviation Authority, Safety Regulation Group, Propulsion Department, Aviation House, Gatwick Airport South, West Sussex, RH6 0YR, United Kingdom. Phone: +44 (0) 1293 573199 Fax: +44 (0)1293 573979 E-mail: pete.woollacott@srg.caa.co.uk.

# United Kingdom Civil Aviation Authority

# AIRWORTHINESS DIRECTIVE

## AD No: G-2004-0009

Issue Date: 27 May 2004

This AD is issued by the UK CAA acting for and on behalf of the European Aviation Safety Agency as the Primary Aviation Authority (ICAO Annex 8 Authority of State of Design) for the affected product(s).

Approved by the European Aviation Safety Agency under approval number 2004-5258 on 18 May 2004.

In accordance with Article 9(7)(b) of the Air Navigation Order 2000 as amended the following action required by this Airworthiness Directive (AD) is mandatory for applicable aircraft registered in the United Kingdom.
No person may operate an aircraft to which an AD applies except in accordance with the requirements of that AD unless otherwise agreed with the Authority of the State of Registry.

| Type Approval Holders Name: | Type/Model Designation(s): |
|---|---|
| **ROLLS-ROYCE PLC** | **RB211 TRENT 875-17, 877-17, 884-17, 884B-17, 892-17, 892B-17, 895-17** |

**Type Certificate Data Sheet No:** 1051

**Superseded/ Revised ADs:** None

### ATA 72 – ENGINE - IP TURBINE BEARING – OIL VENT TUBE INSPECTION

**Manufacturer(s):** Rolls-Royce plc

**Applicability:** Models RB211 Trent 875-17, 877-17, 884-17, 884B-17, 892-17, 892B-17, 895-17 engines installed on Boeing 777 aeroplanes.

**Reason:** This Airworthiness Directive has been raised following an incident involving uncontained multiple IP turbine blade release on a Trent 700 engine. The blade release was the result of an overspeed of the IP turbine rotor that was initiated by an internal fire in the HP/IP bearing chamber. Post incident analysis and investigation has established that blockage of the HP/IP turbine bearing vent pipe due to oil coking was a significant factor in the failure sequence. The Trent 800 has a similar type design standard to that of the Trent 700.

To prevent a potentially unsafe condition developing on the Trent 800 engine fleet, this Airworthiness Directive (AD) instructs a one off inspection of the HP/IP turbine vent tube, with repeat inspections required if a certain carbon build-up is found. Cleaning of the vent tube is also instructed if carbon accumulation is found. This action mitigates the risk of further events within the fleet.

**Effective Date:** 10 June 2004

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**Compliance/Action:**

In-Service Inspection

1) Inspect and clean as necessary the HP/IP turbine oil vent tube in accordance with Section 3 Accomplishment Instructions of Rolls-Royce Alert Non Modification Service Bulletin RB211-72-AE362, when the 05 module life exceeds the threshold life of 15,000 hours since new, or 3,000 cycles since new.
    a. For 05 modules that exceed the threshold life at the time of the effective date of this AD, carry out the action within 6 months of the effective date of the AD.
    b. For 05 modules that are below the threshold life at the time of the effective date of this AD, carry out the action within 6 months of reaching the threshold life.

2) HP/IP turbine oil vent tubes inspected and cleaned in accordance with this AD, and for which it has been determined that an 8mm diameter flexible borescope would not pass through the internal vent tube, but a 6mm diameter borescope would pass along the full length of the internal vent tube into the bearing chamber; carry out a repeat inspection in accordance with Section 3 Accomplishment Instructions of Rolls-Royce Alert Non Modification Service Bulletin RB211-72-AE362, at intervals of 1500 hours or 300 cycles (whichever occurs first) since the previous inspection.

3) HP/IP turbine oil vent tubes inspected and cleaned in accordance with this AD, and for which it has been determined that an 6mm diameter flexible borescope would not pass through the internal vent tube, remove the engine from service within 10 cycles of the inspection.

**Reference Publications:** Rolls-Royce Alert Non Modification Service Bulletin RB211-72-AE362 original or later issues, may be obtained from Publication Services, Rolls-Royce plc PO Box 31, Derby, DE24 8BJ, United Kingdom. Phone: +44 (0) 1332 242424 Fax: +44 (0) 1332 249936.

Note: Later EASA Approved Service Bulletin issue numbers than the issue referenced within this Airworthiness Directive are also considered to be an acceptable means of compliance .

**Remarks:**

Enquiries regarding this Airworthiness Directive may be directed to Civil Aviation Authority, Safety Regulation Group, Propulsion Department, Aviation House, Gatwick Airport South, West Sussex, RH6 0YR, United Kingdom. Phone: +44 (0)1293 573199 Fax: +44 (0)1293 573979 E-mail: pete.woollacott@srg.caa.co.uk.

# United Kingdom Civil Aviation Authority

# AIRWORTHINESS DIRECTIVE

## AD No: G-2004-0010

Issue Date: 8 April 2004

This AD is issued by the UK CAA acting for and on behalf of the European Aviation Safety Agency as the Primary Aviation Authority (ICAO Annex 8 Authority of State of Design) for the affected product(s).

Approved by the European Aviation Safety Agency under approval number 2004-3674 on 7 April 2004.

In accordance with Article 9(7)(b) of the Air Navigation Order 2000 as amended the following action required by this Airworthiness Directive (AD) is mandatory for applicable aircraft registered in the United Kingdom.
No person may operate an aircraft to which an AD applies except in accordance with the requirements of that AD unless otherwise agreed with the Authority of the State of Registry.

| Type Approval Holders Name: | Type/Model Designation(s): |
|---|---|
| **ROLLS-ROYCE PLC** | **RB211 TRENT 768-60, 772-60, 772B-60** |

**Type Certificate Data Sheet No:** 1050

**Superseded AD:** G-2003-0014

### ATA 72 – ENGINE – HP COMPRESSOR – TEST/MODIFICATION

**Manufacturer(s):** Rolls-Royce plc

**Applicability:** Models RB211 Trent 768-60, 772-60 and 772B-60 engines installed on Airbus A330 aeroplanes.

**Reason:** There have been a number of low power surges in service on Trent 700 engines. These surges occurred with the aeroplane on the ground as take-off power was being set or during taxi. The cause of the surges has been identified as excessive wear on the HPC casing front location feature. This causes increased HPC tip clearances resulting in loss of surge margin. Engines affected by this problem are also at risk of failure to respond due to surge on acceleration during descent, prior to flap selection.

Routine ground testing for adequate surge margin will assure safe in-flight operation and embodiment of the redesigned HPC casing front location feature will remove the problem.

This AD supersedes AD G-2003-0014 by introducing the accomplishment of the engine control software to automatically maximise HPC surge margin in descent as an Interim Action with an associated compliance date. The requirements of this AD are otherwise unchanged from those of AD G-2003-0014.

**Effective Date:** 4 December 2003 (the effective date of AD G-2003-0014).

**Compliance/Action:**

1) In-Service Test

Carry out a surge test in accordance with Rolls-Royce Alert Service Bulletin RB211-71-AD509 revision 3 or later CAA approved revision, Section 3 Accomplishment Instructions before the engine exceeds 2000 cycles since new or 1000 cycles since HP Compressor overhaul, and subsequently at intervals of not more than;
(a) 130 cycles
**or**
(b) 160 cycles if Rolls-Royce Alert Service Bulletin RB211-73-AE224 original issue or later CAA approved revision, or later standard of engine control software is embodied.

Note: For the purposes of this Airworthiness Directive, testing carried out in accordance with superseded AD 005-09-2001 or AD G-2003-0014 (Rolls-Royce Alert Service Bulletin RB211-71-AD509 revision 3, revision 2, revision 1 or original issue) is deemed to be valid.

continued on next page

2) Interim Action

Fit an EEC incorporating a revised standard of engine control software as specified in Rolls-Royce Alert Service Bulletin RB211-73-AE224 original issue or later CAA approved revision, or later standard of engine control software, before 1 July 2005.

3) Terminating Action

Fit redesigned HP compressor stage 1 casing and intermediate case outer location ring in accordance with Rolls-Royce Service Bulletin RB211-72-D574 original issue or later CAA approved revision, Section 3 Accomplishment Instructions within 4500 cycles of the Effective Date of this Airworthiness Directive or before 30 June 2012 whichever is the sooner. Incorporation of this modification removes the requirement to carry out 1) In-Service Test and 2) Interim Action and therefore constitutes the terminating action for this Airworthiness Directive.

**Reference Publications:** Rolls-Royce Alert Service Bulletin RB211-71-AD509 revision 3 or later approved issue, Rolls-Royce Alert Service Bulletin RB211-73-AE224 original issue or later CAA approved revision, Rolls-Royce Service Bulletin RB211-72-D574 original issue or later CAA approved revision may be obtained from Publication Services, Rolls-Royce plc, PO Box 31, Derby, DE24 8BJ, United Kingdom. Phone: +44 (0) 1332 242424 Fax: +44 (0) 1332 249936.

**Remarks:** Enquiries regarding this AD may be directed to Civil Aviation Authority, Safety Regulation Group, Propulsion Department, Aviation House, Gatwick Airport South, West Sussex, RH6 0YR, United Kingdom. Phone: +44 (0) 1293 573199 Fax: +44 (0) 1293 573979 E-mail: tony.boud@srg.caa.co.uk.

# United Kingdom Civil Aviation Authority

# AIRWORTHINESS DIRECTIVE

## AD No: G-2004-0016

Issue Date: 29 June 2004

This AD is issued by the UK CAA acting for and on behalf of the European Aviation Safety Agency as the Primary Aviation Authority (ICAO Annex 8 Authority of State of Design) for the affected product(s).

Approved by the European Aviation Safety Agency under approval number on 2004-6754 28 June 2004.

In accordance with Article 9(7)(b) of the Air Navigation Order 2000 as amended the following action required by this Airworthiness Directive (AD) is mandatory for applicable aircraft registered in the United Kingdom.
No person may operate an aircraft to which an AD applies except in accordance with the requirements of that AD unless otherwise agreed with the Authority of the State of Registry.

| Type Approval Holders Name: | Type/Model Designation(s): |
|---|---|
| **ROLLS-ROYCE PLC** | **RB211 TRENT 768-60, 772-60, 772B-60** |

**Type Certificate Data Sheet No:** 1050

**Superseded/ Revised ADs:** G-2003-0016

### ATA 72 - IP TURBINE BEARING – OIL VENT TUBE INSPECTION

**Manufacturer(s):** Rolls-Royce PLC

**Applicability:** Models RB211 Trent 768-60, 772-60, 772B-60 engines installed on Airbus A330 aeroplanes.

**Reason:** This Airworthiness Directive has been raised following an incident involving uncontained multiple IP turbine blade release on a Trent 700 engine. The blade release was the result of an overspeed of the IP turbine rotor that was initiated by an internal fire in the HP/IP bearing chamber. Post incident analysis and investigation has established that blockage of the HP/IP turbine bearing oil vent tube due to oil coking is a significant factor in the failure sequence.

G-2003-0016 instructed a one-off inspection/cleaning of the HP/IP turbine bearing vent tube.

This Airworthiness Directive supersedes Airworthiness Directive G-2003-0016 by extending the requirements as follows;

- Repetitive inspections/cleaning of the HP/IP turbine bearing internal oil vent tube are introduced at intervals that are dependent on the level of carbon build-up found.
- The threshold life is revised following evidence from the initial inspections that have shown that overhaul does not always remove all carbon from the vent pipe. The threshold life is therefore now applicable "since new" only, and not "since last overhaul".
- The threshold life is also revised by the addition of a cyclic limit following evidence from the initial inspection.
- As a result of the latter two points above, a further three months compliance time is included to cover those engines which, due to overhaul or high cyclic usage, now exceed the revised threshold life of this Airworthiness Directive.

**Effective Date:** 30 June 2004

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**Compliance/Action:**

1) Carry out the Action detailed below for engines on which the 05 module life exceeds the threshold life of 10,000 hours or 2,500 cycles since new (whichever occurs first) within 3 months of reaching the threshold life. For engines already exceeding the threshold life, carry out the Action detailed below within 3 months of the Effective Date of this Airworthiness Directive.

2) HP/IP turbine bearing internal oil vent tubes inspected/cleaned in accordance with this Airworthiness Directive, for which no evidence of carbon build up of visible thickness exists or for which an internal clearance of 8mm diameter for the full length of the tube is established, must be re-inspected/cleaned in accordance with the Action detailed below at repeat intervals of 6,400 hours or 1,600 cycles (whichever occurs first).

3) HP/IP turbine bearing internal oil vent tubes inspected/cleaned in accordance with this Airworthiness Directive which do not meet the acceptance criteria in (2), for which an internal clearance of 6mm diameter for the full length of the tube is established, must be re-inspected/cleaned in accordance with the Action detailed below at repeat intervals of 1,600 hours or 400 cycles (whichever occurs first).

4) HP/IP turbine bearing internal oil vent tubes inspected/cleaned in accordance with this Airworthiness Directive, for which an internal clearance of less than 6mm diameter is established, remove the engine from service within 10 cycles of the inspection.

Note: For the purposes of compliance with this Airworthiness Directive, inspection/cleaning carried out in accordance with superseded Airworthiness Directive G-2003-0016 (Rolls-Royce Alert Service Bulletin RB211-72-AE302 original issue) is deemed to be valid.

**Action:** Inspect and clean (as necessary) the HP/IP turbine bearing internal oil vent tube in accordance with Section 3 Accomplishment Instructions of Rolls-Royce Alert Non Modification Service Bulletin RB211-72- AE302 rev 1 (or later approved issue).

**Reference Publications:** Rolls-Royce Alert Non Mod Service Bulletin RB211-72-AE302 original or later approved issue may be obtained from Publication Services, Rolls-Royce plc. PO Box 31, Derby, DE24 8BJ, United Kingdom. Phone: +44 (0) 1332 242424, Fax: +44 (0) 1332 249936.

**Remarks:** Enquiries regarding this Airworthiness Directive may be directed to Civil Aviation Authority, Safety Regulation Group, Propulsion Department, Aviation House, Gatwick Airport South, West Sussex, RH6 0YR, United Kingdom. Phone: +44 (0) 1293 573199 Fax: +44 (0) 1293 573979 E-mail: tony.boud@srg.caa.co.uk.

## ROLLS-ROYCE SMALL ENGINES

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| | | **CIRRUS MINOR II AND IIA** | |
| 1746 PRE 80 | 687<br>688<br>689 | Diameter of propeller front plate increased.<br>Length of propeller spinner reduced.<br>Diameter of propeller hub sleeve flange increased. | Applicable when wooden propellers are fitted. Service instruction J10 refers. Compliance required before flight. |
| 1747 PRE 80 | 1243 | Introduction of steel distance pieces on cylinder holding down studs. | Service instruction J20 and J20A refers. Compliance required before flight. |
| 1748 PRE 80 | 1288 | Conversion of Rotax vacuum pump from type M0105 to M0106. | Service instruction J22/G5 refers. Compliance required before flight. |
| 1749 PRE 80 | 1609 | Carburettor enrichment valve diaphragm in improved material. | Service instruction J30 refers. Compliance required before flight. |
| | | **CIRRUS MAJOR II AND III** | |
| 1750 PRE 80 | 446/447 | Serrated type propeller hub and front plate introduced. | Compliance required before flight. |
| 1751 PRE 80 | 710 or 2032 | Simms vernier magneto coupling in softer material. | Service instruction G1 refers. Compliance required before flight. |
| 1752 PRE 80 | 734 | Piston type oil pump, rotor diameter revised. | Applicable to piston type oil pumps prior to Part No. GC 1601/12. (GC 1601/12 and later stroke number incorporate these Mods.) Service instruction G2 refers. Compliance required before flight. |
| 1753 PRE 80 | 885 | Piston type oil pump, piston diameter revised. | |
| 1754 PRE 80 | 912 | Piston type oil pump, main body port dimensions revised. | |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| | | CIRRUS MAJOR II AND III continued | |
| 1755 PRE 80 | 923 | Piston type oil pump, bush oil slot depth increased. | |
| 1756 PRE 80 | 1289 | Conversion to Rotax vacuum pump from type M0105 to M0106. | Service instruction J22/G5 refers. Compliance required before flight. |
| | | **CIRRUS ENGINE INSPECTIONS** | |
| 1757 PRE 80 | 1 | Die cast cylinder head Part No. JD201. Inspection for cracks every 10 hours. | Applicable to Minor II and IIA. Service instruction J19 and 19A refers. |
| 1758 PRE 80 | 2 | Amal type 120 fuel pump. Inspection of lower diaphragm washer every 50 hours or three months whichever is the longer until Mod 1645 Part 1 or 1668 Part 1 embodied. | Applicable to Minor I, II and IIA. Service instruction F7/J35 refers. |
| 1759 PRE 80 | 3 | Crankshaft. Inspection for fatigue crack. | Applicable to Minor II and IIA. Service instruction J14 refers. |
| 1760 PRE 80 | 4 | Zenith carburettor type FAIHB blanking plug. | Applicable to Minor II and IIA. Service instruction J17 refers. |
| 1761 PRE 80 | 5 | Zenith carburettor main discharge assembly inspection. | Applicable to Minor II and IIA. Service instruction J27 refers. |
| 1762 PRE 80 | 6 | Crankshaft. Inspection of front end with approved penetrant detector every 200 hrs and after shock loading. | Applicable to Minor I, II, IIA, Major II and III. Service instruction F1/G13/J36 refers. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 1763 PRE 80 | 7 | Piston type oil pump GC1601. Inspection for wear/damage on piston and rotor every 300 hours. | Applicable to Major II and III. Service instruction G2 refers. |
| 1764 PRE 80 | 8 | Hobson carburettor type AI48GM1. Inspection for external cracks in main body every 10 hours until Mod. 2014 embodied. | Applicable to Major II and III. Service instruction G8 refers. |
| 1765 PRE 80 | 9 | Amal type 136 fuel pump. Internal examination every 150 hours or 12 months whichever is the sooner. | Applicable to Major II and III. Service instruction G10 refers. |
| 1766 PRE 80 | 10 | Amal type 136/AD/2 fuel pump. Check of cam shaft thread not later than 100 hours from 6 July 1957. | Applicable to Major II and III. Service instruction G11 refers. |
| 1767 PRE 80 | 11 | Cirrus Engine Controls – 50 hour inspection – Ball and Socket joints type EA 767/3. (Note: This subject was previously covered by CAA Airworthiness Notice No. 23, which is now cancelled.) | Applicable to aircraft fitted with Cirrus Minor or Cirrus Major engines. Not exceeding 50 flight hours, inspect as detailed in paras 1 to 5 inclusive.<br>1 Inspect all ball and socket joints type EA 767/3 and ensure that there is at least $^{1}/_{16}$" clearance between the socket and the lever arm to which the threaded portion of the ball joint is attached.<br>2 Ensure that the control rods do not foul any adjacent structure or mechanism throughout their full range of movement.<br>3 Ensure that the screwed end of the control rod is safely in the socket, but does not protrude into the socket housing. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| | | | 4 Ensure that the spring behind the inner concave pad in the socket is serviceable. |
| | | | 5 With the controls assembled, screw up the adjusting pad in each socket until the ball joint is clamped tight, then slacken off until the next split pin hole in the socket is in line with the slot in the adjustment pad. Under no circumstances should the adjustment pad be slackened more than $^{1}/_{4}$ of a turn. Lock in the approved manner with $^{1}/_{16}$" split pin. |
| | | *GIPSY MAJOR 1 (ALL SERIES) AND MAJOR 10 MARK 1* | |
| 1768 PRE 80 | 424<br>2495<br>2690<br>TNS.G15 | Modified crankshaft.<br>Crankshaft bearing locating sleeve.<br>Sulphinuz treatment of crankshaft. | Compliance required in accordance with Technical News Sheet G No. 8 (Major I) Technical News Sheet GM10 No. 11 (Major 10 Mark 1). |
| | | *GIPSY QUEEN 30 SERIES* | |
| 1769 PRE 80 | G2654 | Rotax starter type CO257. | Applicable to Queen 30 Mark 2. Should have been embodied by 1 January 1962. MNSG2654 refers. |
| 1770 PRE 80 | G2925 | Shot peening of crankshaft where Mod. 2036 (R267) or 2162 (R364) already embodied. | Compliance required in accordance with Technical News Sheet GQ30 No. 70. |
| | | *GIPSY QUEEN 70 SERIES* | |
| 1771 PRE 80 | G1920 | Replacement of Klingerit joint washers by those of copper sheet. | Applicable to Queen 70, 70–2, 70–3, 70–4. Compliance required before flight. MNSG1920 refers. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| | | *GIPSY ENGINE INSPECTIONS* | |
| 1772 PRE 80 | 1 | Crankshaft. Inspection of front end for cracks. | Applicable to Major 1 Series and Major 10 Mark 1. Technical News Sheet G No. 8 and GM10 No. 11 refers. |
| 1773 PRE 80 | 2 | Crankshaft. Inspection of front end for cracks until Mod. 2925 embodied. | Applicable to Queen 30 Series embodying Mod. 2036 (R267) or 2162 (R364). Technical News Sheet GQ30 No. 70 refers. |
| 1774 PRE 80 | 3 | Carburettor power jet Part No. CH47979 and slow running jet plug Part No. CH69704. Inspection for distortion until Mod. 2601 embodied. | Applicable to Queen 30 Series. Technical News Sheet GQ30 No. 63 refers. |
| 1775 PRE 80 | 4 | Propeller shaft – Cracking. | Applicable to Queen 70 Series. Technical News Sheet GQ70 No. 105 refers. |
| 1776 PRE 80 | 5 | Pressure testing of induction manifold heater box. | Applicable to early type Gipsy engines TNS G No. 77 and Gipsy major engines TNS GM 10 N. 47. An inspection procedure has been devised and published by the engine manufacturer. This requires a pressure test to be made at the following intervals:<br>1 Within 60 days of receipt of the inspection procedure, then,<br>2 Annually, or<br>3 At any time rough running from an otherwise unexplained cause is experienced. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 009–11–83 | Gipsy Mod. 3014 Issue 2 and LTO 579 | *Fuel Control Unit* – Introduction of new Boost Capsule. | Applicable to Gipsy Queen Series 70 engines. Compliance required as detailed in Hants and Sussex Modification News Sheet 3014 Issue 2. |
| 007–06–89 | Gipsy Mod. G4030 | *Fuel Pipe* – Fire resisting. | Applicable to Gipsy Queen 2, 3, 3A Six I, Six IA and Six II engines. Compliance required as detailed in H&S Aviation Modification News sheet G4030 not later than 31 December 1989. |

## ROLLS-ROYCE TAY SERIES ENGINES

With effect from 7 January 2002, the responsibilities of the Type Design Organisation for the Rolls-Royce Tay Series engines transferred from Rolls-Royce plc to Rolls-Royce Deutschland. Coincident with this the ICAO Annex 8 responsibilities of the Authority of the State of Design transferred from the United Kingdom Civil Aviation Authority (CAA) to the German Luftfahrt-Bundesamt (LBA). From that date LBA became responsible for mandating and promulgating Airworthiness Directives for the Rolls-Royce Tay Series engines. The following CAA Airworthiness Directives had been issued at the time of design transfer and are still applicable to aircraft on the UK register.

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 016–09–87 | SB TAY–72–1069 | Engine – Inspection of nose cone spinner fairing to nose cone spinner radial gaps. | Applicable to Tay 610–8 and 620–15 engines. Compliance required as detailed in Service Bulletin. |
| 017–09–87 | SB TAY–73–1030 | Engine Fuel and Control – Revision to fuel flow regulator calibration – Mod. 73–1030 (Lucas Mod. CP. 6465). | Applicable to Tay 610–8 engines. Compliance required as detailed in Service Bulletin. |
| 002–02–88 | SB TAY–75–1055 | Air – Air tubes and fittings – Introduction of 'non-flowing' EPR manifold system and modified pressure rakes – Mod 75–1055. | Applicable to Tay 620–15 engines. Compliance required as detailed in Service Bulletin. |
| 002–03–88 | SB TAY–76–1083 | Engine Controls – Emergency fuel shut down system – Rear cable guide plate in stainless steel – Mod 76–1083. | Applicable to Tay 610–8, 611–8 and 620–15 engines. Compliance required as detailed in Service Bulletin. |
| 027-04-90 | SB TAY–73–1207 | Engine Fuel and Control – Fuel flow regulator – Revised variable metering orifice (VMO) by-pass adjuster – Mod. 73–1207 (Lucas Mod. CP 6735). | Applicable to Tay 650–14 and 650–15 engines. Compliance required as detailed in Service Bulletin. |
| 017–10–90 | SB TAY–73–1220 | Engine Fuel and Control – Inspection of fuel flow regulator for pilot burner simulator fault. | Applicable to Tay 650–15 engines. Compliance required as detailed in Service Bulletin. |
| 008–10–97 | SB TAY–72–1442 | Engine – Fan blades – Ultrasonic inspection of fan blade roots. | Cancelled and superseded by LBA AD D–1998–055R3. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 001–12–97 | SB TAY–72–1447 | *Engine* – Action to be taken following inadvertent stabilized ground operation between idle reverse and emergency maximum reverse thrust. | Cancelled and superseded by LBA AD 2002–090. |
| 003–03–98 | SB TAY–76–1434 | *Engine Controls* – Emergency fuel shut off system – Inspection of emergency fuel shut off cable. | Applicable to Tay 620–15 engines fitted to Fokker F70 and F100 aircraft, Tay 650–15 engines fitted to Fokker F100 aircraft and Tay 651–54 engines fitted to Boeing 727 aircraft. Compliance required as detailed in Service Bulletin. |
| 002–01–99 | SB TAY–73–1459 | *Engine Fuel and Control* – Fuel flow regulator – Revision to the in-service life of the fuel flow regulator | Applicable to Tay 650–15 engines fitted to Fokker F100 aircraft. Compliance required as detailed in Service Bulletin. |
| 004–07–99 | SB TAY–72–1479 | *Engine* – Flight profile compliance. | Applicable to Tay 650 engines fitted to Fokker F100 aircraft. Compliance required as detailed in Service Bulletin. |
| 005–12–99 | SB TAY–72–1483 | *Engine* – HP compressor – Instructions for the repeat borescope inspection of the HP compressor stage 12 disc. | Applicable to Tay 650–15 engines pre SB 72-1498 fitted to Fokker F100 aircraft and Tay 651–54 engines pre SB 72–1498 fitted to Boeing 727 aircraft. Compliance required as detailed in Service Bulletin. Embodiment of Service Bulletin 72–1498 (AD 003–10–2000) is terminating action. |
| 006–04–2000 | SB TAY–72–1492 | *Engine* – Auxiliary gearbox assembly. | Applicable to Tay 651–54 engine Serial Nos. 81002, 81003 and 81007 fitted to Boeing 727 aircraft. Compliance required as detailed in Service Bulletin. |
| 003–10–2000 | SB TAY–72–1498 | *Engine* – HP rotor thrust bearing housing assembly – Introduction of revised retaining and locking features for the HP compressor outlet guide vane and outer seal spacer. | Applicable to Tay 650–15 and Tay 651–54 engines as detailed in Service Bulletin fitted to Fokker F100 and Boeing 727 aircraft respectively. Compliance required as detailed in Service Bulletin which is terminating action for SB 72–1483 (CAA AD 005–12–99). |
| 001–01–2002 | SB TAY–72–1485 | *Engine* – HP turbine/HP compressor shaft spline flank wear inspection. | Applicable to Tay 650–15 engines fitted to Fokker F100 aircraft. Compliance required as detailed in Service Bulletin. |

## ROLLS-ROYCE SPEY SERIES ENGINES

With effect from 7 January 2002, the responsibilities of the Type Design Organisation for the Rolls-Royce Spey Series engines transferred from Rolls-Royce plc to Rolls-Royce Deutschland. Coincident with this the ICAO Annex 8 responsibilities of the Authority of the State of Design transferred from the United Kingdom Civil Aviation Authority (CAA) to the German Luftfahrt-Bundesamt (LBA). From that date LBA became responsible for mandating and promulgating Airworthiness Directives for the Rolls-Royce Spey Series engines. The following CAA Airworthiness Directives had been issued at the time of design transfer and are still applicable to aircraft on the UK register.

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 2228 PRE 80 | SP 71–234 | *Engine* – Drain Tubes, Valves and Fittings – Combustion System Overboard Drain Tube repositioned to give downhill run – Mod 5268. | Applicable to Spey 512–14E, 512–14DW and Spey 512–5, 512–5W installed in Trident 2E and 3B. Compliance required by 1 April 1974. BAED Mod 71–A–105 is acceptable alternative. |
| 2229 PRE 80 | SP 71–242 | *Engine* – In-field rectification of low power indication. | Applicable to Spey 555–15. Compliance required as detailed in Service Bulletin. |
| 2230 PRE 80 | SP 72–310 | *Engine Fuel and Control* – Fuel bleed valve. Solenoid operated fuel spill valve. | Applicable to Spey 506–14, 506–14A, 506–14AW. Compliance required as detailed in Service Bulletin. |
| 2231 PRE 80 | SP 72–A477 | *Engine* – Fuel and Air Tubes – Failure of Avico Clamps. | Applicable to Spey engines as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. |
| 2232 PRE 80 | SP 72–502 | *Engine* – By-Pass duct. Rear Duct with extended liner in oil scavenge sole plate. | Applicable to Spey 511–8. Compliance required as detailed in Service Bulletin. |
| 2233 PRE 80 | SP 72–723 | *Engine* – By-Pass duct and low pressure (LP) Compressor case and vanes – Fitment of modified support bracket for constant speed drive (CSD)/alternator cooling air duct – Mod. 4822. | Applicable to Spey 512–5 ad 512–5W installed in Trident 3B only. Compliance required as detailed in Service Bulletin. |
| 2234 PRE 80 | SP 73–29 | *Engine Fuel and Control* – Fuel flow Regulator. Modified elbow connection to suit installation of solenoid operated fuel spill valve. | Applicable to Spey 506–14, 506–14A, 506–14AW. Compliance required as detailed in Service Bulletin. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 2235 PRE 80 | SP 73–56 | *Engine Fuel and Control* – Fuel bleed valve solenoid operated. Increased fuel bleed flow. | Applicable to Spey 510–14. Compliance detailed in Service Bulletin. |
| 2236 PRE 80 | SP 73–A109 | *Engine Fuel and Control* – Fuel flow Regulator – Inspection of Input Drive Shaft. | Applicable to Spey 505–5, 505–5E, 506–14 and 506–14AW. Compliance required as detailed in Service Bulletin. |
| 2237 PRE 80 | SP 73–A161 | *Engine Fuel and Control* – Possible foul between fuel tubes EU20154A and EU67548A. | Applicable to Spey 555–15, –15H, –15N and –15P. Compliance required as detailed in Alert Service Bulletin. |
| 2238 PRE 80 | SP 72–715 | *Engine* – HP Compressor – Stages 2 to 5 rotor discs with increased thickness neck and diaphragm – Mod 4540. | Applicable to Spey engines as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. |
| 2239 PRE 80 | SP 72–735 | *Engine* – HP Compressor – Stages 2 to 5 rotor discs with increased thickness neck and diaphragm – Mod 4592. | Applicable to 512–14E, 512–14DW and 512–5, 512–5W installed in Trident 2E and 3B. Compliance required as detailed in Service Bulletin. |
| 2240 PRE 80 | SP 72–871 | *Engine* – LP compressor rotor – ultrasonic inspection of LP compressor stage 1 rotor blade lugs. | Applicable to Spey 506–14 and 506–14D not incorporating Service Bulletin SP72–848 (Mod 5453). Compliance required as detailed in Service Bulletin. |
| 2241 PRE 80 | SP 72–A886 | *Engine* – Replacement of H.P. 2 Turbine Disc location sleeves. | Applicable to Spey 506–14, 506–14A, 555–15, 555–15H, 555–15N and 555–15P, designated engine numbers. Compliance required at next shop visit or on completion of 1500 flights since last shop visit, whichever occurs first. |
| 2242 PRE 80 | SP 73–182 | *Engine Fuel and Control* – H.P. Shut-Off Valve Primary Strainer – Check for contamination. | Applicable to Spey 511–8 fitted with H.P. Shut-Off Valves featuring Lucas Service Bulletin L.SB SP 73–158 but not fitted with H.P. fuel pumps featuring either L.SB SP 73–127 or L.SB SP 73–212. Compliance required as detailed in Service Bulletin. |
| 011–11–81 | SP 72–949 | *Engine* – Inspection of pre-mod. 5989 H.P. Stage 12 compressor disc. (INCO 901 Material). | Applicable to Spey 512–14E, 512–14DW, 512–5 and 512–5W. Compliance required as detailed in Service Bulletin. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 001–10–82 | SP 72–A963 | *Engine* – Malfunction of bleed valve mechanism featuring Mod 5866. | Applicable to Spey 555–15, –15H, –15N and –15P featuring Mod 5866. Compliance required as detailed in Service Bulletin. |
| 004–10–83 | SP 72–932 | *Engine* – H.P.2 Turbine disc locating sleeve classified as a group 'A' part. | Applicable to Spey engines as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. |
| 005–10–83 | SP 72–969 | *Engine* – Stage 12 H.P. Compressor disc and seal and L.P. Compressor drive shaft (Pre Mod 4297) cyclic life reductions – Revised presentation of Group 'A' lives. | Applicable to Spey 555–15, –15H, –15N and –15P. Compliance required as detailed in Service Bulletin. |
| 009–02–84 | SP 72–983 | *Engine* – H.P.1 and H.P.2 turbine discs. Restriction of life to 8,000 flights. | Applicable to Spey 555–15, 555–15H, 555–15N and 555–15P not embodying Mod. 4700. Compliance required as detailed in Service Bulletin. |
| 011–10–85 | SP 72–997 | *Engine* – Combustion section – Introduction of an improved standard of primary airscoop overhaul. | Applicable to Spey engines as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. |
| 005–01–87 | SP 78–125 | *Exhaust* – Stainless steel exhaust collector. Restriction on applicability. | Applicable to Spey 555–15N and 555–15P. Compliance required as detailed in Service Bulletin. |
| 009–05–88 | SP 72–A1019 | *Engine* – LP Turbine/Interstage seal inspection. | Applicable to Spey 555–15, 555–15H, 555–15N and 555–15P, serial numbers as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. |
| 005–09–88 | SP 72–1020 | *Engine* – LP Turbine rotor and interstage seal. | Applicable to Spey 555–15, 555–15H, 555–15N and 555–15P engines as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. |
| 013–10–88 | SP 72–A1021 | *Engine* – High life H.P.7 compressor discs. | Applicable to Spey 506–14D engines. Compliance required as detailed in Service Bulletin. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 018–11–88 | SP 72–1022 | *Engine* – Stage 7 HP compressor disc – Repetitive overhaul inspection. | Superseded by CAA AD 001–07–90. |
| 011–01–90 | SP 72–1028 | *Engine* – HP compressor stage 12 rotor disc featuring Mod. 5989 – Revised lives. | Applicable to Spey 512–5W, 512–5/50, 512–14E, 512–14DW and 512–14DWE engines. Compliance required as detailed in Service Bulletin. |
| 001–07–90 | SP 72–1034 | *Engine* – HP compressor stage 7 disc – Revised lives. | Applicable to Spey 506–14, 506–14D, 506–14A, 511–14, 511–14W, 512–14DW, 555–15 Series engines. Compliance required as detailed in Service Bulletin. |
| 017–02–91 | SP 72–1038 | *Engine* – Mod 6147 transply combustion liner head section cracking. | Applicable to Spey 555 engines as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. |
| 004–11–91 | P 72–A1042 | *Engine* – Inspection of thermal barrier coated (TBC) combustion liners. | Applicable to Spey 506–14, 506–14A, 506–14D and 511–14 Series engines. Compliance required as detailed in Service Bulletin. |
| 003–09–92 | SB 72–1044 | *Engine* – Inspection of steel high pressure and low pressure turbine discs. | Applicable to Spey 506–14, 506–14A, 506–14D, 511–14, 511–14W, 512–5W, 512–14E, 512–14DW, 512–14DWE, 555–15, 555–15H, 555–15N, 555–15P Series engines. Compliance required as detailed in Service Bulletin. |
| 002–02–97 | SP 72–1045 | *Engine* – Turbine rotor discs and shafts – L.P. stage 2 turbine blades with revised clearance between shroud interfaces – Mod. 6329. | Applicable to Spey 506–14A, 555–15, 555–15H, 555–15N and 555–15P Series engines. Compliance required as detailed in Service Bulletin. |
| 003–02–97 | SP 78–129 | *Exhaust* – Thrust reverser – Selector mechanism – Introduction of retention spring and vibration damper. | Service Bulletin cancelled at Revision 2 therefore AD is cancelled. |
| 008–08–97 | SP 72–1053 | *Engine* – Nozzle case and vanes – L.P. turbine stage 2 nozzle guide vane seal support with increased clearances. | Applicable to Spey 555–15, 555–15H, 555–15N and 555–15P Series engines. Compliance required as detailed in Service Bulletin. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 010–10–97 | SP 72–1062 | *Engine* – HP compressor stage 1 disc (Mod. 5285) revised lives. | Applicable to Spey 512–14E, 512–14E/10 and 512–14DWE Series engines. Compliance required as detailed in Service Bulletin. |
| 004–09–98 | SP78–131 | *Exhaust* – Thrust reverser – Revised rigging and checking instructions to ensure engagement of the selector valve detent in the forward thrust position. | Applicable to Spey 506–14, 506–14D, 506–14A, 511–14, 511–14W, 512–14E, 512–14DW and 512–14DWE Series engines. Compliance required as detailed in Service Bulletin. |
| 004–10–98 | SP78–133 | *Exhaust* – Thrust reverser – Control valves & rams – Introduction of a GEC-Marconi combined selector sequence valve with revised locking spring and spring valve. | Applicable to Spey engines as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. |
| 007–05–99 | SP72–1063 | *Engine* – Nozzle case and vanes – L.P. turbine stage 2 nozzle guide vane seal support with honeycomb seal. | Applicable to Spey 555 engines as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. |
| 005–07–2000 | SP72–1064 | Engine – Turbine rotor discs and shafts – Introduction of LP turbine stage 2 blade with interlocked shroud. | Applicable to Spey 506–14A engines fitted to BAC 1–11 aircraft and Spey 555–15, –15H, –15N and –15P engines fitted to Fokker F28 aircraft. Compliance required as detailed in Service Bulletin. |

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## ROLLS-ROYCE TYNE ENGINES

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 2221 PRE 80 | ASB Ty A–72–438 | *Engine* – Cooling Air Pipes – Cracking of High Pressure Cooling Air Manifold. | Applicable to Tyne 506 engines. Compliance required as detailed in Alert Service Bulletin. |
| 2222 PRE 80 | SB Ty 72–480 | *Engine* – Pipes and fittings – Introduction of two-piece HP cooling air manifold with butt welded flanges – Mod. 1118. | Applicable to Tyne 506 engines. Compliance required as detailed in Service Bulletin not later than 30 June 1978. |
| 2223 PRE 80 | ASB Ty A–72–438 | *Engine* – Cooling Air Pipes – Cracking of High Pressure Cooling Air Manifold. | Applicable to Tyne 512 engines. Compliance required as detailed in Alert Service Bulletin. |
| 2224 PRE 80 | SB Ty 72–480 | *Engine* – Pipes and fittings – introduction of two-piece HP cooling air manifold with butt welded flanges – Mod. 1118. | Applicable to Tyne 512 engines. Compliance required as detailed in Service Bulletin not later than 30 June 1978. |
| 2225 PRE 80 | ASB Ty 79–A18 | *Oil System* – HP turbine bearing scavenge oil temperature. | Applicable to Tyne 515 engines. Compliance required as detailed in Alert Service Bulletin. |
| 2226 PRE 80 | ASB Ty A–72–438 | *Engine* – Cooling Air Pipes – Cracking of High Pressure Cooling Air Manifold. | Applicable to Tyne 515 engines. Compliance required as detailed in Alert Service Bulletin. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 2227 PRE 80 | SB Ty 72–480 | *Engine* – Pipes and fittings – Introduction of two-piece HP cooling air manifold with butt welded flanges – Mod. 1118. | Applicable to Tyne 515 engines. Compliance required as detailed in Service Bulletin not later than 30 June 1978. |
| 017–04–82 | SB Ty 72–480 | *Engine* – Pipes and fittings – Introduction of two-piece HP cooling air manifold with butt welded flanges – Mod. 1118. | Applicable to Tyne 515/101W engines. Compliance required as detailed in Service Bulletin. |
| 025–04–89 | SB Ty 72–743 | *Engine* – Reduction gear – Control of propeller shaft lives. | Applicable to Tyne 522 engines. Compliance required as detailed in Service Bulletin. |
| 026–04–89 | SB Ty 72–744 | *Engine* – Reduction gear – Control of propeller shaft lives. | Applicable to Tyne 515/101W engines. Compliance required as detailed in Service Bulletin. |
| 027–04–89 | SB Ty 72–745 | *Engine* – Reduction gear – Control of propeller shaft lives. | Applicable to Tyne 506 and 512 engines. Compliance required as detailed in Service Bulletin. |
| 028–08–89 | SB Ty 72–746 | *Engine* – Reduction gear – Control of propeller shaft lives. | Applicable to Tyne 515 engines. Compliance required as detailed in Service Bulletin. |
| 001–03–90 | SB Ty 72–751 | *Engine* – Incorrect hexagon nuts have been installed during assembly. | Applicable to Tyne 506, 515 and 515/101W engines. Compliance required as detailed in Service Bulletin. |

## ROLLS-ROYCE VIPER ENGINES

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 0040 PRE 80 | CV 3370 (Pre-Mod. CV 7136) | *Engine* – Compressor – Introduction of lengthened compressor casing centre section joint flange. | Applicable to Viper Mk 520 and 521. Compliance required by 31 March, 1971. |
| 0041 PRE 80 | 72–A69 | *Engine* – Introduction of inner exhaust cone with improved front diaphragm weld. | Applicable to Viper Mk 601–22. Compliance as detailed in Service Bulletin. |
| 0042 PRE 80 | 73–10 | *Engine Fuel and Control* – high pressure fuel pump. | Applicable to Viper Mk 601–22. Compliance required as detailed in Alert Service Bulletin. |
| 0043 PRE 80 | 73–A13 | *Engine Fuel and Control* – Servo to EPC tube unit – clearance between tube unit and HP cock operating rod. | Service Bulletin has been cancelled and the information incorporated in the Time Limits Section of Maintenance and Overhaul Manuals. Therefore the AD has been cancelled. |
| 0044 PRE 80 | 73–A15 | *Engine Fuel and Control* – HP fuel pump to automate thrust limiter – alignment check. | Applicable to Viper Mk 601–22. Compliance as detailed in Alert Service Bulletin. |
| 0045 PRE 80 | 73–A17 (CV 4323) | *Engine Fuel and Control* – Fuel tubes – Introduction of a modified flexible fuel tube. | Applicable to Viper Mk 601–22. Compliance required not later than 31 December, 1978. |
| 0046 PRE 80 | 73–A98 | *Engine Fuel and Control* – Servo to EPC tube unit – Clearance between tube unit and HP cock operating rod. | Applicable to Viper Mk 521 and 522. Compliance required not later than 30 November, 1975. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 0047 PRE 80 | 75–A31 | *Air* – Compressor – Blow-off valve – valve seizure. | Applicable to Viper Mk 521 and 522 Compliance required within 28 days from receipt of this Bulletin and at intervals not exceeding 300 hours thereafter. |
| 0048 PRE 80 | 75–A32 | *Air* – Blow-off Valve – revised operating limit. | Applicable to Viper Mk 521 and 522. Compliance required not later than 30 June 1979. |
| 0049 PRE 80 | 73–A101 | *Engine Fuel and Control* – Inspection of fuel pump blanking plugs and connections. | Applicable to Viper Mk 520, 521 and 522. Compliance required as detailed in Alert Service Bulletin. |
| 020–06–80 | 73–A19 | *Engine Fuel and Control* – Fuel Pump – Inspection of fuel pump blanking plugs and connections. | Applicable to Viper Mk 601–22. Compliance required as detailed in Alert Service Bulletin. |
| 010–10–80 | 72–A338 | *Engine* – Exhaust cone assembly – Inspection of cap nuts and stay pins. | Applicable to Viper Mk 520, 521 and 522. Compliance required as detailed in Alert Service Bulletin. |
| 012–10–88 | 75–A11 | *Air* – Blow-off valve – Revised operating limit. | Service Bulletin has been cancelled and the information incorporated in the Time Limits Section of Maintenance and Overhaul Manuals. Therefore the AD has been cancelled. |
| 049–09–89 | 72–A154 | *Engine* – Compressor – Reduction of cyclic life of stages 5 and 6 compressor disc. | Service Bulletin has been cancelled and the information incorporated in the Time Limits Section of Maintenance and Overhaul Manuals. Therefore the AD has been cancelled. |
| 050–09–89 | 72–A372 | *Engine* – Compressor – Reduction of cyclic life of stages 5 and 6 compressor disc. | Applicable to Viper Mk 520, 521 and 522 Compliance required as detailed in Alert Service Bulletin. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 015–04–90 | 79–A4 | *Engine* – Oil – Check for correct seating of oil tank drain valve. | Applicable to Viper Mk 601–22. Compliance required as detailed in Alert Service Bulletin. |
| 030–04–90 | 72–A381 | *Engine* – Lubrication – Check for correct seating of oil tank and oil pump drain valves. | Applicable to Viper Mk 520, 521 and 522. Compliance required as detailed in Alert Service Bulletin. |
| 011–05–90 | 72–A243 | *Engine* – Lubrication – Check for correct seating of oil tank and oil pump drain valves. | Applicable to Viper Mk 526. Compliance required as detailed in Alert Service Bulletin. |
| 002–07–90 | 72–A388 | *Engine* – Centre section – Inspection for pulled inserts. | Applicable to Viper Mk 520, 521 and 522. Compliance required as detailed in Alert Service Bulletin. |
| 003–07–90 | 72–A249 | *Engine* – Centre section – Inspection for pulled inserts. | Applicable to Viper Mk 526. Compliance required as detailed in Alert Service Bulletin. |
| 004–07–90 | 72–A173 | *Engine* – Centre section – Inspection for pulled inserts. | Applicable to Viper Mk 601–22. Compliance required as detailed in Alert Service Bulletin. |
| 020–02–91 | 73–A52 | *Engine Fuel and Control* – Fuel pump – Inspection of fuel pump blanking plugs and connections. | Applicable to Viper Mk 526. Compliance required as detailed in Alert Service Bulletin. |
| 021–02–91 | 72–A233 | *Engine* – Compressor – Reduction of cyclic life of stages 5 and 6 compressor disc. | Applicable to Viper Mk 526. Compliance required as detailed in Alert Service Bulletin. |
| 003–02–96 | 73–A115 | *Engine Fuel and Control* – Introduction of fuel pump types MGBB.183 and MGBB.184. | Applicable to Viper Mk 522. Compliance required as detailed in Alert Service Bulletin. |
| 004–02–96 | 73–A118 | *Engine Fuel and Control* – Introduction of fuel pump types MGBB.181 and 182. | Applicable to Viper Mks 520 and 521. Compliance required as detailed in Alert Service Bulletin. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 008–11–97 | 73–A121 | *Engine Fuel and Control* – Joint washer replacement – Augmentor and by-pass valve assembly to BFCU body. | Applicable to Viper Mks 520/521 and 522. Compliance required as detailed in Alert Service Bulletin. |
| 009–11–97 | 73–A35 | *Engine Fuel and Control* – BFCU – Inspection of Augmentor and by-pass valve assembly joint washer. | Applicable to Viper Mk 601. Compliance required as detailed in Alert Service Bulletin. |
| 010–11–97 | 73–A36 | *Engine Fuel and Control* – Joint washer replacement – Augmentor and by-pass valve assembly to BFCU body. | Applicable to Viper Mk 601. Compliance required as detailed in Alert Service Bulletin. |
| 011–11–97 | 73–A120 | *Engine Fuel and Control* – BFCU – Inspection of Augmentor and by-pass valve assembly joint washer. | Applicable to Viper Mks 520/521 and 522. Compliance required as detailed in Alert Service Bulletin. |
| 012–11–97 | 73–A68 | *Engine Fuel and Control* – BFCU – Inspection of Augmentor and by-pass valve assembly joint washer. | Applicable to Viper Mk 526. Compliance required as detailed in Alert Service Bulletin. |
| 013–11–97 | 73–A69 | *Engine Fuel and Control* – Joint washer replacement – Augmentor and by-pass valve assembly to BFCU body. | Applicable to Viper Mk 526. Compliance required as detailed in Alert Service Bulletin. |
| 003–06–99 | 72–A176 | *Engine* – Compressor – Zero stage compressor stator vane cracking. | Applicable to Viper Mk 601–22. Compliance required as detailed in Alert Service Bulletin. |
| 004–01–2001 | 72–A184 | *Engine* – 1st stage turbine rotor blades – New life limits. | Applicable to Viper Mk 601–22. Compliance required as detailed in Alert Service Bulletin. |

**BRITISH AEROSPACE DYNAMICS GROUP**

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| | | **Bracket Propellers and Equipment** | |
| 2164 PRE 80 | 5226 | Propeller Types PD 136/ 212/1/2 (Heron)<br>PD 170/ 212/1/2 (Heron)<br>PD 175/ 212/1/2 (Heron)<br>Introduction of stronger counterweight bracket. | Modification News Sheet 2BCS Series No. 81 refers. Compliance required not later than first overhaul after 1 November 1962. |
| 2165 PRE 80 | 7204 | Constant Speed Units PAX 16 (Heron)<br>PAX 16/B (Heron)<br>Introduction of improved relief valve. | Modification News Sheet 2BCS Series No. 75 refers. Compliance required immediately. Satisfies Special Propeller Technical Instruction No. 30. |
| 2166 PRE 80 | 25697 | Propeller Types PD 70/212/1 (Prentice)<br>PD 136/212/1 (Heron)<br>PD 170/212/1 (Heron)<br>PD 175/212/1 (Heron)<br>Front cone seat machine finished in situ, and changes propeller types to /2. | Modification News Sheet 2BCS Series No. 86 refers. Compliance required not later than first overhaul after 1 February 1965. |
| 2167 PRE 80 | 29027 | Propeller Types PD 136/ 212/1/2 (Heron)<br>PD 170/ 212/1/2 (Heron)<br>PD 175/ 212/1/2 (Heron)<br>Simplified method of locking the oil transfer tube which cannot interfere with the tightening of the propeller. | Modification News Sheet 2BCS Series No. 88 refers. Compliance required not later than first overhaul after 1 April 1968. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 2168 PRE 80 | 29104 | Propeller Types PD 136/ 212/1/2 (Heron)<br>PD 170/ 212/1/2 (Heron)<br>PD 175/ 212/1/2 (Heron)<br>Improved assembly standard of barrel support blocks. | Modification News Sheet 2BCS Series No. 87 refers. Compliance required not later than first overhaul after 1 November 1967. |
| | | **Inspections** | |
| 2169 PRE 80 | – | Constant Speed Units PAX 16 (Heron)<br>PAX 16/B (Heron).<br>Inspection and alteration of relief valve cap. | Special Propeller Technical Instruction No. 30 refers. No action required if Modification 7204 Modification News Sheet 2BCS Series No. 75 embodied. |
| 2170 PRE 80 | – | Propeller Types PD 136/ 212/1/2 (Heron)<br>PD 170/ 212/1/2 (Heron)<br>PD 175/ 212/1/2 (Heron)<br>Periodic checks to be carried out. | Publication 2BCS Revision 28 refers. |
| 2171 PRE 80 | – | Propeller Type PD 70/ 212/1/2 (Prentice)<br>Periodic checks to be carried out. | Publication 2BCS Revision 28 refers. |
| | | **Britannia Propellers and Equipment** | |
| 2172 PRE 80 | 6739 | Controller Type PAY 81406/B (Britannia 300)<br>PAY 81407/B (Britannia 300)<br>Conversion to Types PAY 81408 & PAY 81409. | Modification News Sheet Britannia No. 93 refers. Compliance required not later than 1 April 1960. |
| 2173 PRE 80 | 8383 | Synch switch units PQ 1088/1/2 (Britannia 300)<br>PQ 1095/1/2 (Britannia 100)<br>'All propellers increase/decrease.'<br>Switch to be changed for new type.<br>IMPORTANT NOTE: Part of this Modification has been superseded by Modification 26243 (See Modification News Sheet No. 538.) | Modification News Sheet Britannia No. 309 refers. Compliance required not later than first overhaul after 1 January 1960.<br><br>See also Technical News Sheet Britannia No. 54. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 2174 PRE 80 | 10584 | Controller Type PAY 81404 to PAY 81409 (Britannia 100 and 300) Introduction of re-designed shuttle valve bush. | Modification News Sheet No. 300 refers. Compliance required not later than 1 June 1959. |
| 2175 PRE 80 | 11445 | Controller Types PAY 81404 to PAY 81409 (Britannia 100 and 300).<br>IMPORTANT NOTE: This Modification has been superseded by Modification 24038 (see Modification News Sheet Britannia No. 487). | Modification News Sheet Britannia No. 309 refers. Compliance required not later than first overhaul after 1 January 1960. |
| 2176 PRE 80 | 11513 | Controller Types PAY 81406 to PAY 81409 (Britannia 100 and 300). Introduction of filter to pressure setting valve. | Modification News Sheet Britannia No. 342 refers. Compliance required not later than first overhaul after 1 April 1960. |
| 2177 PRE 80 | 14064 | Controller Types PAY 81406 to PAY 81409 (Britannia 100 and 300). Reintroduction of bolts to secure shield to Governor carrier. | Modification News Sheet Britannia No. 376 refers. Compliance required not later than first overhaul after 1 April 1960. |
| 2178 PRE 80 | 14606 | Propeller Types PD 208/466/2 (Britannia 300) PD 208/466/3 (Britannia 100). Cadmium Plate rear of barrel. | Modification News Sheet Britannia No. 464 refers. Compliance required not later than first overhaul after 1 December 1962. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 2179 PRE 80 | 14771 | Propeller Types PD 208/466/2 (Britannia 300) PD 208/466/3 (Britannia 100). Introduction of an improved Piston Relief Valve to avoid high fluctuating pressures in the pitch change mechanism. | Modification News Sheet Britannia No. 429 refers. Compliance required not later than first overhaul after 1 July 1962. |
| 2180 PRE 80 | 14877<br>14952<br>24195<br>24196 | Controller Types PAY 81406 to PAY 81409 (Britannia 100 and 300). Improved running conditions for idler shaft. | Modification News Sheet Britannia No. 427, Revision 4, refers. Compliance required not later than first overhaul after 1 November 1963. |
| 2181 PRE 80 | 24038 | Controller Types PAY 81406 to PAY 81409 (Britannia 100 and 300). Governor weights and legs brazed and riveted for additional security. | Modification News Sheet No. 487 refers. Compliance required not later than first overhaul after 1 July 1965. |
| 2182 PRE 80 | 24276 | Propeller Types PD 208/466/2 (Britannia 300) PD 208/466/3 (Britannia 100). Introduction of blend radius on internal step of piston. | Modification News Sheet Britannia No. 500 refers. Compliance required not later than first overhaul after 1 August 1963. |
| 2183 PRE 80 | 25264 | Actuator Control Box Type PQ 1089/–/1 (Britannia 300). Positive location of Selsyn Generator control arms. | Modification News Sheet No. 515 refers. Compliance required not later than 1 August 1964. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 2184 PRE 80 | 25606 | Propeller Types PD 208/466/2 (Britannia 300) PD 208/466/3 (Britannia 100). Removal of plating from spider radius resulting from embodiment of Repair Schemes P165 and/or P173. IMPORTANT NOTE: These repair Schemes have been superseded by Repair Scheme P753 (Modification No. 29946) see Technical News Sheet No. 62. | Modification News Sheet Britannia No. 522 refers. Compliance required not later than first overhaul after 1 December 1964. |
| 2185 PRE 80 | 26243 | Synch switch units PQ 1088/2 (Britannia 300) PQ 1095/2 (Britannia 100). 'All propellers increase/decrease' switch with improved spring. IMPORTANT NOTE: This modification is not mandatory, but is included for information because it supersedes part of Modification 8383 (Modification News Sheet Britannia No.241). | Modification News Sheet Britannia No. 538 refers. Compliance recommended at first overhaul after 1 August 1966, or during repair. |
| 2186 PRE 80 | 29683 | Pump Unit, Feathering, assembly type: PFD 6306. Introduction of bleed valve associated with Rolls-Royce Bristol Siddeley Proteus engine Modification No. 632. | Modification News Sheet Britannia No. 586 refers. Compliance required by 31 December 1971. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 2187 PRE 80 | – | Propeller Types PD 208/466/2 (Britannia 300) PD 208/466/3 (Britannia 100). Periodic checks to be carried out. | Publication 5200 Revision 25 refers. |
| 2188 PRE 80 | – | Synch switch units PQ 1088/2 (Britannia 300) PQ 1095/2 (Britannia 100).'All propellers increase/decrease' switch life limited to 1800 hours unless Modification 26243 embodied. | Technical News Sheet Britannia No. 54 Revision 2 refers. |
| 2189 PRE 80 | – | Propeller Types PD 208/466/2 (Britannia 300) PD 208/446/3 (Britannia 100). Repair Scheme P556 superseded by P753A, P753B or P753C.<br>IMPORTANT NOTE: No action is required if:<br>1 Propellers overhauled by Hawker Siddeley Dynamics since 30 November 1970,<br>OR<br>2 Modification 29953 (MNS BRIT 592) or Modification 29954 (MNS BRIT 894) embodied. | Technical News Sheet Britannia No. 62 refers. Compliance required not later than 31 December 1973. |
| 2190 PRE 80 | | Synch Switch Unit PQ1088/2 (Britannia 300) – check security of 'All propellers increase/ decrease' switch dolly. | Technical News Sheet Britannia No. 63 refers. Compliance required before 1 February 1974. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| | | **Heron Hydromatic Propellers and Equipment** | |
| 2191 PRE 80 | 7484 | Spinner Type PPS 2129501.<br><br>Strengthened backplate unit and improved lock body. | Modification News Sheet Heron No. 24 refers. Compliance required not later than 1 July 1963. See also Special Propeller Technical Instruction No. 32. |
| 2192 PRE 80 | 8913 | Feathering Unit Type PFD 2205. Conversion to Type PFD 3001 by reversal of drive gear. | Modification News Sheet Heron No. 26 refers. Compliance required immediately. Satisfies Special Propeller Technical Instruction No. 34. |
| 2193 PRE 80 | 14724 | Constant Speed Unit Type PAY 208. Repair scheme to obviate leakage between constant speed units and engine. | Modification News Sheet Heron No. 28 refers. Compliance required not later than first overhaul after 1 December 1961. |
| | | **Inspections** | |
| 2194 PRE 80 | – | Feathering Unit Type PFD 2205. Conversion to Type PFD 3001 by embodiment of Modification 8913. | Special Propeller Technical Instruction No. 34 refers. Compliance required immediately. No action required if Modification 8913 Modification News Sheet No. 26 embodied. |
| | | **Pembroke, Prince and President Propellers and Equipment** | |
| 2195 PRE 80 | 7290 | Constant Speed Unit Types PAY 30404 (Prince)<br>PAY 30404 (Pembroke)<br>PAY 30405 (Pembroke)<br>PAY 30405 (President)<br><br>Introduces new coupling and drive gear having improved splines. | Modification News Sheet 3HFB Series No. 257 refers. Compliance required not later than first overhaul after 1 December 1957. Satisfies Special Propeller Technical Instruction No. 31. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 2196 PRE 80 | 7627 | Constant Speed Unit Types PAY 30404 (Prince) PAY 30404 (Pembroke) PAY 30405 (Pembroke) PAY 30405 (President)<br>Strengthened spring for change over valve. | Modification News Sheet 3HFB Series No. 269 refers. Compliance required not later than first overhaul after 1 May 1959. |
| | | **Inspections** | |
| 2197 PRE 80 | – | Constant Speed Unit Types PAY 30404 (Prince) PAY 30404 (Pembroke) PAY 30405 (Pembroke) PAY 30405 (President)<br>Periodic check to be carried out if Modification 7290 not embodied. | Special Propeller Technical Instruction No. 31 refers. No action required if Modification 7290 Modification News Sheet 3HFB Series No. 257 embodied. |
| | | **Pioneer (Twin and Single) Propellers and Equipment** | |
| 2198 PRE 80 | 7290 | Constant Speed Unit Types PAY 30405 (Single).<br>Introduces new coupling and drive gear having improved splines. | Modification News Sheet 3HFB Series No. 257 refers. Compliance required not later than first overhaul after 1 December 1957. Satisfies Special Propeller Technical Instruction No. 31. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 2199 PRE 80 | 7500 | Constant Speed Unit Types PAY 31202 (Twin). Introduces new drive shaft and couplings having improved splines. | Modification News Sheet Twin Pioneer No 17 refers. Compliance recommended at first overhaul after March 1959. Satisfies Special Propeller Technical Instruction No. 31. |
| 2200 PRE 80 | 7627 | Constant Speed Unit Type PAY 30405 (Single). Strengthened spring for changeover valve. | Modification News Sheet 3HFB Series No. 269 refers. Compliance required not later than first overhaul after 1 May 1959. |
| 2201 PRE 80 | 9205 | Propeller Type PD 205/323/1 (Twin). Improved tab washer.<br><br>IMPORTANT NOTE: This Modification is not mandatory but is included for information because its embodiment satisfies Special Propeller Technical Instruction No. 35. | Modification News Sheet Twin Pioneer No. 18 refers. Compliance recommended at first overhaul after 1 December 1968, or during repair. Satisfies Special Propeller Technical Instruction No. 35. |
| 2202 PRE 80 | 25717 | Propeller Types PD 205/323/1 (Twin)<br>PD 237/323/1 (Twin)<br>Increased clearance between piston and dome shell. | Modification News Sheet Twin Pioneer No. 37 refers. Compliance required not later than 1 July 1969. |
| | | **Inspections** | |
| 2203 PRE 80 | – | Constant Speed Unit Types Pay 30405 (Single)<br>PAY 31202 (Twin)<br>Periodic check to be carried out if Modification 7290 (Single) and Modification 7500 (Twin) not embodied. | Special Propeller Technical Instruction No. 31 refers. No action required if Modification 7290 Modification News Sheet 3HFB Series No. 257 (Single) embodied or Modification 7500 Modification News Sheet Twin Pioneer No. 17 (Twin) embodied. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 2204 PRE 80 | | Propeller Type PD 205/323/1 (Twin). Periodic check to be carried out if Modification 9205 not embodied. | Special Propeller Technical Instruction No. 35 refers. No action required if Modification News Sheet Twin Pioneer No. 18 embodied. |
| | | **Vanguard Propeller and Equipment** | |
| 2205 PRE 80 | 13501 | Controller Type PAY 85004 (Van 951 and 953)<br>PAY 85201 (Van 952).<br>Strengthened material for third oil line R/V housing. | Service Bulletin 61–465 refers. Compliance required not later than first overhaul after 1 February 1973. |
| 2206 PRE 80 | 13610 or 18305 | Controller Types PAY 85004 (Van 951 and 953)<br>PAY 85201 (Van 952).<br>Strengthened end plate for fine pitch resistor valve. | Service Bulletin A61–45C and A61–57C refer. Compliance required not later than 20 May 1961. |
| 2207 PRE 80 | 18374 | Propeller Type PD 223/466/3. Cadmium plate rear of barrel. | Service Bulletin 61–165C refers. Compliance required not later than first overhaul after 1 February 1963. |
| 2208 PRE 80 | 18608 | Controller Types PAY 85004 (Van 951 and 953)<br>PAY 85201 (Van 952).<br>Improved governor leg drop-limiting stops. | Service Bulletin 61–135C refers. Compliance required not later than 1 February 1962. |
| 2209 PRE 80 | 25615 | Propeller Type PD 223/466/3. Improved No. 2 stop piston. | Service Bulletin Vanguard 61–254 refers. Compliance required not later than first overhaul after 1 March 1965. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 2210 PRE 80 | 29946 | Propeller type PD223/466/3 repair scheme P556 superseded by P753A, P753B or P753C.<br><br>Removal of plating from spider radius.<br><br>IMPORTANT NOTE: No action is required if:<br><br>1 Propellers overhauled by Hawker Siddeley Dynamics since 31 December 1973<br><br>or<br><br>2 Modification 30352 (SB 61–477) embodied<br><br>or<br><br>3 *New spider Part No. 7P73690 with repair scheme P658 embodied fitted at last overhaul.<br><br>*Note 1 Spiders to this standard are acceptable for one overhaul life only. Modification 29946 must then be incorporated before further service.<br><br>*Note 2 Spiders to this standard are not affected by the completion date of 31 December 1976. | Service Bulletin Vanguard 61–473 refers. Compliance required not later than 31 December 1976. |
| 2211 PRE 80 | 30039 | Propeller Type PD 223/466/3. Strengthened distributor housing. | Service Bulletin Vanguard 61–450 refers. Compliance required not later than first overhaul after 1 April 1971. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 2212 PRE 80 | 30854 | Propeller type PD 223/446/3. Improved assembly technique of distributor housing bolts. | Service Bulletin Vanguard 61–489 refers. Compliance within next 500 hours time in-service from 10 April 1976 but not later than 10 October 1976. |
| | | **CL44 PROPELLER AND EQUIPMENT** | |
| 2213 PRE 80 | 13610 or 18305 | Controller Types PAY 85400 (CL44)<br>PAY 85401 (CL44)<br>PAY 85402 (CL44)<br>Strengthened endplate for fine pitch restrictor valve. | Service Bulletin A61–45C and A61–57C refers. Compliance required not later than 20 May 1961. |
| 2214 PRE 80 | 18374 | Propeller Type PD 228/476/3.<br>Cadmium plate rear of barrel. | Service Bulletin 61–165C refers. Compliance required not later than first overhaul after 1 February 1963. |
| 2215 PRE 80 | 18608 | Controller Type PAY 85402 (CL44).<br>Improved governor leg drop-limiting stops. | Service Bulletin 61–135C refers. Compliance required not later than 1 February 1962. |
| 2216 PRE 80 | 25946 | Propeller Type PD 228/476/3 (CL44).<br>Introduction of Repair Scheme P643 to improve the fatigue strength of the barrel. | Service Bulletin CL44 61–198. Compliance required not later than 10,500 total life. |
| 2217 PRE 80 | 30236 | Propeller Type PD228/476/3.<br>Strengthened distribution housing. | Service Bulletin 61–378 Revision 1 refers. Compliance required not later than 31 December 1976. To be embodied concurrently with Mod 30854. |
| 2218 PRE 80 | 30854 | Propeller Type PD 228/476/3.<br>Improved assembly technique of distribution housing bolts. | Service Bulletin 61–387 refers. Compliance required not later than 31 December 1976. To be embodied concurrently with 30236. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 004–05–91 | SB ABA910–A61–3 | *Propellers* – Propeller system – Propeller control unit – Inspect ballscrew quill. | Applicable to British Aerospace/Hamilton Standard 6/5500/F–1 propellers of specific serial Nos. fitted to BAe ATP aircraft. Compliance required as detailed in Alert Service Bulletin. |

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## DOWTY AEROSPACE PROPELLERS

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 1143 PRE 80 | SB 61–157 | *Propellers* – Introduction of pre-primer for propeller blades. | Superseded by AD 1236 PRE 80. |
| 1145 PRE 80 | SB 61–524 | *Propellers* – Assembly of hub and driving centre – revised hub driving centre. | Applicable to R186/4–30–4/16 or R186/4–30–4/16/1 propellers fitted to Hawker Siddeley AW650, Argosy Series aircraft. Should have been embodied not later than 1 January 1968. |
| 1146 PRE 80 | SB 61–564 | *Propellers* – New operating cylinder introduced – Modification No. VP 2480. | Superseded by AD 1239 PRE 80. |
| 1147 PRE 80 | SB 61–714 | *Propellers* – Blade group – new locking segments introduced for blade bearing retaining bolts. | Superseded by AD 1272 PRE 80. |
| 1148 PRE 80 | SB 61–380 | *Propellers* – Blade bearings – Overhaul. | Superseded by AD 1245 PRE 80. |
| 1149 PRE 80 | SB 61–A521 | *Propellers* – Cylinders – cracking through front threads. | Superseded by AD 1146 PRE 80. |
| 1150 PRE 80 | SB 61–521 | *Propellers* – Cylinders – cracking through front threads. | Superseded by AD 1146 PRE 80. |
| 1151 PRE 80 | SB 61–542–18 | *Propellers* – Hub group – ultimate life of hub and driving centre assemblies (30 root single and double-lock propellers). | Superseded by AD 1223 PRE 80. |
| 1152 PRE 80 | SB 61–604 | *Propellers* – Hub group – strengthened hub driving centre introduced. Mod. No. (C) VP 2388 Rev. 3. | Applicable to but not necessarily restricted to Hawker Siddeley AW 650 Argosy Series aircraft. Compliance required as detailed in Service Bulletin. |
| 1153 PRE 80 | SB 61–711 | *Propellers* – Operating pins – Inspection for cracking at overhaul. | Superseded by AD 1258 PRE 80. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 1154 PRE 80 | SB 61–A753 | *Propellers* – Eyebolt and operating link group – seizure through cadmium plating. | Superseded by AD 1259 PRE 80. |
| 1155 PRE 80 | SB 61–754 | *Propellers* – Eyebolt and operating link group – De-embrittlement of incorrectly cadmium plated operating links, link pins and eyebolts/eyebolt forks. | Superseded by AD 1260 PRE 80. |
| 1156 PRE 80 | SB 61–857 | *Propellers* – Inspection of hub driving centres for incorrect machining to Mod. No. (c) VP 2381 standard. | Superseded by AD 1227 PRE 80. |
| 1157 PRE 80 | SB 61–887 | *Propellers* – Operating pins – inspection for cracking. | Applicable to propeller types (c) R212/4–30–4/22 and 22/1 fitted to Hawker Siddeley AW650 Series aircraft. Compliance required as detailed in Service Bulletin. |
| 1158 PRE 80 | SB 61–888 | *Propellers* – Excessive blade corrosion. | Superseded by AD 1263 PRE 80. |
| 1159 PRE 80 | SB 61–890 | *Propellers* – Hub group – inspection of hub arms. | Superseded by AD 1264 PRE 80. |
| 1160 PRE 80 | SB 61–904 | *Propellers* – Hub and driving centre – Inspection of hubs for cracks in front wall. | Cancelled and superseded by AD 006–03–88. |
| 1161 PRE 80 | SB 61–906 | *Propellers* – Pitch lock support sleeve – Inspection for cracking. | Superseded by AD 1265 PRE 80. |
| 1162 PRE 80 | SB 61–909 | *Propellers* – Hub and driving centre – Inspection of hubs for cracks in front wall. | Superseded by AD 1202 PRE 80. |
| 1164 PRE 80 | SB 61–157 | *Propellers* – Introduction of pre-primer for propeller blades. | Superseded by AD 1236 PRE 80. |
| 1166 PRE 80 | SB 61–564 | *Propellers* – New operating cylinder introduced – Modification No. VP 2480. | Superseded by AD 1239 PRE 80. |
| 1167 PRE 80 | SB 61–714 | *Propellers* – Blade group – New locking segments introduced for blade bearing retaining bolts. | Superseded by AD 1272 PRE 80. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 1169 PRE 80 | SB 61–380 | *Propellers* – Blade bearings – Overhaul. | Superseded by AD 1245 PRE 80. |
| 1171 PRE 80 | SB 61–A521 | *Propellers* – Cylinders – Cracking through front threads. | Superseded by AD 1166 PRE 80. |
| 1172 PRE 80 | SB 61–521 | *Propellers* – Cylinders – Cracking through front threads. | Superseded by AD 1166 PRE 80. |
| 1173 PRE 80 | SB 61–542–18 | *Propellers* – Hub group – ultimate life of hub and driving centre assemblies (30 root single and double-lock propellers). | Superseded by AD 1223 PRE 80. |
| 1174 PRE 80 | SB 61–711 | *Propellers* – Operating pins – Inspection for cracking at overhaul. | Superseded by AD 1258 PRE 80. |
| 1175 PRE 80 | ASB 61–A734 | *Propellers* – Operating pins – Inspection for cracking. | Applicable to but not necessarily limited to Hawker Siddeley 748 Series aircraft. Compliance required within 600 hours flying from the date of ASB. |
| 1176 PRE 80 | SB 61–A753 | *Propellers* – Eyebolt and operating link group – Seizure through Cadmium plating. | Superseded by AD 1259 PRE 80. |
| 1177 PRE 80 | SB 61–754 | *Propellers* – Eyebolt and operating link group – De-embrittlement of incorrectly cadmium plated operating links, link pins and eyebolts/eyebolt forks. | Superseded by AD 1260 PRE 80. |
| 1178 PRE 80 | SB 61–828 | *Propellers* – Hub and driving centre – Inspection of hubs for cracks in front wall. | Cancelled and superseded by AD 006–03–88. |
| 1179 PRE 80 | SB 61–857 | *Propellers* – Inspection of hub driving centres for incorrect machining to Mod. No. (c) VP 2381 standard. | Superseded by AD 1227 PRE 80. |
| 1180 PRE 80 | SB 61–888 | *Propellers* – Excessive blade corrosion. | Superseded by AD 1263 PRE 80. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 1181 PRE 80 | SB 61–157 | *Propellers* – Introduction of pre-primer for propeller blades. | Superseded by AD 1236 PRE 80. |
| 1182 PRE 80 | SB 61–185 | *Propellers* – Pitch lock group lock support sleeve revised. | Superseded by AD 1237 PRE 80. |
| 1183 PRE 80 | SB 61–564 | *Propellers* – New operating cylinder introduced – Modification No. VP 2480. | Superseded by AD 1239 PRE 80. |
| 1184 PRE 80 | Mod. VP 2486 (SB 61–858) | *Propellers* – Assembly of hub and driving centre – revised hub driving centre. | Superseded by AD 1213 PRE 80. |
| 1186 PRE 80 | SB 61–714 | *Propellers* – Blade group – New locking segments introduced for blade bearing retaining bolts. | Superseded by AD 1272 PRE 80. |
| 1187 PRE 80 | SB 61–266C | *Propellers* – Propeller blade RA 25907 – The removal of blade corrosion and subsequent protection. | Applicable to Fokker/Fairchild F27 and FH227 Series aircraft. Compliance required not later than at the completion of 7500 hours or 5 years, whichever is the shorter period, in accordance with Service Bulletin. |
| 1188 PRE 80 | SB 61–266E | *Propellers* – Propeller blade RA 25899 – The removal of blade corrosion and subsequent protection. | Applicable to Fokker/Fairchild F27 and FH227 Series aircraft. Compliance required at next overhaul after 5000 hours or 5 years, whichever is the shorter period, in accordance with Service Bulletin. |
| 1189 PRE 80 | SB 61–380 | *Propellers* – Blade bearings – Overhaul. | Superseded by AD 1245 PRE 80. |
| 1190 PRE 80 | SB 61–A521 | *Propellers* – Cylinders – Cracking through front threads. | Superseded by AD 1183 PRE 80. |
| 1191 PRE 80 | SB 61–521 | *Propellers* – Cylinders – Cracking through front threads. | Superseded by AD 1183 PRE 80. |
| 1192 PRE 80 | SB 61–542–6 | *Propellers* – Blade group – ultimate life of blades RA 25899. | Applicable to Fokker/Fairchild F27 and FH227 Series aircraft. Compliance required as detailed in Service Bulletin. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 1193 PRE 80 | SB 61–542–18 | *Propellers* – Hub group – ultimate life of hub and driving centre assemblies (30 root single and double-lock propellers). | Superseded by AD 1223 PRE 80. |
| 1194 PRE 80 | SB 61–711 | *Propellers* – Operating pins – Inspection for cracking at overhaul. | Superseded by AD 1258 PRE 80. |
| 1195 PRE 80 | SB 61–A733 | *Propellers* – Operating pins – Inspection for cracking. | Applicable to Fokker/Fairchild F27 and FH227 Series aircraft. Compliance required as detailed in Alert Service Bulletin. |
| 1196 PRE 80 | SB 61–A740 | *Propellers* – Operating pins – Inspection for cracking. | Applicable to but not necessarily restricted to Fokker/ Fairchild F27 and FH227 Series aircraft. Compliance required as detailed in Alert Service Bulletin. |
| 1197 PRE 80 | SB 61–A753 | *Propellers* – Eyebolt and operating link group – seizure through Cadmium plating. | Superseded by AD 1259 PRE 80. |
| 1198 PRE 80 | SB 61–754 | *Propellers* – Eyebolt and operating link group – De-embrittlement of incorrectly Cadmium plated operating links, link pins and eyebolts/ eyebolt forks. | Superseded by AD 1260 PRE 80. |
| 1199 PRE 80 | SB 61–857 | *Propellers* – Inspection of hub driving centres for incorrect machining to Mod No. (c) VP 2381 standard. | Superseded by AD 1227 PRE 80. |
| 1200 PRE 80 | SB 61–858 | *Propellers* – Inspection of hub driving centres. | Superseded by AD 1213 PRE 80. |
| 1201 PRE 80 | SB 61–888 | *Propellers* – Excessive blade corrosion. | Superseded by AD 1263 PRE 80. |
| 1202 PRE 80 | SB 61-909 | *Propellers* – Hub and driving centre – Inspection of hubs for cracks in front wall. | Applicable to propeller type R175/4-30-4/13E fitted to Hawker Siddeley AW650 Argosy, Fokker/Fairchild F27 and FH227 Series aircraft. Compliance required as detailed in Service Bulletin. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 1204 PRE 80 | SB 61–157 | *Propellers* – Introduction of pre-primer for propeller blades. | Superseded by AD 1236 PRE 80. |
| 1205 PRE 80 | SB 61–185 | *Propellers* – Pitch lock group lock support sleeve revised. | Superseded by AD 1237 PRE 80. |
| 1206 PRE 80 | SB 61–714 | *Propellers* – Blade group – New locking segments introduced for blade bearing retaining bolts. | Superseded by AD 1272 PRE 80. |
| 1207 PRE 80 | SB 61-380 | *Propellers* – Blade bearings – Overhaul. | Superseded by AD 1245 PRE 80. |
| 1208 PRE 80 | SB 61-542-18 | *Propellers* – Hub group – ultimate life of hub and driving centre assemblies (30 root single and double-lock propellers). | Superseded by AD 1223 PRE 80. |
| 1209 PRE 80 | SB 61-633 | *Propellers* – Hub and hub driving centre assemblies – cracks in hub driving centre. | Applicable to but not necessarily restricted to Gulfstream Series aircraft. First inspection should have been accomplished by 1 August 1968, in accordance with Service Bulletin. |
| 1210 PRE 80 | SB 61-711 | *Propellers* – Operating pins – Inspection for cracking at overhaul. | Superseded by AD 1258 PRE 80. |
| 1211 PRE 80 | SB 61-A753 | *Propellers* – Eyebolt and operating link group – seizure through Cadmium plating. | Superseded by AD 1259 PRE 80. |
| 1212 PRE 80 | SB 61-754 | *Propellers* – Eyebolt and operating link group – De-embrittlement of incorrectly Cadmium plated operating links, link pins and eyebolts/eyebolt forks. | Superseded by AD 1260 PRE 80. |
| 1213 PRE 80 | SB 61–858 | *Propellers* – Inspection of hub driving centres. | Applicable to but not necessarily restricted to Fokker/Fairchild F27 and FH227 and Gulfstream Series aircraft. Compliance required as detailed in Service Bulletin. Service Bulletin 61–573A and 61–573B, as applicable, refers. |
| 1214 PRE 80 | SB 61–888 | *Propellers* – Excessive blade corrosion. | Superseded by AD 1263 PRE 80. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 1215 PRE 80 | SB 61–906 | *Propellers* – Pitch lock support sleeve – Inspection for cracking. | Superseded by AD 1265 PRE 80. |
| 1216 PRE 80 | SB 61–157 | *Propellers* – Introduction of pre-primer for propeller blades. | Superseded by AD 1236 PRE 80. |
| 1218 PRE 80 | SB 61–564 | *Propellers* – New operating cylinder introduced – Modification No. VP 2480. | Superseded by AD 1239 PRE 80. |
| 1219 PRE 80 | SB 61–714 | *Propellers* – Blade group – new locking segments introduced for blade bearing retaining bolts. | Superseded by AD 1272 PRE 80. |
| 1220 PRE 80 | SB 61–380 | *Propellers* – Blade bearings – Overhaul. | Superseded by AD 1245 PRE 80. |
| 1221 PRE 80 | SB 61–A521 | *Propellers* – Cylinders – Cracking through front threads. | Superseded by AD 1218 PRE 80. |
| 1222 PRE 80 | SB 61–521 | *Propellers* – Cylinders – Cracking through front threads. | Superseded by AD 1218 PRE 80. |
| 1223 PRE 80 | SB 61–542–18 | *Propellers* – Hub group – ultimate life of hub and driving centre assemblies (30 root single and double-lock propellers). | Applicable to propellers and aircraft types as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. |
| 1224 PRE 80 | SB 61–711 | *Propellers* – Operating pins – Inspection for cracking at overhaul. | Superseded by AD 1258 PRE 80. |
| 1225 PRE 80 | SB 61–A753 | *Propellers* – Eyebolt and operating link group – seizure through Cadmium plating. | Superseded by AD 1259 PRE 80. |
| 1226 PRE 80 | SB 61–754 | *Propellers* – Eyebolt and operating link group – De-embrittlement of incorrectly Cadmium plated operating links, link pins and eyebolts/ eyebolt forks. | Superseded by AD 1260 PRE 80. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 1227 PRE 80 | SB 61–857 | *Propellers* – Inspection of hub driving centres for incorrect machining to Mod. No. (c) VP 2381 standard. | Applicable to but not necessarily restricted to Hawker Siddeley AW650 Argosy and 748 Series, Fokker/ Fairchild F27 and FH227 Series, and Handley Page Herald Series aircraft. Compliance required as detailed in Service Bulletin. |
| 1228 PRE 80 | SB 61–888 | *Propellers* – Excessive blade corrosion. | Superseded by AD 1263 PRE 80. |
| 1229 PRE 80 | SB 61–900 | *Propellers* – Hub and driving centre – Inspection of hubs for cracks. | Applicable to but not necessarily restricted to Handley Page Herald Series Aircraft. Compliance required as detailed in Service Bulletin. |
| 1231 PRE 80 | SB 29–112 | *Hydraulic Power* – Ram air turbine – Blade torque check and extension of calendar life. | Applicable to Ram air turbine RAT 5/1 and 5/2 fitted to Trident aircraft. Compliance required as detailed in Service Bulletin. Service Bulletin also referenced in the Hawker Siddeley/De Havilland 121 Trident entry under AD 007–07–80. |
| 1232 PRE 80 | Mod. GU 497 | *Controller Unit* (except TCA) Type CU/25AE converted to CU/25AE/1. Type CU/48E converted to CU/48E/1. Additional earth lead to solenoid assembly. | Applicable to Vickers Viscount Series aircraft. Complementary to Vickers Mod. D908. |
| 1233 PRE 80 | Mod. GU 524 | *Controller Unit* Types CU/25AE/1,CU/48E, CU/48E/1 and CU/55E/1. Locating prongs of spring housing removed and guide cone with blending radius added to bore. | Applicable to Vickers Viscount Series aircraft. Incorporated in all units from February 1955. Retrospective not later than Aircraft Check 1 (130 hours maximum) on all units not to Mod. GU 517 standard. |
| 1234 PRE 80 | Mod. FP 83 | *Feathering Pumps* RFP/9E and RFP/18E. Addition of breather to gear chamber by means of drilling in BTH motor flange. Plugs and retaining spring added to unused portion of drain oilway. | Applicable to Vickers Viscount Series aircraft. Embodied on all new units from January 1957 and classified as mandatory for retrospective embodiment at next overhaul following that date. |
| 1235 PRE 80 | Mod. FP 98 | *Feathering Pumps* – RFP/9E and RFP/18E. Crimping of lead connection (Mod. FP 64) or improved type soldered pins (Mod. FP 79) and plug adaptor face machined back 0.050 in (Mod. FP 82) on BTH motors. | Applicable to Vickers Viscount Series aircraft. Embodiment on all production aircraft from January 1957. Retrospective at next overhaul. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 1236 PRE 80 | SB 61–157 | *Propellers* – Introduction of pre-primer for propeller blades. | Applicable to Propellers and Aircraft types as detailed in Service Bulletin. Compliance required as detailed in SB. |
| 1237 PRE 80 | SB 61–185 | *Propellers* – Pitchlock group lock support sleeve revised. | Applicable to Dart engine propeller types as detailed in Service Bulletin. Compliance required as detailed in SB. |
| 1239 PRE 80 | SB 61–564 | *Propellers* – New operating cylinder introduced – Modification No. VP 2480. | Applicable to Propellers and Aircraft types as detailed in Service Bulletin. Compliance required as detailed in SB. |
| 1240 PRE 80 | SB 61–714 | *Propellers* – Blade group – new locking segments introduced for blade bearing retaining bolts. | Superseded by AD 1272 PRE 80. |
| 1241 PRE 80 | SB 61–266B | *Propellers* – Propeller blades RA 25840 and RA 25842 – The removal of blade corrosion and subsequent protection. | Applicable to Viscount 700 and 800 Series aircraft excluding V701 and V802, V724 and V757 operated by Air Canada and V745, V785 and V798 operated by Alitalia for which separate Bulletins have been issued in the 61–266B1 etc Series.<br><br>Propeller Types:<br>(c) R129/4–20–4/11E (c) R129/4–20–4/16E<br>(c) R139/4–20–4/17E (c) R139/4–20–4/19E<br>(c) R148/4–20–4/21E (c) R148/4–20–4/22E<br>(c) R155/4–20–4/25E (c) R155/4–20–4/26E<br>Propeller Blade Part No. RA 25840.<br><br>Propeller Types:<br>(c) R130/4–20–4/12E (c) R141/4–20–4/18E<br>(c) R147/4–20–4/20E<br>Propeller Blade Part No. RA 25842. Compliance required as per Service Bulletin. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 1242 PRE 80 | SB 61–266F | *Propellers* – Propeller blade RA 25890 – The removal of blade corrosion and subsequent protection. | Applicable to Viscount 806 – Dart 520. Propeller type No. (c) R178/4–20–4/32. Viscount 802 – Dart 510, Viscount 806X – Dart Propeller type No. (c) R240/4–20–4/32. Propeller Blade Part No. RA 25890. Compliance required as per Service Bulletin. |
| 1243 PRE 80 | SB 61–A521 | *Propellers* – Cylinders – cracking through front threads. | Superseded by AD 1239 PRE 80. |
| 1244 PRE 80 | SB 61–521 | *Propellers* – Cylinders – cracking through front threads. | Superseded by AD 1239 PRE 80. |
| 1245 PRE 80 | SB 61–380 | *Propellers* – Blade bearings – Overhaul. | Applicable to all types of blade bearings fitted to Dowty Rotol propeller blades. Compliance required as detailed in Service Bulletin. |
| 1246 PRE 80 | SB 61–711 | *Propellers* – Operating pins – Inspection for cracking at overhaul. | Superseded by AD 1258 PRE 80. |
| 1247 PRE 80 | SB 61–A753 | *Propellers* – Eyebolt and operating link group – seizure through Cadmium plating. | Superseded by AD 1259 PRE 80. |
| 1248 PRE 80 | SB 61–754 | *Propellers* – Eyebolt and operating link group – De-embrittlement of incorrectly Cadmium plated operating links, link pins and eyebolts/eyebolt forks. | Superseded by AD 1260 PRE 80. |
| 1249 PRE 80 | SB 61–888 | *Propellers* – Excessive blade corrosion. | Superseded by AD 1263 PRE 80. |
| 1250 PRE 80 | SB 61–906 | *Propellers* – Pitch lock support sleeve – Inspection for cracking. | Superseded by AD 1265 PRE 80. |
| 1252 PRE 80 | SB 18B | *Propellers* – R44/456/2, 4 and 12 Blade No. RA 10370–1. Inspection of blade root. | Applicable to Vickers Viking Series Aircraft. Compliance required as detailed in Service Bulletin. |
| 1253 PRE 80 | SB 61–714 | *Propellers* – Blade group – New locking segments introduced for blade bearing retaining bolts. | Superseded by AD 1272 PRE 80. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 1254 PRE 80 | SB 61–470 | *Propellers* – Blade bearing assemblies – ultimate life introduced for specific races. | Applicable to Mitsubishi YS-11 Series aircraft. Compliance required as detailed in Service Bulletin. |
| 1255 PRE 80 | SB 61–542–8 | *Propellers* – Blade group – ultimate life of case hardened rollers to Mod No. (c) VP 2416 or (c) VP 2677 Standard in blade bearing bottom (cf) races. | Applicable to Mitsubishi YS-11 Series aircraft. Compliance required as detailed in Service Bulletin. |
| 1256 PRE 80 | SB 61–581 | *Propellers* – Locking of blade groups in hub group – checking for security. | Superseded by AD 1269 PRE 80. |
| 1257 PRE 80 | SB A61–654 | *Propellers* – Operating pins – Inspection for fatigue cracking. | Applicable to Mitsubishi YS-11 Series aircraft. Compliance required as detailed in Service Bulletin. |
| 1258 PRE 80 | SB 61–711 | *Propellers* – Operating pins – Inspection for cracking at overhaul. | Applicable to Propellers and Aircraft types as detailed in Service Bulletin. Compliance required as detailed in SB. |
| 1259 PRE 80 | SB 61–A753 | *Propellers* – Eyebolt and operating link group – seizure through Cadmium plating. | Applicable to all Dowty Rotol 20 root, 30 root and 40 root propeller types fitted to Dart engined aircraft. Compliance requied as detailed in Alert Service Bulletin. |
| 1260 PRE 80 | SB 61–754 | *Propellers* – Eyebolt and operating link group – De-embrittlement of incorrectly Cadmium plated operating links, link pins and eyebolts/ eyebolt forks. | Applicable to all Dowty Rotol 20 root, 30 root and 40 root propeller types fitted to Dart engined aircraft. Compliance required as detailed in Service Bulletin. |
| 1261 PRE 80 | SB 61–A862 | *Propellers* – Inspection of blades. | Superseded by AD 1270 PRE 80. |
| 1262 PRE 80 | SB 61–873 | *Propellers* – Pitch lock assembly – Inspection of pitch lock piston for cracks. | Superseded by AD 1271 PRE 80. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 1263 PRE 80 | SB 61–888 | *Propellers* – Excessive blade corrosion. | Applicable to Propellers and Aircraft types as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. |
| 1264 PRE 80 | SB 61–890 | *Propellers* – Hub group – Inspection of hub arms. | Applicable to Mitsubishi YS–11 Series aircraft fitted with R209/4–40–4.5/2 propellers. Compliance required as detailed in Service Bulletin. |
| 1265 PRE 80 | SB 61–906 | *Propellers* – Pitch lock support sleeve – Inspection for cracking. | Applicable to Propellers and Aircraft types as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. |
| 1267 PRE 80 | SB 61–714 | *Propellers* – Blade group – new locking segments introduced for blade bearing retaining bolts. | Superseded by AD 1272 PRE 80. |
| 1268 PRE 80 | SB 61–542–9 | *Propellers* – Blade group – All No. 40 root size blade bearings – ultimate life of case hardened rollers to Mod No. (c) VP 2416 or (c) VP 2677 standard in blade bearing bottom (cf) races. | Applicable to Convair 600 and 640 Series aircraft. Compliance required as detailed in Service Bulletin. |
| 1269 PRE 80 | SB 61–581 | *Propellers* – Locking of blade groups in hub group – checking for security. | Applicable to Mitsubishi YS-11 and Convair 600 and 640 Series aircraft.Compliance required as detailed in Service Bulletin. |
| 1270 PRE 80 | SB 61–A862 | *Propellers* – Inspection of blades. | Applicable to Mitsubishi YS–11 and Convair 600 and 640 Series aircraft. Compliance required as detailed in Service Bulletin. |
| 1271 PRE 80 | SB 61–873 | *Propellers* – Pitch lock assembly – Inspection of pitch lock piston for cracks. | Applicable to Mitsubishi YS–11 and Convair 600 and 640 Series aircraft. Compliance required as detailed in Service Bulletin. |
| 1272 PRE 80 | SB 61–714 | *Propellers* – Blade group – New locking segments introduced for blade bearing retaining bolts. | Applicable to Propellers and Aircraft types as detailed in Service Bulletin. Compliance requires incorporation at the next overhaul of all propellers from 1 January 1972. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 049–12–80 | SB 61–934 | *Propellers* – Operating restriction. | Applicable to Rockwell Thrush Commander Models S2–R and S2–R3S and Grumman Ag-Cat Models G164A, G164B and G164C aircraft fitted with Pezetel PZL–3S engines. Compliance required as detailed in Service Bulletin. |
| 017–02–81 | SB 61–941 | *Propellers* – Propeller to engine indexing. | Applicable to Rockwell Thrush Commander Models S2–R and S2–R3S and Grumman Ag-Cat Models G164A, G164B and G164C aircraft fitted with Pezetel PZL–3S engine. Compliance required as detailed in Service Bulletin. |
| 003–06–81 | SB 61–A945 | *Propellers* – Pre Take-off inspection for blade leading edge damage. | Applicable to but not necessarily restricted to Rockwell Thrush Commander Models S2–R and S2–RS3 and Grumman Ag-Cat G164A, G164B and G164C aircraft fitted with Pezetel PZL–3S engines. Compliance required as detailed in Service Bulletin. |
| 012–10–81 | SB 61–843 | *Propellers* – Inspection of operating pins. | Applicable to propeller type R187/4–30–4/18 fitted to Handley Page Herald aircraft. Compliance required as detailed in Service Bulletin. |
| 002–12–81 | SB 61–542–3 | *Propellers* – Hub group – Ultimate life of hub and driving centre assembly. | Applicable to Viscount 700/800 Series. Compliance required as detailed in Service Bulletin. |
| 003–12–81 | SB 61–542–17 | *Propellers* – Hub group – Ultimate life of hub and driving centre assembly. | Applicable to Viscount 810 Series. Compliance required as detailed in Service Bulletin. |
| 013–05–84 | SB 61–882 | *Propellers* – Inspection of hub and driving centre assemblies which have possibly been incorrectly cadmium plated. | Applicable to propeller Types R193/4–30–4/50 and 61 installed on F.27 and FH227 aircraft. Compliance required as detailed in Service Bulletin. |
| 011–10–86 | SB 61–1042 | *Propellers* – Pitch lock group – Cracking of cylinder cover. | Applicable to aircraft and hovercraft as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 012–10–86 | SB 61–1043 | *Propellers* – Propeller hubs – Inspection of the buttress threads in hub ports for cracking. | Applicable to propellers as detailed in Service Bulletin fitted to HS748 and Argosy aircraft. Compliance required as detailed in Service Bulletin. |
| 011–07–87 | SB SF340–61–A21 | *Propellers* – Hub wall cracking. | Applicable to R354/4–123–F/13 and R354/4–123–F/20 propellers fitted to SAAB SF 340 aircraft. Compliance required as detailed in Service Bulletin. |
| 012–09–87 | SB 61–954 | *Propellers* – Introduction of new propeller type – Mod No. (c) VP3008. | Applicable to propellers and aircraft as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. |
| 013–09–87 | SB 61–961 | *Propellers* – Blade group – Temporary marking of blades for ultimate life identification relative to up-rated Dart engines. | Applicable to propellers and aircraft as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. |
| 014–09–87 | SB 61–1044 | *Propellers* – Propeller blades associated with up-rated Dart engined aircraft – Limitation on number of take-offs at high power. | Applicable to propellers and aircraft as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. |
| 015–09–87 | SB 61–1048 | *Propellers* – Introduction of new propeller type – Mod No. (c) VP3190 Revision 2. | Applicable to propellers and aircraft as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. |
| 005–10–87 | SB F50–61–12 | *Propellers* – Replacement of beta tubes to monitor condition. | Applicable to Beta Tubes Unit (R352/6–123–F/1 and –F/2) propellers Part No. 696001006 fitted to Fokker F27 Mk 050 aircraft. Compliance required as detailed in Service Bulletin. |
| 006–03–88 | SB 61–1053 | *Propellers* – Propeller hubs – Inspection of the front wall/snout radius areas for cracking. | Applicable to propellers as detailed in Service Bulletin fitted to HS748 and Argosy aircraft. Compliance required as detailed in Service Bulletin. |
| 007–03–88 | SB 61–1054 | *Propellers* – Introduction of scheduled hub contact switch brushes – Inspection and replacement. | Applicable to propellers and aircraft as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 013–06–88 | SB SF340–61–33 | *Propellers* – Introduction of new hub assemblies – Mod No (c) VP3299. | Applicable to R354/4–123–F/13 propellers fitted to SAAB SF 340 aircraft. Compliance required as detailed in Service Bulletin not later than 31 December 1989. |
| 003–11–88 | SB 61–A1021 | *Propellers* – Failure of beta tube. | Applicable to R354/4–123–F/13, R354/4–123–F/20 and R375/4–123–F/21 propellers fitted to SAAB SF 340 aircraft. Compliance required as detailed in Service Bulletin. |
| 010–11–88 | SB SF340–61–A42 | *Propellers* – Hub wall cracking. | Applicable to R354/4–123–F/13 and R354/4–123–F/20 and R375/4–123–F/21 propellers fitted to SAAB SF 340 aircraft. Compliance required as detailed in Alert Service Bulletin. |
| 023–05–89 | SB F50–61–50 | *Propellers* – Inspection of propellers if an overtorque condition has occurred. | Applicable to R352/6–123–F/1 and R352/6–123–F/2 propellers fitted to Fokker F27 Mk. 050 aircraft. Compliance required as detailed in Service Bulletin. |
| 027–05–89 | SB F50–61–53 | *Propellers* – Inspection of propeller operating cylinder retaining bolts. | Applicable to R352/6–123–F/1 propellers fitted to Fokker F27 Mk. 050 aircraft. Compliance required as detailed in Service Bulletin. |
| 008–09–90 | SB F50–61–67 | *Propellers* – Replacement of propeller operating cylinder retaining bolts. | Applicable to R352/6–123–F/1 propellers fitted to Fokker F27 Mk 050 aircraft. Compliance required as detailed in Service Bulletin. |
| 014–03–91 | SB F50–61–79 | *Propellers* – Operating cylinder – Ultimate life. | Applicable to R352/6–123–F/1 propellers operating cylinder Part Nos. 660715606 and 660715708 fitted to Fokker F27 Mk 050 aircraft. Compliance required as detailed in Service Bulletin. |
| 012–11–91 | SB F50–61–93 | *Propellers* – Inspection of propeller operating cylinder retaining bolts. | Applicable to R352/6–123–F/1 propellers post Service Bulletin F50–61–72 Rev. 1 and R352/6–123–F/2 propellers fitted to Fokker F27 Mk 050 aircraft. Compliance required as detailed in Service Bulletin. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 009–03–92 | SB 61–1091 | *Propellers* – Pitch lock assembly – Inspection of lock supports at overhaul. | Applicable to propellers as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. |
| 006–01–94 | SB SF340–61–75 | *Propellers* – Inspection of counterweight arms for forging folds. | Applicable to R354/4–123–F/13, R354/4–123–F/20, R375/4–123–F/21, R389/4–123–F/25, R389/4–123–F/26 and R390/4–123–F/27 propellers fitted to SAAB 340A and 340B aircraft. Compliance required as detailed in Service Bulletin. |
| 005–10–94 | SB SF340–61–82 | *Propellers* – Hub wall cracking. | Applicable to R354/4–123–F/13, R354/4–123–F/20 and R375/4–123–F/21 propellers fitted to SAAB 340A and 340B aircraft. Compliance required as detailed in Service Bulletin. |
| 004–11–94 | SB S2000–61–6 | *Propellers* – Pitch control unit – New spool and sleeve sub-assembly. | Applicable to pitch control units Part No. 697013004 fitted to SAAB 2000 aircraft. Compliance required as detailed in Service Bulletin. |
| 005–12–94 | SB S2000–61–11 | *Propellers* – Inspection of blade retention bearings. | Applicable to R381/6–123–F/5 propellers fitted to SAAB 2000 aircraft. Compliance required as detailed in Service Bulletin. |
| 006–09–95 | SB S2000–61–21 | *Propellers* – Overspeed governor – Inspection of weight carrier sub-assembly. | Applicable to overspeed governor units Part No. 697012002 fitted to SAAB 2000 aircraft. Compliance required as detailed in Service Bulletin. |
| 005–10–95 | SB S2000–61–22 | *Propellers* – Cylinder – Adjust preload of cap screws. | Applicable to R381/6–123–F/5 propellers fitted to SAAB 2000 aircraft. Compliance required as detailed in Service Bulletin. |
| 003–03–96 | SB F50–61–151 | *Propellers* – Pitch control unit – Inspection of servo valve. | Applicable to pitch control units Part Nos. 663007003, 663007004 and 663007005 fitted to Fokker F.27 Mk. 050 aircraft. Compliance required as detailed in Service Bulletin. |
| 002–11–96 | SB SF340–61–88 | *Propellers* – Blade pitch seizure. | Applicable to R354/4–123–F/13, R354/4–123–F/20, R375/4–123–F/21, R389/4–123–F/25, R389/4–123–F/26 and R390/4–123–F/27 propellers fitted to SAAB 340A and 340B aircraft. Compliance required as adetailed in Service Bulletin. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 008–07–97 | SB S2000–61–47 | *Propellers* – Overspeed governor – Increased torque and loctite added to solenoid valve attachment cap screws. | Applicable to overspeed governor units Part No. 697012002 fitted to SAAB 2000 aircraft. Compliance required as detailed in Service Bulletin. |
| 006–08–97 | SB S2000–61–31 | *Propellers* – Pitch control unit (PCU) – New servo valve strainer plate. | Applicable to pitch control units Part No. 697013004 pre Serial No. DAP 0136 fitted to SAAB 2000 aircraft. Compliance required as detailed in Service Bulletin. |
| 004–09–97 | SB S2000–61–46 | *Propellers* – Pitch control unit (PCU) – Time to unfeather propeller checks to ensure safe operation. | Applicable to pitch control units Part Nos. 697013004 and 697013005 fitted to SAAB 2000 aircraft if the engine uses Mobiljet Oil 254 now or in the last 500 flying hours. Compliance required as detailed in Service Bulletin. |
| 004–12–97 | SB C130J–61–7 | *Propellers* – Inspect propeller blades to NDT21. | Applicable to R391/6–132–F/3 propellers fitted to Lockheed 382J (C–130J) aircraft. Compliance required as detailed in Service Bulletin. |
| 005–12–97 | SB C130J–61–9 | *Propellers* – New seal kit. | Applicable to R391/6–132–F/3 propellers fitted to Lockheed 382J (C–130J) aircraft. Compliance required as detailed in Service Bulletin. |
| 002–04–98 | SB S2000–61–63 | *Propellers* – Overspeed governor – New weights and carrier assembly. | Superseded by AD 005–09–98. |
| 005–09–98 | SB S2000–61–67 | *Propellers* – Overspeed governor – New weights and carrier assembly. | Applicable to overspeed governor units Part Nos. 697012002 and 697012003 pre Serial No. DAP0161 fitted to SAAB 2000 aircraft. Compliance required as detailed in Service Bulletin. |
| 007–09–98 | SB C130J–61–26 | *Propellers* – Overspeed governor – New weights and carrier assembly. | Applicable to overspeed governor units Part Nos. 697052002 and 697052003 pre Serial No. DAP0216 fitted to Lockheed 382J (C130J) aircraft. Compliance required as detailed in Service Bulletin |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 006–04–99 | SB S2000–61–73 | *Propellers* – Inspection of counterweight arm assembly for damage. | Applicable to R381/6–123–F/5 propellers fitted to SAAB 2000 aircraft. Compliance required as detailed in Service Bulletin. |
| 003–05–99 | SB S2000–61–75 | *Propellers* – Inspection of de-iced blade assembly for damage. | Applicable to R381/6–123–F/5 propellers fitted to SAAB 2000 aircraft. Compliance required as detailed in Service Bulletin. |
| 005–06–99 | SB S2000–61–26 | *Propellers* – New cylinder, piston and cover. | Applicable to R381/6–123–F/5 propellers fitted to SAAB 2000 aircraft. Compliance required as detailed in Service Bulletin. |
| 006–10–99 | SB SF340–61–95 | *Propellers* – Hub wall cracking. | Applicable to R389/4–123–F/25, –F/26 and –F/27 propellers fitted to SAAB 340A and 340B aircraft. Compliance required as detailed in Service Bulletin. |
| 005–04–2000 | SB SF340–61–96 | *Propellers* – Loose hub through bolts. | Applicable to propellers as detailed in Service Bulletin fitted to SAAB 340A and 340B aircraft. Compliance required as detailed in Service Bulletin. |
| 007–05–2000 | SB D8400–61–21 | *Propellers* – High crosswind operation life limitation. | Applicable to R408/6–123–F/17 propellers fitted to De Havilland Dash 8 Series 400, 401 and 402 aircraft. Compliance required as detailed in Service Bulletin. |
| 003–09–2000 | SB D8400–61–23 | *Propellers* – Propeller electronic controller – Unit removal. | Applicable to R408/6–123–F/17 propellers fitted to De Havilland Dash 8 Series 400, 401 and 402 aircraft. Compliance required as detailed in Service Bulletin. |
| 001–11–2000 | SB C130J–61–55 | *Propellers* – Examine propeller blade root outer sleeves. | Applicable to R391/6–132–F/3 de-iced blade assemblies fitted to Lockheed 382J (C–130J) aircraft. Compliance required as detailed in Service Bulletin. |
| 003–11–2001 | SB 61–1119 | *Propellers* – Hub wall cracking. | Applicable to R334/4–82–F/13 propellers fitted to Casa 212 aircraft. Compliance required as detailed in Service Bulletin. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 002–10–2002 | SB S2000–61–90 | *Propellers* – Pitch control unit – Inspection of servo valve. | Applicable to R381/6–123–F/5 propellers with pitch control unit Part No. 697013005 fitted to SAAB 2000 aircraft. Compliance required as detailed in Service Bulletin. |
| 009–05–2002 | 61–1124 | *Propellers* – Hub wall cracking. | Applicable to R333/4–82–F/12 propellers fitted to Jetstream 3100 and 3200 aircraft. Compliance required as detailed in Service Bulletin. |
| 010–05–2002 | 61–1125 | *Propellers* – Hub wall cracking. | Applicable to R321/4–82–F/8 propellers fitted to Merlin IVC/Metro III aircraft. Compliance required as detailed in Service Bulletin. |
| 011–05–2002 | 61–1126 | *Propellers* – Hub wall cracking. | Applicable to R324/4–82–F/9 propellers fitted to Merlin IIIC aircraft. Compliance required as detailed in Service Bulletin. |

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## FAIREY REED FIXED PITCH METAL PROPELLERS

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 2220 PRE 80 | SB FRP.001.1 | Instructions for the strip and examination of all Fairey Reed fixed pitch metal propellers. | Compliance required at periods not exceeding each 300 hours of flying time. |

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## PERMALI GROUP – HORDEN RICHMOND WOODEN FIXED PITCH PROPELLERS

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 2219 PRE 80 | – | Permali Group – Horden Richmond wooden fixed pitch propellers. | Any propellers which have protecting sheathing in accordance with Modification SK504 must be withdrawn from service within a period not to exceed 50 hours flying since embodiment of this type of sheathing. The affected propellers have the letter 'M' after the drawing number stamped on the side of the boss. Subsequently these propellers should be resheathed by the manufacturer in accordance with Modification HR 1811, or HR 1812 or HR 1813. |

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# 3 AIRCRAFT RADIO STATIONS AND EQUIPMENT

## AIRCRAFT EQUIPMENT

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 0133 PRE 80 | Dowty Rotol SB 32–8E | *Landing Gear* – Introduction of strengthened jack attachment pin to crossbeam and radius rod. | Applicable to all HS 748 Series aircraft. Compliance required not later than 1 December 1963. |
| 0134 PRE 80 | Dowty Rotol SB 32–15E | *Landing Gear* – Introduction of new circlip and collar to retain the nose undercarriage axle. | Applicable to all HS 748 Series aircraft. Compliance required not later than 31 December 1971. |
| 0135 PRE 80 | Dowty Rotol SB 32–20E | *Landing Gear* – Introduction of a support plate for retraction jack pin on main undercarriage crossbeam and radius rod units. | Applicable to all HS 748 Series aircraft. Compliance required as detailed in Service Bulletin. |
| 0136 PRE 80 | Dowty Rotol SB 32–28E | *Landing Gear* – Life limitation of main undercarriage crossbeam, plate and pin. | Superseded by AD 009–02–93. |
| 0137 PRE 80 | Dowty Rotol SB 32–43E | *Landing Gear* – Introduction of new sub-assembly of hub and bush to the axle assembly of nose undercarriage. | Applicable to all HS 748 Series aircraft. Compliance required not later than 31 December 1971. |
| 0138 PRE 80 | Dowty Rotol SB 32–49E | *Landing Gear* – Introduction of a strengthened main undercarriage crossbeam and radius rod. | Applicable to all HS 748 Series aircraft. Compliance required as detailed in Service Bulletin. |
| 0139 PRE 80 | Dowty Rotol SB 32–56E | *Landing Gear* – Inspection for cracks in nose undercarriage axles after repair. | Applicable to all HS 748 Series aircraft. Compliance required as detailed in Service Bulletin. |
| 0140 PRE 80 | Dowty Rotol SB 32–75E | *Landing Gear* – Inspection of nose undercarriage axles. | Applicable to all HS 748 Series aircraft. Compliance required as detailed in Service Bulletin. |
| 0141 PRE 80 | Dowty Rotol SB 32–78E | *Landing Gear* – Main undercarriage retraction jack – Inspection of eye-end fitting. | Applicable to all HS 748 Series aircraft. Compliance required as detailed in Service Bulletin. |
| 0142 PRE 80 | Dowty Rotol SB 32–84E | *Landing Gear* – Inspection of main undercarriage retraction jack improved eye-end fittings. | Applicable to all HS 748 Series aircraft. Compliance required as detailed in Service Bulletin. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 0143 PRE 80 | Dowty Rotol SB 32–85E | *Landing Gear* – Inspection of main undercarriage cross beam and radius rod jack attachment pins. | The Service Bulletin has been cancelled therefore the Airworthiness Directive has been cancelled. |
| 0144 PRE 80 | Dowty Rotol SB 32–91E | *Landing Gear* – Inspection of nose undercarriage jack shuttle valve retaining bolt. | Applicable to all HS 748 Series aircraft. Compliance required as detailed in Service Bulletin. |
| 0305 PRE 80 | Dowty Rotol 32–30–14SB | *Hydraulics* – Main undercarriage door jack – Inspection of end fitting. | Applicable to all Herald aircraft. Compliance required as detailed in Service Bulletin. Service Bulletin 32–1544 SB also refers and is referenced under this AD No in the Handley Page Herald entry. |
| 1144 PRE 80 | Dowty Rotol SB 83–338 | *Accessory Gear-boxes* – Tunnel shaft assembly – brazing of end fittings. | Superseded by AD 1238 PRE 80. |
| 1163 PRE 80 | Dowty Rotol SB 83–378 | *Accessory Gearboxes* – Original supercharger drive quill introduced. | Superseded by AD 1266 PRE 80. |
| 1165 PRE 80 | Dowty Rotol SB 83–338 | *Accessory Gearboxes* – Tunnel shaft assembly – brazing of end fittings. | Superseded by AD 1238 PRE 80. |
| 1168 PRE 80 | Dowty Rotol SB 83–378 | *Accessory Gearboxes* – Original supercharger drive quill introduced. | Superseded by AD 1266 PRE 80. |
| 1170 PRE 80 | Dowty Rotol SB 83–417 | *Accessory Gearboxes* – Introduction of revised supercharger drive quill. | Applicable to Hawker Siddeley 748 Series 1 aircraft. Compliance required at next overhaul in accordance with Service Bulletin. |
| 1185 PRE 80 | Dowty Rotol Mod. GB 2136 | *Accessory Gearboxes* – Input bevel pinion group – New gear introduced. | Applicable to Fokker/Fairchild F27 and FH227 Series aircraft. Compliance required at the first overhaul after 1 June 1965. Compliance with modification GB 2294 establishes compliance with GB 2136. |
| 1203 PRE 80 | Dowty Rotol SB 83–338 | *Accessory Gear-boxes* – Tunnel shaft assembly – brazing of end fittings. | Superseded by AD 1238 PRE 80. |
| 1217 PRE 80 | Dowty Rotol SB 83–338 | *Accessory Gear-boxes* – Tunnel shaft assembly – brazing of end fittings. | Superseded by AD 1238 PRE 80. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 1230 PRE 80 | Dowty Rotol SB 83–378 | *Accessory Gear-boxes* – Original supercharger drive quill introduced Mod. No. GB 2412. | Superseded by AD 1266 PRE 80. |
| 1238 PRE 80 | Dowty Rotol SB 83–338 | *Accessory Gear-boxes* – Tunnel shaft assemblies – brazing of end fittings. | Applicable to Propellers and Aircraft types as detailed in Service Bulletin. Compliance required as detailed in SB. |
| 1251 PRE 80 | Dowty Rotol SB 83–378 | *Accessory Gear-boxes* – Original supercharger drive quill introduced. Mod. No. GB 2412. | Superseded by AD 1266 PRE 80. |
| 1266 PRE 80 | Dowty Rotol SB 83–378 | *Accessory Gear-boxes* – Original supercharger drive quill introduced. | Applicable to Propellers and Aircraft types as detailed in Service Bulletin. Compliance required at the next overhaul unless Mod. GB 1834 is already embodied. |
| 1273 PRE 80 | Dowty Rotol SB 83–A461 | *Accessory Gear-boxes* – Gear-box drives – Renewal of universal joint fork lock washers. | Applicable to but not necessarily restricted to Vickers Vanguard Series aircraft. Compliance required within 200 hours of receipt of this bulletin or by the 1 May 1973, whichever occurs first. |
| 1274 PRE 80 | Dowty Rotol SB 83–A476 | *Accessory Gear-boxes* – Gear-box drives – Inspection of universal joint fork lock washers gearbox drive types 602110006 (post Mod GB 1842). | Applicable to but not necessary restricted to Vickers Vanguard Series aircraft. Compliance required within 200 flying hours of receipt of this bulletin or by the 1 May 1974, whichever occurs first. |
| 1275 PRE 80 | Dowty Rotol SB 83–464 | *Accessory Gear-boxes* – Gear-box drives – Introduction universal joint seal housing and stud gear-box drive type 602110006. | Applicable to Vickers Vanguard Series aircraft. Compliance requires accomplishment at the next overhaul as detailed in Service Bulletin. |
| 1276 PRE 80 | – | Where negatively earthed radio equipment is installed in an aircraft using a double-pole wiring system, the negative, as well as the positive, lead to that equipment must be fused. | To be incorporated prior to the issue or renewal of certificate of airworthiness or at the time of a major modification to the radio stations, whichever is the earlier. For Consul Aircraft, Airspeed Technical Instruction Modification No. 103 applies. For aircraft fitted with Marconi 604A Switchboard Marconi Mod. No. AML 24 applies. For Gemini and Messenger aircraft Mod. No. CMC 441 Issue B applies and for Aerovan aircraft Mod. No. CMC 442 applies. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 1277 PRE 80 | RAF AM 905 | Prevention of carbon dust deposit on the underside of IF unit. | Applicable to RAF TR1520, TR1920, TR1934, TR1935, TR1936, TR1985, TR1986, TR1987 radio equipment. Compliance required before installation 1520/1920. |
| 1278 PRE 80 | RAF AM 693 | To prevent overheating of relay type 1032. | Applicable to RAF TR1520, TR1920, TR1934, TR1935, TR1936, TR1985, TR1986, TR1987 radio equipment. Compliance required before installation 1520/1920. |
| 1279 PRE 80 | RAF AM 2192 | To enable 10XJ/– Type crystals to be used in transmitter unit. | Applicable to RAF TR1520, TR1920, TR1934, TR1935, TR1936, TR1985, TR1986, TR1987 radio equipment. Compliance required before installation 1520/1920/ 1934/1935/1936. |
| 1280 PRE 80 | RAF AM 2353 | To prevent intermittent reception due to pressure of the co-axial lead to the IF assembly on 3026. | Applicable to RAF TR1520, TR1920, TR1934, TR1935, TR1936, TR1985, TR1986, TR1987 radio equipment. Compliance required before installation 1520/1920. |
| 1281 PRE 80 | RAF AM 2474 | To prevent high noise level due to use of brushes type IM7. | Applicable to RAF TR1520, TR1920, TR1934, TR1935, TR1936, TR1985, TR1986, TR1987 radio equipment. Compliance required before installation 1520/1920/ 1934/1935/1936/1985/1986/1987. |
| 1282 PRE 80 | RAF AM 2565 | To prevent instability when switched to transmit position. | Applicable to RAF TR1520, TR1920, TR1934, TR1935, TR1936, TR1985, TR1986, TR1987 radio equipment. Compliance required before installation 1520/1920/ 1934/1935/1936. |
| 1283 PRE 80 | RAF AM 2560 | To restrict the voltage across crystal to a maximum of 25 volts. | Applicable to RAF TR1520, TR1920, TR1934, TR1935, TR1936, TR1985, TR1986, TR1987 radio equipment. Compliance required before installation 1520/1920/ 1934/1935/1936. |
| 1284 PRE 80 | RAF AM 2499 | Replacement of capacitors C5, C6 and C26 in transmitter and C26 in receiver with non waxed type. | Applicable to RAF TR1520, TR1920, TR1934, TR1935, TR1936, TR1985, TR1986, TR1987 radio equipment. Compliance required before installation 1520/1920/ 1934/1935/1936/1985/1986/1987. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 1285 PRE 80 | RAF<br>AM 3774 | To suppress instability in the Modulator unit. | Applicable to RAF TR1520, TR1920, TR1934, TR1935, TR1936, TR1985, TR1986, TR1987 radio equipment. Compliance required not later than 31 July 1975. 1520/1920/1934/1935/1936/1985/1986/1987. |
| 1286 PRE 80 | RAF<br>AM 689/3 | Fuse protection for HT circuit. | Applicable to Power Units Type 15 and 16. Compliance required before installation. |
| 1297 PRE 80 | Chelton (Electrostatics)<br>CEL 13 | Navigation – ILS/VOR antenna system – inspection. | Applicable to all Chelton (Electrostatics) 140–LRU–48B VOR–ILS blade antenna. Compliance required as detailed in Service Bulletin. |
| 1306 PRE 80 | Cossor Radar and Electronics<br>SSR 1251/001 | The delay line 5DL2, type KA 87879/1 is replaced by an improved type KA 87879/5. | Applicable to Cossor Radar and Electronics SSR 1251 radio equipment. Compliance required before installation. |
| 1307 PRE 80 | Cossor Radar and Electronics<br>SSR 1251/002 | To prevent failures due to power supply faults. | Applicable to Cossor Radar and Electronics SSR 1251 radio equipment. Should have been embodied by 31 March 1961. |
| 1308 PRE 80 | Elliott-Automation Radar Systems<br>M455 | To eliminate effects of the beat frequency from category 2 localiser stations. | Applicable to Elliott-Automation Radar Systems E-NVA-21 radio equipment. Should have been embodied by 31 August 1966. |
| 1309 PRE 80 | Ekco Electronics (MEL)<br>No. 22 | To prevent overheating of transformer TR1 and a resultant smoke hazard as a result of fault conditions in associated circuits or of an internal short in TR1. | Applicable to Ekco Electronics (MEL) E120 radio equipment. Should have been embodied by 31 October 1967. Service Bulletin No. 34–15 revision 4 refers. |
| 1310 PRE 80 | Ekco Electronics (MEL)<br>No. 23 | The removal of Fuse FS3. | Applicable to Ekco Electronics (MEL) E120 radio equipment. Should have been embodied by 31 March 1967. Service Bulletin No. 34–41 refers. |
| 1311 PRE 80 | Ekco Electronics (MEL)<br>No. 29 | To improve current rating of 700V winding on Transformer TR1 Transformers of Serial Nos. below 200. | Applicable to Ekco Electronics (MEL) E120 radio equipment. Compliance required not later than 31 July 1975. |
| 1312 PRE 80 | Ekco Electronics (MEL)<br>ML 124 | To avoid possibility of damage to adjacent wiring insulation in the event of overheating of resistor R20. | Applicable to Ekco Electronics (MEL) E120 radio equipment. Should have been embodied by 30 June 1962. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 1313 PRE 80 | Ekco Electronics (MEL) No. 22 | To prevent overheating of transformer TR1 and a resultant smoke hazard as a result of fault conditions in associated circuits or of an internal short in TR1. | Applicable to Ekco Electronics (MEL) E160 radio equipment. Should have been embodied by 31 October 1967. Service Bulletin No. 34–15 revision 4 refers. |
| 1314 PRE 80 | Ekco Electronics (MEL) No. 23 | The removal of Fuse FS3. | Applicable to Ekco Electronics (MEL) E160 radio equipment. Should have been embodied by 31 March 1967. Service Bulletin No. 34–41 refers. |
| 1315 PRE 80 | Ekco Electronics (MEL) ML 124 | To avoid possibility of damage to adjacent wiring insulation in the event of overheating of resistor R20. | Applicable to Ekco Electronics (MEL) E160 radio equipment. Should have been embodied by 30 June 1962. |
| 1328 PRE 80 | Marconi-Elliott Avionic Systems AML 24 | To comply with Negative Fusing Requirement. | Applicable to Marconi-Elliott Avionic Systems 604 charging boards. Compliance required before installation. |
| 1329 PRE 80 | Marconi-Elliott Avionic Systems AML 43 | Replacement of Screened Grid Resistor – Mixer valve. | Applicable to Marconi-Elliott Avionic Systems AD94 radio equipment. Compliance required not later than 31 July 1975. |
| 1330 PRE 80 | Marconi-Elliott Avionic Systems TSA 116 SB 34–A192 | To ensure that a lock washer is present on the Goniometer spindle to prevent slip relative to the synchro. | Applicable to Marconi-Elliott Avionic Systems AD 360 radio equipment. Compliance required not later than 31 July 1975. |
| 1331 PRE 80 | Marconi-Elliott Avionic Systems ML 120 ML 121 | To improve reliability of the Aerial Connections to the Transmit/Receive Relays. | Applicable to Marconi-Elliott Avionic Systems AD 307 radio equipment. Should have been embodied by 31 December 1959. |
| 1332 PRE 80 | Marconi-Elliott Avionic Systems AML 100 | To avoid possible short circuits of ILS level switch. | Applicable to Marconi-Elliott Avionic Systems AD 704 radio equipment. Should have been embodied by 1 July 1959. |
| 1333 PRE 80 | Marconi-Elliott Avionic Systems ML 94 | To ensure that the receiver returns automatically after a power failure without re-selection of the required frequency. | Applicable to Marconi-Elliott Avionic Systems AD 712 radio equipment. Compliance required not later than 31 July 1975. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 1334 PRE 80 | Marconi-Elliott Avionic Systems SB 201 | To maintain isolation of the ground speed potentiometer earth line. | Applicable to Marconi-Elliott Avionic Systems AD 2300 Series radio equipment. Should have been embodied by 1 September 1962. |
| 1335 PRE 80 | Marconi-Elliott Avionic Systems AML 56 | To improve signal discrimination. | Applicable to Marconi-Elliott Avionic Systems AD 7092 radio equipment. Compliance required not later than 31 July 1975. |
| 1336 PRE 80 | Marconi-Elliott Avionic Systems AML 61 | To protect transformer against damage. | Applicable to Marconi-Elliott Avionic Systems AD 7092 radio equipment. Compliance required not later than 31 July 1975. |
| 1337 PRE 80 | Marconi-Elliott Avionic Systems AML 50 | To improve signal discrimination. | Applicable to Marconi-Elliott Avionic Systems AD 7092 A and B radio equipment. Compliance required not later than 31 July 1975. |
| 1338 PRE 80 | Marconi-Elliott Avionic Systems AML 60 | To protect transformer against damage. | Applicable to Marconi-Elliott Avionic Systems AD 7092 A and B radio equipment. Compliance required not later than 31 July 1975. |
| 1339 PRE 80 | Marconi-Elliott Avionic Systems AML 87 | To prevent OFF position of System Switch being used when installed in conjunction with 1555/1555A Voltage Regulators. | Applicable to Marconi-Elliott Avionic Systems AD 7092 A, B, D and F radio equipment. Compliance required before installation. |
| 1340 PRE 80 | – | To render RIM Type 2523 compatible with CL3 compass. | Applicable to Marconi-Elliott Avionic Systems RMI 2523 radio equipment. To be embodied before further flying if compass information is derived from CL3 compass. BOAC Mod. CM 15571 is an acceptable alternative. |
| 1343 PRE 80 | Murphy Radio No. 7 | To remove spurious whistles from receivers. | Applicable to Murphy Radio MR 60 radio equipment. Compliance required before installation. |
| 1344 PRE 80 | Murphy Radio No. 7 | To remove spurious whistles from receivers. | Applicable to Murphy Radio MR 80 and 100 radio equipment. Compliance required before installation. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 1345 PRE 80 | Murphy Radio EML 12/60 | To allow listening watch to be maintained while the intercom facility is in use. | Applicable to Murphy Radio MR 80 and 100 radio equipment. Should have been embodied by 31 December 1960 if there is a legal requirement to maintain a continuous R/T watch. |
| 1346 PRE 80 | Murphy Radio EML 6/58 | To introduce adequate level of negative locking pulse in phantastron oscillator. | Applicable to Murphy Radio DME Mk 6 radio equipment. Compliance required before installation. |
| 1347 PRE 80 | Murphy Radio EML 3/59 | To reduce incidence of failure to lock-on at low ranges due to unreliable triggering of phantastron circuit. | Applicable to Murphy Radio DME Mk 6 radio equipment. Should have been embodied by 31 December 1959. |
| 1348 PRE 80 | Murphy Radio EML 3/59 (Amendment No. 1) | To reduce incidence of failure to lock-on at low ranges due to unreliable triggering of phantastron circuit. | Applicable to Murphy Radio DME Mk 6 radio equipment. Should have been embodied by 31 December 1959. |
| 1349 PRE 80 | Murphy Radio EML 7/59 | To improve operation of memory circuit when switched to 'manual'. | Applicable to Murphy Radio DME Mk 6 radio equipment. Should have been embodied by 31 December 1959. |
| 1350 PRE 80 | Murphy Radio EML 7/59 (Amendment No. 1) | To maintain homing sensitivity when EML 7/59 is embodied. | Applicable to Murphy Radio DME Mk 6 radio equipment. Should have been embodied by 31 March 1960. |
| 1351 PRE 80 | Plessey ODM 3508/1 Issue 4 | Fusing – To provide protection of pecker motor. | Applicable to Plessey PTR 61 Series radio equipment. Compliance required before installation. |
| 1352 PRE 80 | Standard Telephones and Cables ML2 | Replacement of Crystal Cover on Control Unit. (Serial Nos. 450–585 only.) | Applicable to Standard Telephones and Cables STR 12 D radio equipment. Compliance required before installation. |
| 1353 PRE 80 | Standard Telephones and Cables ML 37 | Fuse F4 and spare uprated from 250 ma to 500 ma. | Applicable to Standard Telephones and Cables STR 18B2/18C radio equipment. Compliance required before installation. |
| 1354 PRE 80 | Standard Telephones and Cables ML 115 | To ensure that the inadvertent earthing of any one of the leads to the deviation indicator does not result in the presentation of a misleading flag indication. | Applicable to Standard Telephones and Cables SR 15 radio equipment. Should have been embodied by 28 February 1961. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 1355 PRE 80 | Standard Telephones and Cables ML 119 | To prevent the presentation of erroneous height information when the equipment is operated at higher ambient temperatures. | Applicable to Standard Telephones and Cables STR 30B1, B2 and B3 radio equipment. Should have been embodied by 31 January 1961. Applicable when 0-50 feet range is used for auto-pilot purposes. |
| 1356 PRE 80 | Standard Telephones and Cables ML 125 | To prevent the possibility of the presentation of a misleading flag indication due to malfunction of the VOR flag operating relay. | Applicable to Standard Telephones and Cables SR 31 radio equipment. Should have been embodied by 28 February 1961. |
| 1357 PRE 80 | Standard Telephones and Cables ML 76 | To remove possibility of the winding of relay RL 1 and associated parallel capacity having a resonant frequency near 30 c/s. | Applicable to Standard Telephones and Cables SR 32 radio equipment. Should have been embodied by 31 December 1959. |
| 1358 PRE 80 | Standard Telephones and Cables ML 91 | To ensure that, in the event of failure of the energising coil of the indicator pointer relay RL 3, the flag alarm will indicate an unserviceable condition. | Applicable to Standard Telephones and Cables SR 32 radio equipment. SHould have been embodied by 30 September 1959. |
| 1359 PRE 80 | Standard Telephones and Cables ML 104 | To prevent the possibility of the presentation of a misleading flag indication due to malfunction of the VOR flag operating relay. | Applicable to Standard Telephones and Cables SR 32 radio equipment. Should have been embodied by 30 June 1960. |
| 1360 PRE 80 | Standard Telephones and Cables ML 109 | To prevent a possibility of the presentation of a misleading flag indication in the event of either side of the deviation indicator being inadvertently earthed. | Applicable to Standard Telephones and Cables SR 35 radio equipment. Should have been embodied by 30 October 1960. |
| 1361 PRE 80 | (Avionic Systems (Heathrow) Ltd) SB 34–11 | To revert equipment to CAA channelling requirements. | Applicable to Standard Telephones and Cables SR 46B radio equipment. Compliance required not later than 30 November 1975. |
| 1362 PRE 80 | Ultra Electric C102 | Improved type knobs – legibility. | Applicable to Ultra Electric UA 56/1/C radio equipment. Compliance required not later than 31 July 1975. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 1363 PRE 80 | Ultra Electric C104 | Improved method of fixing knob mouldings. | Applicable to Ultra Electric UA 56/1/C radio equipment. Compliance required not later than 31 July 1975. |
| 1364 PRE 80 | – | To prevent breakage due to stall flutter caused in the main by icing (RAF Flexible Mount Ref: 10AJ/191, or one with similar characteristics approved by CAA must be used). | Applicable to whip aerials. Compliance required before installation, except where the Declaration of Design and Performance states an aerial to be suitable for use without such modification, in aircraft approved for flight in icing conditions. |
| 1367 PRE 80 | Automotive Products SB 32–224 | *Landing Gear* – nose leg – axle corrosion. Part A Inspection of axle corrosion and cracking. | Applicable to Trident 1C, 1E, 2E, 3B. Compliance requires inspection check for cracks and corrosion on axle ends; this inspection is called for in Hawker Siddeley Aviation Service Bulletin 32–387. |
| 1368 PRE 80 | Automotive Products SB 32–268 | *Landing Gear* – Part A Inspection for cracking and corrosion in main undercarriage leg outer casing. | Applicable to Britten-Norman BN2 MK 3 Trislander Aircraft. Compliance as detailed in Service Bulletin. |
| 1369 PRE 80 | Beaufort SB 007 | Civil Aviation Lifejackets; Infant Mark 1C; Child Mark 2C; Mark 5C; Mark 7C and Mark 8C. Baby's floating survival cot Mark 3. | Compliance required at the next overhaul or within three months from the issue date of this Bulletin. |
| 1370 PRE 80 | Beaufort SB 035 | Beaufort operating mechanism C1855 Part No ME 48 Nitrile 'O' ring seal nylon locking plug. | Compliance required at next scheduled servicing. |
| 1371 PRE 80 | Bendix SB 583 | Ignition switches | Applicability and compliance as detailed in Bendix (Electrical Components Division) Service Bulletin No 583.<br>Note : FAA AD 76–07–12 also refers. |
| 1372 PRE 80 | Fliteform Mod. No AF 385 | To provide protective padding along the rear spar member and the lower rear Squab bar. | Applicable to Burns Model 735–3–59 passenger seats. Compliance required as detailed in Modification. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 1373 PRE 80 | Dunlop SB 29–74 | *Hydraulic* – Accumulators – Fatigue Cracking. | Applicable to<br>(1) All Viscount aircraft fitting Dunlop Hydraulic accumulators Part Nos. AC 14040, AC 14046, AC 14062 and AC 12512.<br>(2) Dunlop accumulators Part Nos. AC 14040, AC 14046, AC 14062 and AC 12512.<br><br>Compliance required as detailed in Service Bulletin. |
| 1375 PRE 80 | Dunlop SB 29–A131 | *Hydraulic* – Mark 3 Hydraulic control valve – Distorted or cracked filter housing. Dunlop Mark 3 hydraulic control valve Part No AC 61772. | Applicable to BAC 1–11 Series 200, 300 and 402 AP. Compliance required as detailed in Alert Service Bulletin. |
| 1377 PRE 80 | Dunlop SB 29–134 | *Hydraulic* – Accumulator – Fatigue cracking. Dunlop Hydraulic Accumulator Part Nos. AC 14040, AC 14062 and AC 14046. | Applicable to Viscount 700 and 800/810 Series. Compliance requires inspection to be accomplished as follows:<br>Units incorporating bodies hard anodised all over, which have achieved 5000 landings but less than 15 000 flying hours – Not later than 31 January 1973. |
| 1378 PRE 80 | Dunlop 29–135 | *Hydraulic* – Accumulators – Crack Detection. Dunlop Hydraulic Accumulators Part Nos. AC 12512, AC 14040, AC 14046 and AC 14062. | Applicable to Viscount 700 and 800/810 Series. Compliance required as detailed in Service Bulletin. |
| 1379 PRE 80 | Dunlop 29–138 | *Hydraulic Power* – Four element Mk 3 hydraulic brake control – failure of knife edge. | Applicable to HS 748 aircraft. Compliance required as detailed in Service Bulletin. |
| 1380 PRE 80 | Dunlop 29–140 | *Hydraulic Power* – Four element Mk 3 hydraulic brake control – failure of knife edge. | Applicable to Vanguard 951 and 953. Compliance required not later than 30 June 1976. |
| 1381 PRE 80 | Dunlop 29–142 | *Hydraulic Power* – Four element Mk 3 hydraulic brake control – failure of knife edge. | Applicable to Short Skyvan aircraft. Compliance required as detailed in Service Bulletin. |
| 1382 PRE 80 | Dunlop 29–144 | *Hydraulic Power* – Four element Mk 3 hydraulic brake control – failure of knife edge. | Applicable to Argosy aircraft. Compliance required not later than 30 June 1976. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 1383 PRE 80 | Dunlop SB 29–146 | *Hydraulic Power* – Four element Mk 3 hydraulic brake control – failure of knife edge. | Applicable to Viscount 700, 800 and 810 Series. Compliance required as detailed in Service Bulletin. |
| 1384 PRE 80 | Dunlop 29–148 | *Hydraulic Power* – Four element Mk 3 hydraulic brake control – failure of knife edge. | Applicable to Britannia 300 Series aircraft. Compliance required not later than 30 June 1976. |
| 1385 PRE 80 | Dunlop 29–150 | *Hydraulic Power* – Four element Mk 3 hydraulic brake control – failure of knife edge. | Applicable to Hindustan HJT 16 aircraft. Compliance required not later than 30 June 1976. |
| 1386 PRE 80 | Dunlop SB 32–A764 | *Landing Gear* – Main wheel tyres – possible looseness of bead wires. Tyres affected – Dunlop mainwheel tyres size 50 x 18, codes DRR 12427T all issues and DR 12428T issue 1 and 2. | Applicable to BAC VC 10 and Super VC 10. Compliance requires inspection as follows: Tyres held as spares – Before release from store. Tyres in service – On return of aircraft to base. |
| 1387 PRE 80 | Dunlop SB 32–A776 | *Landing Gear* – Main wheel tyres – possible looseness of bead wires. Tyres affected – Dunlop mainwheel tyre size 50 x 18, code DRR 12427T all issues, and DR 12428T all issues. | Applicable to BAC VC10 and Super VC 10. Compliance requires inspection as follows: Tyres held as spares – Before release from store. Tyres in service – On return of aircraft to base. |
| 1388 PRE 80 | Dunlop SB 32–A829 | *Landing Gear* – Remould Tyres only, Part No. DRR 17123T, are suspect due to looseness in bead area. | Applicable to L–1011 and DC–10 aircraft. Inspect and remove any remould tyres not later than 2359 hr, 14 August 1973. Remould tyres in storage not to be released. |
| 1389 PRE 80 | Dunlop SB 32–A901 | *Landing Gear* – Main Wheels – failure in service at low life. | Applicable to SD3–30 fitted with Dunlop Main Wheel Part No. AH52998. Compliance required as detailed in Dunlop Service Bulletin 32–A901. (This Alert Service Bulletin confirms Dunlop Campaign Wire 32–A901, dated 18 July 1977). |
| 1390 PRE 80 | Dunlop SB 32–920 | *Landing Gear* – Main Wheels – Failure of half hubs. | Applicable to SD–3–30 fitted with Dunlop Main Wheel Part No. AH53369. Compliance required as detailed in Service Bulletin. |
| 1391 PRE 80 | Dunlop SB 36–156 (Mod C917) | *Pneumatics* – Isolating Valve – Introduction of isolating valve ACM26230 in lieu, and by conversion, of ACM17892 and ACM26214. | Applicable to Fokker F27 Friendship aircraft. Compliance required not later than 31 March 1980. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 1392 PRE 80 | Dunlop SB 36–186 | *Pneumatics* – Air Bottle Assemblies – withdrawal of air bottles manufactured from material Spec H10. | Applicable to Dove and Heron. Compliance required 31 December 1970. |
| 1393 PRE 80 | Dunlop SB 73–6 | *Engine fuel and control* – Fuel hose assemblies – corrosion on end fittings. | Applicable to:<br>(1) Scottish Aviation Bulldog and Slingsby T61 powered sailplane.<br><br>(2) Fuel Hose assemblies Part Nos.<br>6/W 150/361/47/47/29–7<br>6/W 150/361/47/47/55<br>6/W 150/361S/54/56/15<br>4/W 150/361/56/56/360/16–75<br>4/W 150/361S/56/56/360/20–5<br><br>Compliance required by 31 July 1972. |
| 1394 PRE 80 | Dunlop SB 79–1 | *Oil* – Distribution – Hose Assemblies – corrosion on end fittings. | Applicable to:<br>(1) Scottish Aviation Bulldog and Slingsby T61 powered sailplane.<br><br>(2) Engine oil hose assemblies Part Nos.<br>6/W 150/361S/55/55/210/36–5<br>6/W 150/361S/55/56/150/34<br>6/W 150/361S/55/59/90/17<br>4/W 150/361S/54/54/14<br><br>Compliance required by 31 July 1972. |
| 1395 PRE 80 | Flight Refuelling SB 28–33–8882 | *Fuel* – Inspection check of motor unit torque reaction bolt security. | Applicable to Flight Refuelling lightweight motorised valves. Compliance required not later than 30 June 1971. A different tabwasher to be fitted to motor units as and when necessary, requirements detailed in Service Bulletin. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 1396 PRE 80 | Godfrey Precision SB 21–116 | *Air Conditioning* – Lock-wiring of nuts securing the metering unit and bearing cover – Modification No. 1195. | Applicable to Godfrey Precision cabin supercharger Type 15, Mark 6, Mark 9 and all variants fitted to North Star, Argonaut, Viscount, Herald, Argosy, Ambassador, Friendship and 748, Type 15 Mark 15 all variants fitted to Gulfstream, YS–11, HS 748 and Herald. Compliance:<br>(1) To be embodied on all Viscount aircraft by 31 December 1967.<br>(2) After 31 May 1968, all replacement units must be embodied before installation in all other types of aircraft. |
| 1397 PRE 80 | Graviner SB–17 | Inspection and where necessary, modification in accordance with Graviner Service Bulletin No. 17. | Applicable to Graviner 6g Pendulum inertia switches, all types. Compliance required by first Certificate of Airworthiness renewal after 30 September 1962. |
| 1398 PRE 80 | Graviner ASB 26–A20 | *Fire Protection* – Automatic Fire Extinguisher Top Caps – Inspection. | Applicable to all Graviner units listed in Alert Service Bulletin 26–A20. Compliance required by 1 April 1965. |
| 1399 PRE 80 | Graviner ASB 26–A30 | *Fire Protection* – Automatic Fire Extinguishers – Types 110A, 111A, 112A, 132A, 142A, 147A and 1147A BCF Single and Dual Head Steel Containers. | Applicable to Graviner automatic fire extinguishers. Revision of check weighing in accordance with Graviner Alert Service Bulletin 26–A30. |
| 1400 PRE 80 | Irvin SB No. 1 | Cracking of lift-latch buckle. | Applicable to Irvin passenger safety belts and extension pieces AB5 and AB6 Series (incorporating lift-latch metal-to-metal buckles). Compliance as detailed in Service Bulletin. |
| 1401 PRE 80 | Kent Mod MA/7 | Modifications to bypass valve to enable it to open against 30 lb/in$^2$. | Applicable to all aircraft fitted with Kent fuel flow meters of the MA 4000 and 5000 Series fitted with electrically operated by-pass valves. |
| 1402 PRE 80 | Kent Mod MA/9 | Modifications to bottom cover to enable drain pipe to be fitted. | |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 1403 PRE 80 | Lucas SB L SB Sp. 73–160 | *Engine* – Fuel and control – High pressure fuel pump – Introduction of carbon piston liners in aluminium – Bronze rotor – Mod. No. CP 3189 (RR Spey Mod. 4371). | Applicable to Lucas HP fuel pump types GD 111, 114, 116, 119 and 125 fitted to Spey 512–5W, 512–5W/50, 512–5, 512–5/50, 512–14, 512–14DW. Should have been accomplished by 30 September 1971. |
| 1404 PRE 80 | Lucas SB L SB Sp. 73–A50 | *Engine* – Fuel and control – High pressure fuel pump – HMG carbon – Face seal 'O' ring serviceability check. | Applicable to Lucas high pressure fuel pump types MGBB 157 and 161. Compliance required as detailed in Service Bulletin. |
| 1405 PRE 80 | Lucas SB L SB Sp. 73–A173 | *Engine* – Fuel and control – Fuel Flow Regulator – Clearance check of Ferrobestos shrouds – Mod No. CP 3508 (RR Spey Mod 4527). | Applicable to Lucas fuel flow regulator types CASC 119, 164, 165, 166 and 169 fitted to Spey engines 511–5W, 511–14W, 512–5W and 512–14W. Should have been complied with by 31 August 1969. |
| 1406 PRE 80 | Lucas SB L SB Sp. 73–A174 | *Engine* – Fuel and control – Fuel Flow Regulator – Clearance check of Ferrobestos shrouds – Mod No. CP 3509 (RR Spey Mod 4528). | Applicable to Lucas fuel flow regulator type CASC 135 fitted to Spey 512–14 engine. Should have been complied with by 31 August 1969. |
| 1407 PRE 80 | Normalair Garrett SB 21–324 | *Air Conditioning* – Condenser fan – Introduction of reinforcing ring. | Applicable to Normalair Garrett condenser fan Part No. 519330. Compliance required not later than 31 October 1971. |
| 1408 PRE 80 | Normalair Garrett SB 21–359 | *Air Conditioning* – Refrigerant compressor – Improved method of securing diffuser components. | Applicable to Normalair Garrett two stage refrigerant compressor, Part No. 525670. Compliance required at first convenient opportunity following receipt of Modification kit, but not later than 31 December 1974. |
| 1409 PRE 80 | Normalair Garrett SB 21–360 | *Air Conditioning* – Overspeed Trip Amplifier – Introduction of replacement capacitors. | Applicable to Normalair Garrett overspeed trip amplifier Part No. 525800. Compliance required at the first convenient opportunity following receipt of Mod. Kit, but not later than 31 January 1974. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 1410 PRE 80 | Normalair Garrett SB 35–12 | *Oxygen* – Introduction of new inlet connection. Part Nos. 1006X000 and 1412W000. | Applicable to Normalair Garrett pressure reducer type 'C'. Compliance required within 10 flying hours following receipt of modification kit. |
| 1411 PRE 80 | Normalair Garrett SB 35–A23 | *Oxygen* – Fixed socket and flow selector – Dimensional check on bore of bayonet connection. | Applicable to Normalair Garrett fixed socket and flow selector Part Nos. OP4730, 1205X000, 1930W000 and 1931W000. Compliance as detailed in Service Bulletin and BAe Campaign Wire Ref. 35–CW–PM5723. |
| 1412 PRE 80 | Page Engineering SB 23–2 | *Communications* – Switch Base Module RH and LH – Incorrect cable identifications. | Applicable to: Switch Base Module LH, Page Engineering Company Part No. C8780 Serial Nos as listed:<br>Serial No. 001 to 019 inclusive.<br>Serial No. 022.<br>Serial No. 025 to 031 inclusive.<br>Serial No. 034 to 037 inclusive.<br>Serial No. 039 to 040.<br>Serial No. 042.<br>Serial No. 045 to 051 inclusive.<br>Serial No. 053 to 056 inclusive.<br>Serial No. 058.<br>Switch Base Module RH Page Engineering Company Part No. C8760 Serial Nos. as listed: Serial No. 001 to 016 inclusive. |
| 1413 PRE 80 | Mayday Equipment SB MD/SB/1 | Introduction of Modification MD/M/CAL/1001. | Applicable to Mayday Equipment MD/CAL/MK1 lifejackets. |
| 1414 PRE 80 | Mills Equipment ME/1 | Filling of eyeletted tip. Centre punching of roller spindle. | Applicable to Mills Equipment passenger seat belts ME/2095. Should have been embodied by 1 September 1961. Mills Equipment Bulletin dated 31 October 1960 refers. |
| 1415 PRE 80 | Mills Equipment ME/3 or ME/4 or ME/5 | Modification of the locking plate and release lever. | Cancelled by CAA. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 1416 PRE 80 | Mills Equipment ME/2 | Removal of flat springs and replacement with new coil springs. Centre punching of roller spindle. | Applicable to Mills Equipment passenger seat belts. Should have been embodied by 1 March 1962. Mills Equipment Bulletin dated 31 August 1961 refers. |
| 1417 PRE 80 | Plessey Avionics SB FR31–91 | Instruments – Flight data recorder – RF1 overload. | Applicable to all aircraft fitted with Plessey FDR Pv710 and Pv710A. Compliance as detailed in Service Bulletin. |
| 1418 PRE 80 | RFD 734 or | Introduction of Mark 20 (clear plastic) mouth Inflation Valve (RFD Part No. 3324/13). | Applicable to RFD Type 50 Series and Type 72 lifejackets. These modifications are to enable those lifejackets fitted with Mark 11 and Mark 15 (twist to lock action) mouth inflation valves to be modified to the latest standard requiring provision of 'non-action' valves, and to eliminate the risks inherent in having lifejackets with varying types of mouth inflation valves being mixed in the same aircraft set.<br><br>At the next overhaul, any lifejacket in the above series not to the standard of either of these modifications must be modified.<br><br>Lifejackets to modification RFD 734 or 862 may be freely mixed in service. |
| | RFD 862 | Introduction of Mark 4 (blue plastic) mouth Inflation Valve (RFD Part No. 3394/63). | |
| 1419 PRE 80 | RFD 1126 (SB 25–23) | *Equipment/Furnishings* – Concorde escape slide type AES28B at forward RH service door – Replacement of Mk 5E valved air cylinder assembly. | Applicable to all RFD escape slides AES28B installed in Concorde aircraft and held in stores. Compliance as detailed in Service Bulletin. |
| 1420 PRE 80 | RFD 1127 (SB 25–24) | *Equipment/Furnishings* – VC10 escape slide type AES20 and AES21 – Replacement of Mk 5 valved air cylinder assembly. | Applicable to all RFD escape slides AES20 and AES21 installed in Super VC10 aircraft and held in stores. Compliance as detailed in Service Bulletin. |
| 1421 PRE 80 | Rotax (Now Lucas Aerospace) SB 24–272 | *Electrical Power* – Alternators N0501, N0502, N0503, N0505, N0506, N0507, N0509, N0510 and N0511. | Applicable to Rotax alternators not already embodying Mod 3599B. Compliance required by 31 March 1969. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 1422 PRE 80 | Rotax (Now Lucas Aerospace) SB 24–299 | Security of flame trap in brush gear cover. | Applicable to Rotax alternators N0305, N0313, N0405, N0407, N0413, N0414 and N0416. Alternators to be examined on receipt of this Service Bulletin. |
| 1423 PRE 80 | Rotax (Now Lucas Aerospace) SB 24–337 | *Electrical Power* – Flap Motors C9601 and C9602 Series – Replacement of clutch by a solid drive spline adaptor. | Applicable to Rotax C9601 Series and C9602 Series Flap Motors. Should have been complied with by 31 March 1970. |
| 1424 PRE 80 | Rotax (Now Lucas Aerospace) SB 24–368 | *Electrical Power* – Voltage sensing unit U3619 and U3619/1 – Replacement of Transistor T1. | Applicable to HS 748, Viscount, BAC 1-11 and VC 10. Compliance required (1) HS 748 and Viscount not later than 1 September 1970. (2) BAC 1-11 not later than 1 December 1970. (3) VC 10 not later than 1 September 1971. |
| 1425 PRE 80 | Rotax (Now Lucas Aerospace) SB 24–369 | *Electrical Power* – Voltage sensing unit U3624 and U3624/1 – Replacement of Transistor T1. | Applicable to aircraft type HS 125. Compliance required by 1 December 1970. |
| 1426 PRE 80 | Rotax (Now Lucas Aerospace) SB 24–370 | *Electrical Power* – Under voltage unit U3610 – Replacement of Transistors T1 and T2 – Deletion of resistor R10. | Applicable to VC 10. Compliance required by 1 September 1971. |
| 1427 PRE 80 | Rotax (Now Lucas Aerospace) SB 24–420 | *Electrical Power* – Static invertors U6705 and U6724 – Change of Resistors. | Applicable to Rotax U6705 and U6724 static invertors. Compliance required by 1 April 1972. |
| 1428 PRE 80 | Rotax (Now Lucas Aerospace) SB 24–516 | *Electrical Power* – Static invertors U6705/1 and U6724/1 – Change of Thyristers SCR1 and SCR2 to obviate possibility of failure in service due to high ambient temperatures. | Applicable to BAC 1-11 aircraft. Compliance required by 1 April 1974. |
| 1429 PRE 80 | Rotax (Now Lucas Aerospace) SB 24–589 | *Electrical Power* – Alternators Types N0503, N0505, N0509 and N0510 – Redesigned end housing assembly. | Applicable to all Rotax N0503, N0505, N0509 and N0510 alternators. Compliance required not later than 31 March 1977. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 1430 PRE 80 | – | Safety Belts Type M192 and M368 | Applicable to Rumbold safety belts type M192 and M368. The adjuster buckles should bear the stamped letter 'A'. This shows that the knurled bar has been inspected for freedom of movement within the buckle frame, and to ensure that the knurled bar can grip the belt evenly against the frame.<br><br>In addition the free end of the adjustable portion of the belt must have been increased in thickness to prevent withdrawal through the buckle. One method of doing this was by stitching into a pocket a length of 5/8" diameter wooden dowelling. Compressible material such as rope should not be used.<br><br>This information was previously circulated by means of Notice to Licensed Aircraft Engineers and to Owners of Civil Aircraft No. 41 (October 1953) which is now being cancelled. |
| 1431 PRE 80 | – | Passenger Safety Belts Type 2 | Applicable to Siebe Gorman passenger safety belts type 2 manufactured prior to 1 January 1952. Experience showed that where a heavy load was applied to the above belts, the buckle would pull down flat on the webbing. Extension pieces were added to the handle and secured by two rivets. Modified buckles were identified by stamping on the figures 37.<br><br>Safety belts of the above type still in use must be maintained in the modified condition. |
| 1432 PRE 80 | Smiths Industries SB 22–866 | *Auto-flight* – Servomotors – venting of clutch assembly. | Applicable to Viscount 700 Series. Compliance required during repair or overhaul. |
| 1433 PRE 80 | Smiths Industries SB 22–867 | *Auto-flight* – Servomotors – venting of clutch assembly. | Applicable to Viscount 800/810 Series. Compliance required during repair or overhaul. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 1434 PRE 80 | Smiths Industries SB 22–870 | *Auto-flight* – Servomotors – venting of clutch assembly. | Applicable to Vanguard/Merchantman aircraft. Compliance required during repair or overhaul. |
| 1435 PRE 80 | Smiths Industries SB 22–873 | *Auto-flight* – Servomotors – venting of clutch assembly. | Applicable to HS 748 Series 1 and 2. Compliance required during repair or overhaul. |
| 1436 PRE 80 | Smiths Industries SB 22–874 | *Auto-flight* – Servomotors – venting of clutch assembly. | Applicable to HS 748 Series 2. Compliance required during repair or overhaul. |
| 1437 PRE 80 | Sperry SB SPL 45/37 | *Computer actuator* – Improved torque limiting resistor board, actuator. | Applicable to Sperry Gyroscope Computer actuators Part Nos. 200615–0100, 200625–0100, 200636–0100, 200637–0100 and 200638–0100. |
| 1438 PRE 80 | Sperry SADAS 32 | Additional earth bonding, external to, and within, wire recorder unit, drive unit and cassette (Penny & Giles). Mod 12 (drive unit) Mod 10 (cassette). | Applicable to Sperry Gyroscope drive unit Part No. 206001–1004 (Penny & Giles DU 53000 BH/CA) not bearing the identification Mod 12.<br><br>Cassette, Part No. 206001–1005 (Penny & Giles CA 53000 BH/CA) not bearing the identification Mod 10.<br><br>Drive units and cassettes must be modified at their next overhaul or repair but not later than 31 March 1977. Service Bulletin Sadas 32 refers. |
| 1439 PRE 80 | Sunstrand Mod No. 18 | Flight Data Recorder Model FEB–542, Part No. 980–4003–XXX (100550–X) | Applicable to Sunstrand Data Control flight data recorder Model FEB-542. Modification No. 18 to be incorporated not later than 31 December 1976. Service Bulletin No. 46 refers. |
| 1440 PRE 80 | – | TKS Fluid H70 | Applicable to TKS de-icing systems. The use of this fluid is totally prohibited, and old stocks should have been destroyed. |
| | | TKS 328 Fluid<br>DTD Spec<br>406A Fluid | These fluids may be used and can be freely mixed in any proportions. |
| 1441 PRE 80 | Walter Kidde 26–100–7952 | Fire extinguisher Type LM $2\frac{1}{2}$ TSH – Modification to discharge horn. | Applicable to Walter Kidde fire extinguisher WKA 31600 fitted to Trident aircraft. Compliance required in Walter Kidde Service Bulletin No. 26–100–7952. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 1442 PRE 80 | Walter Kidde 25–109–8082 | Lifejacket inflation mechanism. | Applicable to Walter Kidde Miniflators used on RFD Lifejackets as detailed in Service Bulletin. Compliance required not later than next lifejacket overhaul, but not later than January 1981. |
| 1443 PRE 80 | Woodward Governor SB 33538 33539 | Propeller Governor drive shaft – Inspection/ replacement. When modified drive shaft identified with letter 'W' stamped on the drive end is fitted the shaft has a service life of 2000 hours and the 200 hours inspection is no longer required. | Applicable to Britten-Norman BN2A Islander Series and BN2 Mark III Trislander aircraft with propeller governor part numbers detailed in the Woodward Service Bulletins. Replacement shaft to be fitted at the earliest opportunity. In the interim, shafts must be inspected at intervals of 200 hours time in service. Britten-Norman SB No. BN–2/SB 53 also refers. |
| 1444 PRE 80 | BTH/CS 173 | BTH Feathering Switches Type XJ–D | Applicable to BTH feathering switches type XJ-D. Switches to be altered to minimum standard of XJ–D/3 because of electrical faults within the switch. |
| 1445 PRE 80 | – | Pyrene Smoke Detector Type PSDA1 – To be replaced with Type PSDAI/G4 in compartments where the possibility of contamination with flammable fluids exists. | Applicable to Pyrene smoke detector type PSDA1. The new smoke detector has been designed to obviate the possibility of igniting inflammable or explosive vapours. Electrical connections and fixing arrangements are identical. |
| 1446 PRE 80 | – | Allan turn rate indicator assembly Model RCA 80 | Applicable to Allan turn rate indicator assembly Model RCA 80. A label bearing the words 'No pitch information' shall be fitted adjacent to the face of the turn rate indicator assembly. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
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| 1447 PRE 80 | – | Brittain Turn Co-ordinator Model TC-100 | Applicable to Brittain turn co-ordinator Model TC-100. Where already fitted to aircraft, a label bearing the words 'No pitch information' must be fixed adjacent to the face of the Turn Co-ordinator.<br><br>If subsequently introduced into aircraft already fitted with an Horizon Gyro Unit the positioning of the Turn Co-ordinator should be such that it is the HGU which is the more dominant. The 'No pitch information' label must also be fitted adjacent to the Turn Co-ordinator. |
| 1448 PRE 80 | – | Mitchell Pictorial turn and bank indicators – Models 52D69 and 52D75. | Applicable to Mitchell Industries turn and bank indicators Models 52D69 and 52D75. A label bearing the words 'No pitch information' shall be fitted adjacent to the face of the pictorial turn and bank indicator. |
| 1449 PRE 80 | CAA Airworthiness Notice No. 41 | Maintenance of cockpit and cabin combustion type heaters and associated exhaust systems. | Compliance required as detailed in Airworthiness Notice. |
| 1451 PRE 80 | CAA Airworthiness Notice No. 76 | Power supply systems for aircraft radio stations. | Compliance required as detailed in Airworthiness Notice. |
| 1452 PRE 80 | CAA Airworthiness Notice No. 77 | Counter/Pointer altimeters. | Compliance required as detailed in Airworthiness Notice. |
| 1454 PRE 80 | CAA Airworthiness Notice No. 81 | Emergency power supply for electrically operated gyroscopic bank and pitch indicators (Artificial Horizons). | Compliance required as detailed in Airworthiness Notice. |
| 1455 PRE 80 | CAA Airworthiness Notice No. 83 | Fire Precautions – Aircraft toilets – Applicable to all aircraft over 5700 kg operating in the transport category (passenger). | Compliance required as detailed in Airworthiness Notice. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 1456 PRE 80 | CAA Airworthiness Notice No. 53 | Vertical speed indicators on imported aircraft. | Compliance required as detailed in Airworthiness Notice. |
| 003–07–80 | IPECO ASB A001–25–A6 | *Equipment/Furnishings* – Flight Compartment – Pilots/Co-pilots seats – Installation of forward stop blocks. | Applicable to B747 aircraft fitted with IPECO pilots seats Part No. 3A020–003 and –0015 and co-pilots seats Part No. 3A020–0004 and 0016. In accordance with IPECO Alert Service Bulletin, MODIFY by installing stop blocks Part No. 3A020–0371. |
| 009–07–80 | AP Precision Hydraulics 32–278 | *Landing Gear* – Main undercarriage leg – Inspection check for movement between axle and plunger tube and between plunger tube and gland bearing. | Applicable to all BN–2 and BN–2A aircraft fitted with main undercarriage legs Part Nos as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. PB–N Service Bulletin BN–2/SB.135 also refers and is referenced under this AD No in the PB–N Islander entry. |
| 055–07–80 | Dunlop 32–A925 | *Landing Gear* – Main Wheels – Failure in service. | Applicable to BAC/SNIAS Concorde Type 1 Variants 101 and 102 fitted with Dunlop Main Wheels Part Nos AH 53047, AHA1017 and AHA 1042. Compliance required as detailed in Service Bulletin. |
| 012–11–80 | Sperry Newsletter 23–1979–02 | *Navigation* – Prevention of erroneous presentation of glide slope information on STARS Flight Director Instrument System. | Applicable to all aircraft fitted with STARS Flight Director Instrument System RD–044 and RD–444 Glide Slope Flag/Pointer instrumentation. MODIFY in accordance with Sperry Newsletter within 100 flight hours or 60 days whichever is the sooner from the effective date of 1 January 1981. |
| 014–11–80 | Rumbold ASB 11001–25–1 | *Equipment/Furnishings* – Incorrect wiring of hot cup socket – Ident No. S.D.112. | Applicable to Boeing 747 freighter aircraft fitted with galley Part No. C 11001–001. Compliance required as detailed in Service Bulletin. |
| 034–12–80 | Bendix ASB M–4D–060 | *Auto-Pilot* – Inspection of Bendix Type Model M4(A,B,C,D) Autopilot System and YD–4 Yaw Damper System. | Applicable to all aircraft fitted with Bendix Type Model M4(A,B,C,D) Autopilot System. Compliance required as detailed in Service Bulletin. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 015–02–81 | C F Taylor SB DC 2825 | *Equipment/Furnishings* – Installation of spring-loaded flap above galley ice drawer areas. | Applicable to British Airways Boeing 737 aircraft, Galley 2 and Galley 6. Compliance required as detailed in Service Bulletin. |
| 017–05–81 | Dowty Rotol SB 83–331 | *Accessory Gear-boxes* – Input drive shaft and housing group – revised shaft assembly introduced. | Applicable to Accessory Gear-box Part Nos. as detailed in Service Bulletin associated with Dart-engine aircraft. Compliance required for Parts 1 and 2 at next over-haul after January 1966 unless Mod. GB2145 is incorporated. The embodiment of Mod. GB.2371 (S.B.83-384 refers) also satisfies the above Mandatory requirement if new components to Mod. GB.2371 standard are fitted or if conversion of Mod. GB.2300 standard equipment has been carried out as per Mod. GB.2371. |
| 009–07–81 | Dunlop SB 32–A930 | *Landing Gear* – Brake units – Unapproved rotor segments. | Applicable to British Aerospace HS748 aircraft fitted with Dunlop Brake Units Part No. AH 51900 and AH 52765. Compliance required as detailed in Service Bulletin. |
| 012–12–81 | Metair SB 004 | *Equipment/Furnishings* – Improvement of Denting Mechanism for Metair Lifehatch Assemblies Part No. 01–42–1 and 01–42–2. | Applicable to Sikorsky S61N helicopters fitted with Metair Lifehatch Assemblies Part No. 01–42–1 and 01–42–2 as part of Metair Major Modification No. 020. MODIFY in accordance with Service Bulletin no later than 31 January 1982. |
| 013–12–81 | Metair SB 005 | *Equipment/Furnishings* – Alteration of Lifehatch Control Box. Installation Part No. 01–41–1 and 01–42–2. | Applicable to Sikorsky S61N helicopters fitted with Metair Control Box Assemblies Part No. 71–26 as part of Metair Major Modification No. 020. MODIFY in accordance with Service Bulletin no later than 1 January 1982. |
| 015–03–82 | R F D Inflatables SB 25.38 | *Equipment/Furnishings* – Lifejacket Type 72 (Infant) MK 3 – Waistbelt webbing strength check. | Applicable to all RFD Type 72 (Infant) MK 3 lifejackets Serial No. 10475 and subsequent installed on aircraft and held in stores. INSPECT in accordance with Service Bulletin not later than 1 October 1982. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 002–07–82 | – | Auto-Pilot – 2 and 3 axis autopilot electrical systems modification. | Applicable to all aircraft having a maximum certificated weight not exceeding 5700 kg fitted with a 2 or 3 axis electrically controlled autopilot. Not later than 30 November 1982 INSPECT autopilot circuit for the provision of two independent means for disconnection of the autopilot. Where found necessary MODIFY not later than 1 APRIL 1983 to provide at least two independent means, readily accessible to the pilot, to ensure that the autopilot can be disconnected from the power supply under all flight conditions.<br>Notes (i) Modifications must be submitted to the CAA for approval before incorporation.<br>(ii) In some instances amendment may be required to the Flight Manual or Pilots Notes. |
| 011–10–82 | Teleflex Morse SB 25–00–185429 Issue 2 | *Equipment/Furnishing* – Inertia Reel Assemblies – Conversion of D 73766 and D 73766/001 Inertia Reel Assemblies to D 73766/002 Standard. | Applicable to all aircraft fitted with Teleflex Morse D 73766 or D 73766/001 Inertia Reel Assemblies. Compliance required as detailed in Service Bulletin at the next normal maintenance period but not later than 30 September 1984. |
| 001–04–83 | Irvin Great Britain SB No. 2 | Replacement of 'two-action' release system by a 'single action'. | Applicable to Irvin Aircrew Safety Harness Type AH6/6. Compliance required as detailed in Service Bulletin (Irvin Mod. No. CA117). |
| 005–07–83 | IPECO Europe SB No A001–25–11 | *Flight Compartment* – Pilot/Co-pilot seats and floor rail. Seat Model OA–020–0007/8. Floor Rail P/No 1A–020–0387/8. | Applicable to Boeing 747 aircraft fitted with IPECO seats as detailed, where the floor rails have Air France modification AEB AF 25–522 incorporated. Compliance required as detailed in Service Bulletin. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 003–09–83 | Dowty Rotol SB 32–17SD | Main and nose undercarriage – Lifing of units and component details. | Applicable to Short SD3–60 aircraft. Compliance required as detailed in Service Bulletin. NOTE: Dowty Rotol Service Bulletin 32–17SD supersedes Service Bulletin 32–6SD which was previously recorded against this AD number. |
| 004–09–83 | Dowty Rotol SB 32–4SD | Nose undercarriage – Introduction of new main fitting. | Cancelled and superseded by CAA AD No. 017–11–83. See Short SD 3–60 entry. |
| 005–09–83 | Dowty Rotol SB 32–3SD | Nose undercarriage – Steering actuator – Introduction of larger diameter attachment screws. | Cancelled and superseded by CAA AD No. 016–11–83. See Short SD 3–60 entry. |
| 006–09–83 | Henshall & Sons SB 105 | *Equipment/Furnishings* – To modify galley drawer slide mechanism. | Applicable to all aircraft equipped with Henshall galleys having drawers fitted with 'Widney' slides (type 5012TN) and positioned in area of emergency exits or escape routes. MODIFY in accordance with Service Bulletin not later than 1 March 1984. |
| 001–12–83 | Aircraft Furnishing International SB–25–100 | *Equipment/Furnishings* – Replacement of three floor studs on supernumerary seat unit type 5004. | Applicable to all aircraft equipped with Aircraft Furnishing International subject seat units. MODIFY in accordance with Service Bulletin not later than 18 December 1983. |
| 007–01–84 | RFD SB 25–33 | *Equipment/Furnishings* – Pressure test of polyurethene coated life-jackets. | Applicable to RFD Type 102 Mk. 1 and 1B, Mk. 2, 2A, 2B and 2BA (Adult and Crew), Type 105 Mk. 1 (Infant) manufactured before March 1980. Compliance in accordance with Service Bulletin. |
| 010–01–84 | Dunlop SB 32–A952 | *Equipment/Furnishings* – Main wheel Retread Tyres – Removed from Service. | Applicable to Part Nos. DR 7545T and DR 7546T fitted to BAC 1–11 Series 500 aircraft which were retreaded by Dunlop UK in the period July to September 1983. Compliance in accordance with Service Bulletin. |
| 004–06–84 | AP Precision Hydraulics SB 32–278 | *Landing Gear* – Main undercarriage leg – Inspection for axle movement. | Cancelled, see AD 009–07–80 in this Section and in the PB–N Islander entry. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 009–02–85 | Dowty Rotol SB 32–29SD | *Landing Gear* – Nose undercarriage – Introduction of new locking bolt for shock absorber pin. | Applicable to Short SD3–60 aircraft. Compliance as detailed in Service Bulletin. |
| 010–03–85 | Dowty Rotol SB 32–26SD | *Landing Gear* – Nose undercarriage – Inspection of main fitting. | Applicable to Short SD3–60. Compliance as detailed in Service Bulletin. |
| 011–03–85 | Dunlop SB 30–92 | *Ice and Rain Protection* – Windscreen Wiper Equipment – Inspection and modification of actuating arm at attachment point. | Applicable to HS 748 aircraft. Compliance as detailed in Service Bulletin. |
| 016–04–85 | Ipeco Europe SB A001–25–15 | *Equipment/Furnishings* – Pilot/Co-Pilot Seat – Height adjustment mechanism – inspection of heightlock pins. | Applicable to all aircraft equipped with Ipeco subject seat part numbers detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. |
| 017–04–85 | Ipeco Europe SB A001–25–16 | *Equipment/Furnishings* – Pilot/Co-Pilot Seat – Height adjustment mechanism – inspection of heightlock pins. | Applicable to all aircraft equipped with Ipeco subject seat part numbers detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. |
| 018–04–85 | Ipeco Europe SB A001–25–17 | *Equipment/Furnishings* – Pilot/Co-Pilot Seat – Height adjustment mechanism – inspection of heightlock pins. | Applicable to all aircraft equipped with Ipeco subject seat part numbers detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. |
| 019–04–85 | Ipeco Europe SB A001–25–18 | *Equipment/Furnishings* – Pilot/Co-Pilot Seat – Height adjustment mechanism – inspection of heightlock pins. | Applicable to all aircraft equipped with Ipeco subject seat part numbers detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. |
| 020–04–85 | Ipeco Europe SB A001–25–19 | *Equipment/Furnishings* – Pilot/Co-Pilot Seat – Height adjustment mechanism – inspection of heightlock pins. | Applicable to all aircraft equipped with Ipeco subject seat part numbers detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. |
| 007–05–85 | Dowty Rotol SB 32–10SD | *Landing Gear* – Main undercarriage – modification to actuator end fittings. | AD cancelled. Service Bulletin now recommended. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 005–12–85 | Fairey Hydraulics SB 32–4 | *Landing Gear* – Inspection of main undercarriage upper torque link attachment lugs on Fairey Hydraulics Ltd., Part No. 3499HI units. | Applicable to all BN–2A, BN–2B and BN–2T Series aircraft fitted with Fairey Hydraulics main undercarriage units. Compliance required as detailed in Service Bulletin. PB–N Service Bulletin BN–2/SB.170 also refers and is referenced under this AD No. in the PB–N Islander entry. |
| 005–03–86 | Fairey Hydraulics SB 32–7 | *Landing Gear* – Inspection of main undercarriage upper torque link attachment lugs on Fairey Hydraulics Ltd., Part No 3507 H1 units. | Applicable to all BN–2A Mark III Series Trislander aircraft fitted with Fairey Hydraulics main undercarriage units. Compliance required as detailed in Service Bulletin PB–N Service Bulletin BN–2/SB.173 also refers and is referenced under this AD No in the PB–N Trislander entry. |
| 004–05–86 | Dowty Rotol SB 32–45SD | *Landing Gear* – Nose undercarriage – Inspection of forward facing section of main fitting. | Applicable to Short SD3–60 aircraft. Compliance required as detailed in Service Bulletin. |
| 006–05–86 | Ipeco Europe SB A001–25–A22 SB A001–25–22 | *Equipment/Furnishings* – Pilot/Co-Pilot Seat – Inspection/ modification of the seat back disconnection mechanism. | Applicable to Aeritalia/Aerospatiale ATR 42 aircraft fitted with Ipeco Europe subject seat part numbers detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. |
| 010–07–86 | Dowty Rotol SB 32–152B | *Landing Gear* – Main undercarriage – Special instructions for life extension and continued structural integrity to 90,000 landings. | Applicable to Fokker F27 aircraft. Compliance required as detailed in Service Bulletin. |
| 011–07–86 | Dowty Rotol SB 32–154B | *Landing Gear* – Nose undercarriage – Special instructions for continued structural integrity and life extension of the axle and downlock block to 90,000 landings. | Applicable to Fokker F27 aircraft. Compliance required as detailed in Service Bulletin. |
| 004–10–86 | RFD Aviation SB 25–51 | *Equipment/Furnishings* – Inflatable liferaft Type 18R Mk 1 – Re-identification of $CO_2$ gas cylinders. | Applicable to all RFD liferafts Type 18R Mk 1. Compliance required as detailed in Service Bulletin. |
| 011–11–86 | Dowty Rotol SB 146–32–23 | *Landing Gear* – Main undercarriage – Non–destructive testing of the main fitting. | Applicable to BAe 146 aircraft as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. BAe Service Bulletin 32–73 also refers and is referenced under this AD No. in the British Aerospace 146 Series entry. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
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| 004–04–87 | AMC Industries SB/MB2/002 | *Equipment/Furnishings* – To introduce additional power control relay and Hi–temp thermal insulation tubing to electrical cables on Multi–Brewer electrical module. | Applicable to AMC Industries Multi–Brewer Coffee/Tea Maker MB201, MB201–2 and MB201–2A. Compliance required as detailed in Service Bulletin. |
| 012–07–87 | Dowty Rotol SB 32–161B | *Landing Gear* – Main undercarriage – Inspection of torque links. | Applicable to Fokker F27 Mks 100, 200, 300, 400, 600 and 700 aircraft. Compliance required as detailed in Service Bulletin. |
| 005–08–87 | Dowty Rotol SB 32–49SW | *Landing Gear* – Main undercarriage – Inspection of torque links. | Applicable to Fokker F27 Maritime aircraft. Compliance required as detailed in Service Bulletin. |
| 006–08–87 | Dowty Rotol SB 32–82S | *Landing Gear* – Main undercarriage – Inspection of torque links. | Applicable to Fokker F27 Mk. 500 aircraft. Compliance required as detailed in Service Bulletin. |
| 007–08–87 | RFD SB A25–53 | *Equipment/Furnishings* – Escape slide type AES 11D and AES 12C for BAe 1–11 aircraft – Attachment position check of break-out tie tapes. | Applicable to RFD escape slide Type AES 11D and AES 12C Serial Nos. as detailed in Alert Service Bulletin. Compliance required as detailed in Alert Service Bulletin. |
| 004–11–87 | Dowty Rotol SB 32–76S | *Landing Gear* – Main undercarriage –Special instructions for life extension and continued structural integrity to 90,000 landings. | Applicable to Fokker F27 Mk 500 aircraft. Compliance required as detailed in Service Bulletin. |
| 005–11–87 | Dowty Rotol SB 32–78S | *Landing Gear* – Nose undercarriage – Special instructions for life extension to 90,000 landings for limited components only. | Applicable to Fokker F27 Mk 500 aircraft. Compliance required as detailed in Service Bulletin. |
| 006–11–87 | Dowty Rotol SB 32–134R | *Landing Gear* – Main undercarriage – Special instructions for life extension to 90,000 landings. | Applicable to all Fokker F28 aircraft. Compliance required as detailed in Service Bulletin. |
| 007–11–87 | Dowty Rotol SB 32–141R | *Landing Gear* – Nose undercarriage – Special instructions for life extension to 90,000 landings. | Applicable to all Fokker F28 aircraft. Compliance required as detailed in Service Bulletin. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
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| 008–12–87 | Beaufort Air-Sea Equipment SB 078 | *Equipment/Furnishings* – Mk 28 Passenger Lifejacket Series 4 – Modification No 01/87 – To introduce operating handle c/w lanyard. | Applicable to all Beaufort Air-Sea Equipment Mk 28 Passenger Life-jackets Series 4 manufactured prior to October 1987. Compliance required as detailed in Service Bulletin. |
| 003–01–88 | L A Rumbold SB 25–155 | *Equipment/Furnishings* – Installation of mounting brackets on toilets S and T to facilitate attachment of Boeing fire seals. | Applicable to L A Rumbold toilet units being installed in Boeing 747 aircraft concurrent with CAA AD 015–01–87 (Boeing SB 747–25–2683). Compliance required as detailed in Rumbold Service Bulletin. |
| 004–02–88 | Dowty Rotol SB 32–65W | *Landing Gear* – Main undercarriage – Special instructions for continued structural integrity. | Applicable to Fokker F27 RFV aircraft. Compliance required as detailed in Service Bulletin. |
| 005–02–88 | Dowty Rotol SB 32–66W | *Landing Gear* – Nose undercarriage – Special instructions for continued structural integrity. | Applicable to Fokker F27 RFV aircraft. Compliance required as detailed in Service Bulletin. |
| 006–02–88 | Dowty Rotol SB 32–57SD | *Landing Gear* – Nose undercarriage – Security of abutment plate screws. | Applicable to SD3–60 aircraft as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. Short Service Bulletin SD360–32–28 also refers and is referenced under this AD No. in the Short SD3–60 entry. |
| 003–08–88 | Dowty Rotol SB 32–1S | *Landing Gear* – Lifing and inspection of main and nose undercarriage components. | Applicable to Fokker F27 Mk 500 aircraft. Compliance required as detailed in Service Bulletin. |
| 004–08–88 | Dowty Rotol SB 32–14B | *Landing Gear* – Lifing and inspection of nose and main undercarriage components. | Applicable to Fokker F27 Mks 100, 200, 300, 400, 600 and 700 aircraft. Compliance required as detailed in Service Bulletin. |
| 013–08–88 | Dowty Rotol SB 32–1W | *Landing Gear* – Lifing and inspection of nose and main undercarriage components. | Applicable to Fokker F27 RFV aircraft all Marks. Compliance required as detailed in Service Bulletin. |
| 006–09–88 | Metair SB 026/88 | *Equipment/Furnishings* – Tambour door as fitted to meal stowage and wardrobe unit. | Applicable to Metair wardrobe and stowage assy and meal box stowage assy fitted in DHC–7 aircraft. Compliance required as detailed in Service Bulletin not later than 1 November 1988. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
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| 009–11–88 | Dowty Rotol SB 146–32–84 | *Landing Gear* – Nose undercarriage – Improved locking arrangement of steering cuff ring nut. | Applicable to BAe 146 aircraft as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin not later than 30 April 1989. British Aerospace Service Bulletin 32–95–70409A also refers and is referenced under this AD No. in the British Aerospace 146 Series entry. |
| 058–12–88 | Caledonian Airborne Systems CAS/CPT 600/SB–01 | *Equipment/Furnishings* – Replacement of deployment battery Type SAFT CX6334, re–wiring of control panel Part No. 00–23–1065, and relocation of deployment battery and Submersion Actuator. | Applicable to aircraft fitted with the ADELT CPT 600 System. Compliance required as detailed in Service Bulletin not later than 31 March 1989. |
| 004–01–89 | Goodyear Technical Centre Luxembourg ASB 32–001 | *Landing Gear* – Premature removal of main landing gear tyres. | Applicable to aircraft fitted with Goodyear 32 x 8.8R16 10 pr tyres Part No. 328Q08G2 with serial dates above 8340Gxxx. Compliance required as detailed in Service Bulletin. |
| 005–01–89 | Aeroquip SB 002 R1 | Recall of Aeroquip 601 type hose. | Applicable to aircraft fitted with Aeroquip type 601 hose used in fuel or oil systems which have a manufacture date of April 1984 to May 1988. Compliance required as detailed in Service Bulletin. |
| 023–01–89 | GQ Parachutes SB 25–01 | *Equipment/Furnishings* – Check for presence of acid on net mesh panels. | Applicable to GQ Parachutes assemblies that embody the 4.8 m SAC canopy. Compliance required as detailed in Service Bulletin before next use of the parachute assemblies. |
| 024–01–89 | Dunlop Telex ASB 32–A1015 | *Landing Gear* – Main wheels – Increase in NDT coverage and frequency. | Applicable to BAC 1–11 aircraft fitted with Dunlop main wheels with brake side half hubs Part No. AH089379. Compliance required as detailed in Service Bulletin. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 006–02–89 | Dowty Rotol SB 200–32–01 | *Landing Gear* – Main landing gear – Shock absorber outer tube failure. | Applicable to BAe ATP aircraft. Compliance required as detailed in Service Bulletin. British Aerospace Service Bulletin ATP–32–4 also refers and is referenced under this AD No in the British Aerospace ATP Series Aircraft entry. |
| 007–02–89 | Dowty Rotol SB 32–77E | *Landing Gear* – Nose undercarriage – Lifing of component units and details. | Superseded by AD 009–02–93. |
| 008–02–89 | Dowty Rotol SB 32–1K | *Landing Gear* – Nose and main undercarriages – Lifing and inspection of components. | Applicable to Argosy AW 650 Series 200 aircraft fitted with nose and main undercarriage units as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. |
| 009–02–89 | Dowty Rotol SB 32–5K | *Landing Gear* – Main undercarriage jacks – To life the piston rod. | Applicable to Argosy AW 650 Series 200 aircraft fitted with main undercarriage jacks as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. |
| 010–02–89 | Dowty Rotol SB 32–39D | *Landing Gear* – Main undercarriage jacks – To life the piston rod. | Applicable to Argosy AW 650 Series 100 aircraft fitted with main undercarriage jacks as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. |
| 011–02–89 | Dowty Rotol SB 32–26D | *Landing Gear* – Nose and main undercarriage – Lifing and inspection of components. | Applicable to Argosy AW 650 Series 100 aircraft fitted with main undercarriage jacks as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. |
| 024–04–89 | Dowty Rotol SB 146–27–75 | *Flight Controls* – Flap system – Electronic control unit – Introduction of revised unit. | Applicable to BAe 146 aircraft. Compliance required as detailed in Service Bulletin not later than 31 July 1990. British Aerospace Service Bulletin 27–95–70420A also refers and is referenced under this AD No. in the British Aerospace 146 Series entry. |
| 022–05–89 | Metair SB S76–53–01 | *Equipment/Furnishings* – Underseat liferaft deployment system – Additional attachments to aircraft structure. | Applicable to Sikorsky S–76B helicopters serial numbers 760325, 760326, 760329 and 760336 fitted with Metair liferaft seat installation modification 081. Compliance required as detailed in Service Bulletin. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
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| 024–05–89 | Dowty Rotol SB 100–32–58 | *Landing Gear* – Main landing gear – retraction actuator – Improved locking of eye end. | Applicable to BAe ATP aircraft fitted with main landing gear retraction actuators as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. |
| 006–07–89 | Tungstone Energy Products SB M1–89 | *Electrical Power* – Loss of battery capacity. | Applicable to Gates Varley and Tungstone Energy Products sealed aircraft batteries as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. British Aerospace Service Bulletin 24–57 also refers and is referenced under this AD No. in the British Aerospace 146 Series entry. |
| 012–08–89 | Ipeco Europe SB A001–25–42 | *Equipment/Furnishings* – Pilot and Co-Pilot crew seats – Modification to seat attachment. | Applicable to Ipeco Pilot and Co-Pilot crew seats Part Nos. 3A118–0003–01–1 and 3A118–0004–01–1 fitted on De Havilland DHC–7 and DHC–8 Series aircraft. Compliance required as detailed in Service Bulletin. |
| 013–08–89 | Dunlop SB 32–1020 | *Landing Gear* – Premature failure of main landing gear tyres Part No. DR25421T. | Applicable to Dunlop Mainwheel Tyres H34.5x12–14 Part No. DR25421T fitted on BAe ATP aircraft. Compliance required as detailed in Service Bulletin. |
| 015–08–89 | Ipeco Europe SB A001–25–29 | *Equipment/Furnishings* – Pilot and Co-Pilot crew seats – Seat back structure strengthening modification. | Applicable to Ipeco Pilot and Co-Pilot crew seats Part Nos. 3A090–0021–01–2, 3A090–0021–02–2, 3A090–0022–01–2 and 3A090–0022–02–2 up to and including seat serial no. 11009 fitted on Boeing 737 Series aircraft. Compliance required as detailed in Service Bulletin not later than 1 October 1989. |
| 016–08–89 | Ipeco Europe SB A001–25–30 | *Equipment/Furnishings* – Pilot and Co-Pilot crew seats – Seat back structure strengthening modification. | Applicable to Ipeco Pilot and Co-Pilot crew seats Part Nos. 3A090–0019–01–1 and 3A090–0020–01–1 up to and including seat serial no. 11115 fitted on Boeing 737 Series aircraft. Compliance required as detailed in Service Bulletin not later than 1 October 1989. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
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| 017–08–89 | Ipeco Europe SB A001–25–31 | *Equipment/Furnishings* – Pilot and Co-Pilot crew seats – Seat back structure strengthening modification. | Applicable to Ipeco Pilot and Co-Pilot crew seats Part Nos. 3A090–0015–01–1 and 3A090–0016–01–1 up to and including seat serial no. 11143 fitted on Boeing 757 and 767 Series aircraft. Compliance required as detailed in Service Bulletin not later than 1 October 1989. |
| 018–08–89 | Ipeco Europe SB A001–25–32 | *Equipment/Furnishings* – Pilot and Co-Pilot crew seats – Seat back structure strengthening modification. | Applicable to Ipeco Pilot and Co-Pilot crew seats Part Nos. 3A090–0025–01–1 and 3A090–0026–01–1 up to and including seat serial no. 11054 fitted on Boeing 757 and 767 Series aircraft. Compliance required as detailed in Service Bulletin not later than 1 October 1989. |
| 019–08–89 | Ipeco Europe SB A001–25–33 | *Equipment/Furnishings* – Pilot and Co–Pilot crew seats – Seat back structure strengthening modification. | Applicable to Ipeco Pilot and Co–Pilot crew seats Part Nos. 3A090–0053–01–1 and 3A090–0054–01–1 up to and including seat serial no. 11105 fitted on Boeing 747–400 Series aircraft. Compliance required as detailed in Service Bulletin not later than 1 October 1989. |
| 020–08–89 | Ipeco Europe SB A001–25–34 | *Equipment/Furnishings* – Pilot and Co–Pilot crew seats – Seat back structure strengthening modification. | Applicable to Ipeco Pilot and Co–Pilot crew seats Part Nos. 3A090–0027–01–1 and 3A090–0028–01–1 up to and including seat serial no. 11072 fitted on Boeing 747 Series aircraft. Compliance required as detailed in Service Bulletin not later than 1 October 1989. |
| 021–08–89 | Ipeco Europe SB A001–25–35 | *Equipment/Furnishings* – Observer crew seat – Seat back structure strengthening modification. | Applicable to Ipeco Observer crew seat. Part No. 3A102–0003–01–1 up to and including seat serial no. 11041 fitted on Boeing 747–400 Series aircraft. Compliance required as detailed in Service Bulletin not later than 1 October 1989. |
| 022–08–89 | Ipeco Europe SB A001–25–36 | *Equipment/Furnishings* – Pilot and Co–Pilot crew seats – Seat back structure strengthening modification. | Applicable to Ipeco Pilot and Co–Pilot crew seats Part Nos. 3A090–0055–01–1 and 3A090–0056–01–1 up to and including seat serial no. 11062 fitted on Boeing 747–400 Series aircraft. Compliance required as detailed in Service Bulletin not later than 1 October 1989. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
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| 023–08–89 | Ipeco Europe SB A001–25–37 | *Equipment/Furnishings* – Observer crew seat – Seat back structure strengthening modification. | Applicable to Ipeco Observer crew seat. Part No. 3A103–0003–01–1 up to and including seat serial no. 10607 fitted on Boeing 747–400 Series aircraft. Compliance required as detailed in Service Bulletin not later than 1 October 1989. |
| 024–08–89 | Ipeco Europe SB A001–25–38 | *Equipment/Furnishings* – Pilot and Co–Pilot crew seats – Seat back structure strengthening modification. | Applicable to Ipeco Pilot and Co–Pilot crew seats Part Nos. 3A090–0017–01–1 and 3A090–0018–01–1 up to and including seat serial no. 10100 fitted on Boeing 747 Series aircraft. Compliance required as detailed in Service Bulletin not later than 1 October 1989. |
| 025–08–89 | Ipeco Europe SB A001–25–39 | *Equipment/Furnishings* – Pilot and Co–Pilot crew seats – Seat back structure strengthening modification. | Applicable to Ipeco Pilot and Co–Pilot crew seats Part Nos. 3A090–0065–01–1 and 3A090–0066–01–1 up to and including seat serial no. 11635 fitted on Boeing 747–400 Series aircraft. Compliance required as detailed in Service Bulletin not later than 1 October 1989. |
| 026–08–89 | Ipeco Europe SB A001–25–40 | *Equipment/Furnishings* – Pilot and Co–Pilot crew seats – Seat back structure strengthening modification. | Applicable to Ipeco Pilot and Co–Pilot crew seats Part Nos. 3A118–0003–01–1 and 3A118–0004–01–1 up to and including seat serial no. 11580 fitted on De Havilland DHC–7 and DHC–8 Series aircraft. Compliance required as detailed in Service Bulletin not later than 1 October 1989. |
| 004–11–89 | Dowty Rotol SB 32–10–25SB | *Landing Gear* – Main undercarriage – Eddy current inspection of upper toggle link. | Applicable to Dart Herald aircraft. Compliance required as detailed in Service Bulletin. Dart Herald (Support) Service Bulletin 32–1600 SB also refers and is referenced under this AD No. in the Handley Page Herald entry. |
| 017–02–90 | Dowty Rotol SB 200–32–104 | *Landing Gear* – Main landing gear – Oversize axle washers. | Applicable to BAe ATP aircraft fitted with main landing gear units Type Nos. 201045001/002/003. Compliance required as detailed in Service Bulletin. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
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| 018–02–90 | Dowty Rotol SB 200–32–82 | *Landing Gear* – Main landing gear – Ultrasonic inspection of the main fitting. | Applicable to BAe ATP aircraft fitted with main landing gear units Type Nos. 201045001/002/003. Compliance required as detailed in Service Bulletin. |
| 015–03–90 | Flight Equipment and Engineering SB A25–20–1082 | *Equipment/Furnishings* – Inspection and repair of the cross member and pivot bush housing on the 84 and 90 series back assembly. | Applicable to Flight Equipment and Engineering passenger seats Type 84 and 90. Compliance required as detailed in Service Bulletin. |
| 019–04–90 | Fairey Hydraulics SB 32–8 | *Landing Gear* – Main landing gear assembly 3507 H2 – Safe life of link pin 46043. | Applicable to Fairey Hydraulics main landing gear assembly 3507 H2 fitted to Pilatus Britten–Norman Trislander aircraft. Compliance required as detailed in Service Bulletin. |
| 020–04–90 | Fairey Hydraulics SB 32–9 | *Landing Gear* – Main undercarriage leg assembly 3507 H1 and H2 – Safe life of upper and lower link assemblies Part Nos. 46037 and 49065. | Applicable to Fairey Hydraulics main undercarriage leg assembly 3507 H1 and H2 fitted to Pilatus Britten-Norman Trislander aircraft. |
| 012–05–90 | Morse Controls SB 27–00–183136 | *Flight Controls* – Recall of cable tension regulator assembly, Part No. 183136 used on Fokker F50 aircraft. | Applicable to Morse Controls cable tension regulator assemblies Part No. 183136 – Serial Nos. 148/90 through to 165/90 inclusive. Compliance required as detailed in Service Bulletin. |
| 013–05–90 | Morse Controls SB 27–00–72840 | *Flight Controls* – Recall of regular brake unit assembly, Part No. 72840 – Used on regulator. Part No. 72021 for Fokker F27 aircraft. | Applicable to Morse Controls brake unit Part No. 72840, issue 4E, released on JAA Form 1 certification number C2560. Compliance required as detailed in Service Bulletin. |
| 020–06–90 | Dowty Aerospace Gloucester SB 146–32–93 | *Landing Gear* – Main landing gear – Lock jack – Inspection for hydraulic fluid leakage through body. | Applicable to BAe 146 aircraft fitted with lock jack Type Nos. 104275001 Serial Nos. as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. |
| 008–07–90 | Dunlop SB AHA1578/ AHA1684/ AHA1685–32–1039 | *Landing Gear* – Fan and transducer installation – Replacement of transducer drive components and introduction of a finite life. | Applicable to Dunlop fan and transducer installation Part Nos. AHA1578, AHA1684 and AHA1685 fitted to British Aerospace BAe 146 aircraft. Compliance required as detailed in Service Bulletin. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
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| 001–08–90 | Dunlop SB 32–1044 | *Landing Gear* – Replacement of main wheel tyres Part No. DR19922T with new Part No. DR19924T. | Applicable to Dunlop new and retreaded main wheel tyres 37 x 11.75–16 12 ply rating.Part No. DR19922T fitted to Short SD3–60 Series 300; plus aircraft Serial Nos. SH3708, SH3712, SH3713, SH3714 and SH3715. Compliance required as detailed in Service Bulletin. |
| 007–08–90 | Dowty Rotol SB 32–11E | *Landing Gear* – Steering jack – Cylinder – Inspection for cracks. | Applicable to HS 748 aircraft fitted with steering jacks Type Nos. 100574001 and 100574002. Compliance required as detailed in Service Bulletin. |
| 008–08–90 | Dowty Rotol SB 32–18E | *Landing Gear* – Main undercarriage radius rod – To life the radius rod tubes. | Superseded by AD 009–02–93. |
| 009–08–90 | Dowty Rotol SB 32–37E | *Landing Gear* – Main undercarriage crossbeam and radius rod – Lifing of radius rod sub-assembly. | Superseded by AD 009–02–93. |
| 010–08–90 | Dowty Rotol SB 32–44E | *Landing Gear* – Main undercarriage crossbeam and radius rod unit – Lifing of attachment pin. | Superseded by AD 009–02–93. |
| 011–08–90 | Dowty Rotol SB 32–46E | *Landing Gear* – Main undercarriage crossbeam and radius rods unit – Lifing of retraction pin. | Superseded by AD 009–02–93. |
| 012–08–90 | Dowty Rotol SB 32–60E | *Landing Gear* – Main undercarriage – Revision of modification of crossbeam attachment pin. | Applicable to HS 748 aircraft fitted with main undercarriage unit Type Nos. 200140005 Issue 9 or previous. Compliance required as detailed in Service Bulletin. |
| 013–08–90 | Dowty Rotol SB 32–73E | *Landing Gear* – Main undercarriage – Lifing of components units and details. | Superseded by AD 009–02–93. |
| 001–09–90 | Lucas Aerospace SB C5114–80–8 | *Starting* – Starter motor – Visual inspection of securing nuts and locking tab washer used to secure the motor section to clutch housing. | Applicable to BAe ATP aircraft fitted with Lucas Aerospace starter motors, C5114–04, –05, –07 and –08. Compliance required as detailed in Service Bulletin. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
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| 002–09–90 | RFD<br>SB 25–63 | *Equipment/Furnishings* – Escape slides and escape slide/rafts for Concorde series aircraft. | Applicable to BAe Concorde aircraft fitted with RFD escape slides and slides/rafts Type AES/R29B, AES29C, AES/R30C, AES/R30D, AES/R31C, AES/R31D, AES39B, AES39C, AES40B and AES40C. Compliance required as detailed in Service Bulletin. BAe Service Bulletin 25–079 also refers and is referenced under this AD No. in the BAC/SNIAS Concorde entry. |
| 009–09–90 | RFD<br>SB 25–65 | *Equipment/Furnishings* – Escape slides and escape slide/rafts for Concorde series aircraft. | Applicable to BAe Concorde aircraft fitted with RFD escape slides and slides/rafts Type AES28B, AES/R29B, AES/R30C, AES/R31C. Compliance required as detailed in Service Bulletin. BAe Service Bulletin 25–080 also refers and is referenced under this AD No. in the BAe/SNIAS Concorde entry. |
| 012–09–90 | Lucas Aerospace<br>SB C5114–80–10<br>SB C5120–80–1 | *Starting* – Starter motor – Visual inspection of securing nuts and locking tab washer used to secure the motor section to the clutch housing. | Superseded by AD 016–11–90. |
| 014–09–90 | Dunlop Aviation Division<br>SB 29–175 | *Hydraulic Power* – Hydraulic accumulator – Revised inspection periods and procedures. | Applicable to HS 748 aircraft fitted with Dunlop accumulator body Part No. ACM18030 part of hydraulic accumulator Part No. AC14040. Compliance required as detailed in Service Bulletin. |
| 003–10–90 | Dunlop Aviation Division<br>SB 32–1032 | *Landing Gear* – Main wheel – Inspection of wheel bearing grease retainers at each wheel removal. | Applicable to BAe ATP aircraft fitted with Dunlop main wheels Part No. AHA1538 and AHA1663. Compliance required as detailed in Service Bulletin. |
| 006–10–90 | Dowty Aerospace Gloucester<br>SB 100–32–81 | *Landing Gear* – Nose landing gear – Retraction actuator – Security of ring nut locking. | Applicable to BAe ATP aircraft fitted with retraction actuator Type No. 114140002. Compliance required as detailed in Service Bulletin. |
| 016–10–90 | Dowty Aerospace Gloucester<br>SB 32–101E | *Landing Gear* – Nose landing gear – Retraction jack – Security of ring nut locking. | Applicable to HS 748 aircraft fitted with retraction jack Type Nos. J5090, 103011010 and 103011011. Compliance required as detailed in Service Bulletin. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
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| 018–10–90 | Fire Fighting Enterprises SB A26–106 | *Fire Protection* – Cabin portable fire extinguishers – Discharge head assembly – Installation of new safety catch. | Applicable to Halon and Water Glycol portable fire extinguishers as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. |
| 020–10–90 | Dowty Aerospace Gloucester SB 32–53SW | *Landing Gear* – Main undercarriage – Upper member – Inspection at intersection of the side face and the cross bore. | Applicable to Fokker F27 maritime and civil Mk 200 aircraft Serial Nos 10670, 10673, 10674 and 10675 fitted with main undercarriage upper member Part No 200463001 (including 200463301). Compliance required as detailed in Service Bulletin. |
| 021–10–90 | Dowty Aerospace Gloucester SB 32–73W | *Landing Gear* – Main undercarriage – Upper member – Inspection at intersection of the side face and the cross bore. | Applicable to Fokker F27 RFV aircraft fitted with main undercarriage upper member Part Nos 200567001, 200680001 and 200680002. Compliance required as detailed in Service Bulletin. |
| 022–10–90 | Dowty Aerospace Gloucester SB 32–86S | *Landing Gear* – Main undercarriage – Upper member – Inspection at intersection of the side face and the cross bore. | Applicable to Fokker F27 Mk 500 aircraft fitted with main undercarriage upper member Part No 200463001 (including 200463301). Compliance required as detailed in Service Bulletin. |
| 023–10–90 | Dowty Aerospace Gloucester SB 32–165B | *Landing Gear* – Main undercarriage – Upper member – Inspection at intersection of the side face and the cross bore. | Applicable to Fokker F27 Mk 100, 200, 300, 400, 600 and 700 aircraft fitted with main undercarriage upper member Part Nos 09054YA01 and 200251001 (including 200251300 and 200251301). Compliance required as detailed in Service Bulletin. |
| 009–11–90 | GEC Sensors SB 15504–23–14 | *Communications* – AD1550 control communication system central audio unit AA15504–1, –2, –3, –11, –12 and –13 station selector boards – Capacitor removal. | Applicable to GEC Sensors central audio unit types AA15504–1, –2, –3 station selector board A21–5505–01 and AA15504–11, –12, –13 station selector board A21–5505–02. Compliance required as detailed in Service Bulletin. |
| 011–11–90 | Dowty Aerospace Gloucester SB 200–32–137 | *Landing Gear* – Main landing gear – Introduction of new axle washer and new axle nut. | Applicable to BAe ATP aircraft fitted with main landing gear Part Nos 201045001, 201045002, 201045003 and 201045004. Compliance required as detailed in Service Bulletin. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
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| 016–11–90 | Lucas Aerospace<br>SB C5114–80–A11<br>SB C5120–80–A2 | *Starting* – Starter motor – Introduction of bolts and washers to secure the motor section to the clutch housing. | Applicable to Fokker F27 Mk 050 aircraft fitted with Lucas starter motors C5114–05, C5114–07 and C5120–1. Compliance required as detailed in Service Bulletins.<br><br>Compliance with this Directive supersedes the requirements of CAA AD 012–09–90. |
| 019–11–90 | Lucas Aerospace<br>SB C5114–80–A9 | *Starting* – Starter motor – Introduction of bolts and washers to secure the motor section to the clutch housing. | Applicable to BAe ATP aircraft fitted with Lucas starter motors C5114–04, –05, –07 and –08. Compliance required as detailed in Service Bulletin. Compliance with this Directive supersedes the requirements of CAA AD 001–09–90. |
| 020–11–90 | Smith Industries<br>SB 1205AM–34–756 | *Navigation* – Improved knobshaft and micro switch operation. | Applicable to BAe ATP aircraft fitted with Smiths Industries altimeter repeater unit Part No. 1205AM1. Compliance required as detailed in Service Bulletin. |
| 019–01–91 | Dunlop<br>SB 32–A1019 | *Landing Gear* – Main wheel – Premature failure of brake side half hubs. | Applicable to BAC 1–11 aircraft fitted with Dunlop Main Wheels fitted with brake side half hub Part No. AH089379. Compliance required as detailed in Service Bulletin. |
| 019–04–91 | AP Precision Hydraulics<br>SB AIR44880–29–01 | *Hydraulic Power* – Selector valve – Sticking plunger. | Applicable to BAe HS 748, Andover and ATP aircraft fitted with AP Precision Hydraulics selector valve Part Nos. AIR44880 and AIR44882. Compliance required as detailed in Service Bulletin. |
| 022–04–91 | Ipeco Europe<br>SB A001–25–60 | *Equipment/Furnishings* – Observer crew seat – Installation of finger guards. | Applicable to Ipeco Observer crew seats Part No. 3A102–0003–01–1 up to and including seat serial No. 17096, fitted on Boeing 747–400 series aircraft. Compliance required as detailed in Service Bulletin not later than 1 October 1991. |
| 023–04–91 | Ipeco Europe<br>SB A001–25–61 | *Equipment/Furnishings* – Observer crew seat – Installation of finger guards. | Applicable to Ipeco Observer crew seats Part No. 3A160–0007–01–1 fitted on Boeing 747–400 series aircraft. Compliance required as detailed in Service Bulletin not later than 1 October 1991. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
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| 011–05–91 | Dowty Aerospace Gloucester SB 32–54D | *Landing Gear* – Nose undercarriage – Inspection of axle. | Applicable to Dowty Aerospace Gloucester nose undercarriage as detailed in Service Bulletin fitted to AW650 Argosy Series 100 aircraft. Compliance required as detailed in Service Bulletin. |
| 012–05–91 | Dowty Aerospace Gloucester SB 32–20K | *Landing Gear* – Nose undercarriage – Inspection of axle. | Applicable to Dowty Aerospace Gloucester nose undercarriage as detailed in Service Bulletin fitted to AW650 Argosy Series 200 aircraft. Compliance required as detailed in Service Bulletin. |
| 013–05–91 | Dunlop-Beaufort SB 111 | *Equipment/Furnishings* – Routing of the harness. | Applicable to Dunlop-Beaufort Mk. 28 lifejacket Series 1–4 inclusive. Compliance required as detailed in Service Bulletin. |
| 014–05–91 | Dunlop-Beaufort SB 112 | Security of knots in synthetic cordage. | Applicable to Dunlop-Beaufort, Beaufort Air-Sea and Dunlop Marine equipment. Compliance required as detailed in Service Bulletin. |
| 021–06–91 | Dunlop-Beaufort SB 113 | *Equipment/Furnishings* – Flake folding of inflatable stole. | Applicable to Dunlop-Beaufort Mk. 28 lifejacket Series 1–4 inclusive. Compliance required as detailed in Service Bulletin. |
| 022–06–91 | Dunlop SB 32–1033 | *Landing Gear* – Brake unit – Introduction of a service life of 10,000 landings to torque plates AHA 1650 and 14,500 landings to torque plates AHA 1777. | Applicable to Dunlop brake units Part No. AHA 1612 incorporating torque plate Part Nos. AHA 1650 and AHA 1777. Compliance required as detailed in Service Bulletin. |
| 023–06–91 | Dowty Aerospace Gloucester SB 32–161R | *Landing Gear* – Main landing gear – Inspection of main fitting sub-assembly. | Applicable to Fokker F28 series aircraft fitted with main undercarriage as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. |
| 012–10–91 | Sabre Safety AAV ASB02/91 | *Oxygen* – Portable oxygen cylinders – Modification. | Applicable to Sabre AAV120 portable oxygen cylinders Part No. 708.021.00. Compliance required as detailed in Alert Service Bulletin. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
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| 009–11–91 | – | *Equipment/Furnishings* – Removal from service of safety belt assemblies which do not have a metal to metal latching device. | Applicable to aircraft fitted with safety belt assemblies which do not have a metal to metal latching device. Compliance is required not later than one year from the effective date of this Directive which is 16 December 1991. Replace safety belt assemblies which do not have a metal to metal latching device with a type approved by the CAA which have a metal to metal latching device. |
| 010–11–91 | RFD SB 25–67 | *Equipment/Furnishings* Part A: To provide improved location for bridle line Part B: Requirement for check of hole size in valise for firing line. | Applicable to RFD liferafts Type 46RA Mk. 1 as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. |
| 009–01–92 | Lucas Aerospace SB BA03303–24–2 | *Electrical Power* – AC generator BA03303 – Inspection of generator outlet oil filter at stipulated intervals. | Applicable to all Lucas Aerospace BA03303 AC generators in service on BAe ATP aircraft. Compliance required as detailed in Service Bulletin. |
| 005–04–92 | Flight Equipment and Engineering ASB A25–20–1232 | *Equipment/Furnishings* – Visual inspection of passenger seats type 111/115 series aisle sections for cracking. | Applicable to Flight Equipment and Engineering Passenger seats type 111 and 115. Compliance is required as detailed in Alert Service Bulletin. |
| 006–04–92 | Dunlop-Beaufort SB 122 | *Equipment/Furnishings* – To introduce new lifejacket stole. | This Service Bulletin has been withdrawn with the agreement of the CAA. The AD is therefore cancelled. |
| 010–06–92 | Lucas Aerospace SB BA03303–24–3 | *Electrical Power* – BA03303 AC Generator – Introduction of replacement bolts to secure endplate assembly. | Applicable to Lucas Aerospace BA03303 AC Generators in service on the BAe ATP aircraft. Compliance is required as detailed in Service Bulletin. |
| 004–09–92 | Fire Fighting Enterprises SB 26–108 | *Fire Protection* – Cabin portable fire extinguishers – Discharge head assembly – Installation of new trigger. | Applicable to FFE Halon 1211 and Water Glycol portable fire extinguishers as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. |
| 001–02–93 | RFD SB 25–69 | *Equipment/Furnishings* – To introduce precautionary check for correct location of bridge pieces installed inside the main buoyancy tubes adjacent to the transfer valves. | Applicable to RFD liferafts Type 10R Mk. 1, SAR 10R Mk. 1 and 14R Mk. 1. Compliance required as detailed in Service Bulletin. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
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| 009–02–93 | Dowty Aerospace Landing Gear SB 32–104E | *Landing Gear* – Main/Nose undercarriages and associated equipment – Component safe life limitations. | Applicable to BAe HS 748 Series aircraft fitted with main/nose undercarriage and associated equipment as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. |
| 006–03–93 | Flight Equipment and Engineering SB 25–20–1287 | *Equipment/Furnishings* – Passenger compartment – Inspection and where necessary replacement of aisle section. | Applicable to Flight Equipment and Engineering passenger seat Model 121 Type Elete Part numbers as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. |
| 011–03–93 | AP Precision Hydraulics SB AIR 44880–29–02 | *Hydraulic Power* – Selector valve – New alternative selector valves part number AIR46658–0 and AIR 46660–0 are introduced in lieu of part number AIR44880–5 and AIR44882–6 respectively. | Applicable to BAe ATP aircraft fitted with AP Precision Hydraulics selector valve part numbers AIR44880–5 and AIR44882–6.Compliance required as detailed in Service Bulletin. |
| 017–03–93 | Flight Equipment and Engineering SB 25–20–1294 | *Equipment/Furnishings* – Replacement of passenger seat type 121 inboard sections. | Applicable to Flight Equipment and Engineering passenger seats type 121. Compliance required as detailed in Service Bulletin. |
| 008–04–93 | Dunlop-Beaufort SB 131 | *Equipment/Furnishings* – Retrofit modification of the Mk 28 inflatable lifejacket to Mk 28A standard. | Applicable to Dunlop-Beaufort Ltd Mk 28 lifejackets. Compliance required as detailed in Service Bulletin. Modification of the Mk28 lifejacket to the Mk28WB standard as defined in Appendix 5 of Dunlop Beaufort Maintenance Manual 25–60–47 Issue Dec 3/94, is acceptable as an alternative means of compliance to the requirements of SB 131. |
| 009–11–93 | Dunlop Limited Aviation Division SB 32–1073 | *Landing Gear* – Brake unit – Possible incorrect torque loading and locking of thrust plate attachment bolts. | Applicable to BAC 1–11 400, 475 and 500 Series aircraft fitted with Dunlop Brake Units Part No. AH52584, AH52627, AH52805, AH52843, AH52871 and AH52894. Compliance required as detailed in Service Bulletin. |
| 006–02–94 | Hawker Energy Products SB A1–93 | *Electrical Power* – Sealed lead acid aircraft batteries – Frequency of servicing change. | Applicable to Hawker Energy Products Ltd batteries product number 9750F0531. Compliance required as detailed in Service Bulletin. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
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| 006–01–95 | Aerospace Systems and Technologies SB 30–25 | *Ice and Rain Protection* – Ice Protection System – Metering pumps – deletion of wire with silver plated conductors. | Applicable to Aerospace Systems and Technologies metering pumps Part No. XA9511E003–3 Mod 6 fitted to BAe 125 Series 800 and Hawker 800 aircraft, and Part No. XA9511E009 fitted to BAe 125 Series 1000 and Hawker 1000 aircraft. Compliance required as detailed in Service Bulletin. |
| 013–07–95 | Dunlop Limited Aviation Division SB 32–1105 | *Landing Gear* – Brake unit – Introduction of inspection and procedure to find the correct wear remaining length for wear indicator pin related to most worn rotor or stator. | Applicable to BAe 146/AVRO RJ Series aircraft fitted with Dunlop Brake Units Part Nos. AHA 1412, AHA 1413, AHA 1558 and AHA 1559. Compliance required as detailed in Service Bulletin. |
| 003–05–97 | Britax Rumbold SB SBM 13000–25–929 | *Equipment/Furnishings* – Inspection of the motor system cable on first class seats. | Applicable to Boeing 747, 777 and McDonnell Douglas DC10 aircraft fitted with Britax Rumbold first class seats as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. |
| 007–11–97 | First Technology Fire and Safety SB 26–110 | *Fire Protection* – Toilet compartment fire extinguishers. | Applicable to First Technology Fire and Safety spherical type toilet compartment fire extinguishers Halon 1211 and 1301 as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. |
| 002–06–98 | MacCarthy Interiors SB 2012–25–53 | *Equipment/Furnishings* – Passenger compartment – Modification of single and double seats. | Applicable to Aviation Furnishings International single and double seats Part Nos. 201201–1 and 201201–3 fitted to S61N and AS332L helicopters. Compliance required as detailed in Service Bulletin. |
| 001–08–99 | – | Check of altitude encoded data and comparator function used by Mode 'S' transponder. in TCAS equipped aircraft. | Superseded by CAA AD 002–12–99 Rev 1. |
| 002–09–99 | Dowty Aerospace Wolverhampton SB 83–518 | *Accessory Gearbox* – Lubrication of gearbox drive shaft. | Applicable to Dowty accessory gearboxes fitted to Rolls-Royce Dart engines as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin. |
| 005–10–99 | Skyforce Avionics ASB TRSY037C | Batteries | Applicable to Skyforce Avionics Skymap and Tracker II Units Model Nos. SM2000 and TR2000. Compliance required as detailed in Alert Service Bulletin. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 002–12–99<br>Rev 2 | – | Check of Mode 'C' or Mode 'S' transponder system(s). | Applicable to all aircraft equipped with one or more Mode 'C' or Mode 'S' transponder systems which utilise Gilham code altitude input.<br><br>NOTE: Aircraft which are fitted with Altitude Digitizers, Encoding Altimeters or Blind Encoders use the Gilham code to provide altitude inputs to the Mode 'C' or Mode 'S' transponder systems. If any doubt exists as to whether this Directive is applicable checks should be made with the manufacturer of the equipment fitted to the aircraft to ascertain if the Altitude inputs are in Gilham code format.<br><br>Compliance is initially required not later than six months from the effective date of Revision 1 to this Directive. For aircraft which have been checked in accordance with the original issue of this Directive or CAA AAD 001–08–99 compliance is required not later than 24 months from the initial check required by those Directives. REPEAT CHECK at intervals not exceeding 24 months.<br>Check the Mode 'C' or Mode 'S' transponder system(s) in accordance with paragraphs (1) through to (9) below, complying with all precautions detailed in the applicable maintenance manuals and correct all adverse findings prior to further flight.<br><br>NOTE: Altitude testing may be restricted to the operating envelope of the aircraft.<br><br>(1) Connect an air data test set to the No. 1 and No. 2 (where applicable) Pitot/Static source.<br><br>(2) In the aircraft flight deck/cockpit, select the No. 1 Mode 'C' or Mode 'S' transponder (as applicable) and select Air Data source No. 1<br><br>*(AD continued overleaf)* |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 002–12–99 (continued)<br>Rev 2 | | | (3) Select the air data test set to the following altitude reporting values:<br><br>1,000 feet;<br>4,100 feet;<br>15,700 feet and;<br>31,000 feet.<br><br>(4) For each selected altitude, verify that the Mode 'C' or Mode 'S' transponder (as applicable) altitude reporting is within tolerance (± 125 feet), and record the altitude as follows:<br><br>1,000 feet = Actual reading (± 125 feet)<br>4,100 feet = Actual reading (± 125 feet)<br>15,700 feet = Actual reading (± 125 feet)<br>31,000 feet = Actual reading (± 125 feet)<br><br>(5) In the aircraft flight deck/cockpit, select Air Data source No. 2 (if applicable) and repeat paragraphs (3) and (4) above.<br><br>(6) In the aircraft flight deck/cockpit, select the No. 2 Mode 'C' or Mode 'S' transponder (if applicable) and select Air Data source No. 1 and repeat paragraphs (3) and (4) above.<br><br>(7) In the aircraft flight deck/cockpit, select Air Data source No. 2 (if applicable) and repeat paragraphs (3) and (4) above. |

*(AD continued overleaf)*

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 002–12–99 (continued)<br>Rev 2 | | | (8) Where aircraft have the availability of a third air data source, that provides altitude data to the transponder system, repeat checks (3) and (4) above, for No. 1 and/or No. 2 Mode C or Mode S transponder systems connected to Air Data source No. 3.<br><br>(9) Confirm by inspection and reference to aircraft and equipment Maintenance Manuals and Wiring Diagrams that, where dual Air Data sources are used, the transponder altitude data comparator function is enabled. Using appropriate test equipment, demonstrate that the comparator detects altitude data differences between the dual encoders of more than 600 feet. If the comparator function is not enabled or is unserviceable, rectify before further flight (this requirement is only applicable to aircraft which utilise dual Air Data sources).<br><br>NOTE: The comparator function is only available when Mode S transponders are installed.<br><br>The original Directive became effective on 17 January 2000. Revision 1 became effective on 10 November 2000 and cancelled CAA AD 001–08–99. Revision 2 becomes effective on 10 February 2003. |
| 001–05–2001 | Chelton (Electrostatics) SB CEL 01/2001 | *Navigation* – Amendment to installation functional verification and maintenance test procedure No. 1185–(7–429/1)–24. | Applicable to Chelton (Electrostatics) VOR/LOC high pass filter unit Type 7–429/1. Compliance required as detailed in Service Bulletin. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 002–11–2001 | B/E Aerospace SB 25–20–2658 | Hydrolok pin orientation. | Applicable to B/E Aerospace Skyluxe II (AA2) passenger seats. Known to be fitted in Airbus A300, A300–600, A320, A321, A330 and A340 Series aircraft; Boeing 737–800 Series aircraft; Boeing 747–200, –300 and –400 Series aircraft; Boeing 767–200 and –300 Series aircraft; Boeing 777–200 and –300 Series aircraft and McDonnell Douglas MD–11 Series aircraft. Compliance required as detailed in Service Bulletin. |
| 002–12–2001 Rev 2 | – | *Sutton harnesses* – Integrity and lifing. | Applicable to aircraft fitted with Sutton harnesses. Compliance is required not later than 10 flying hours or three months, whichever is the sooner from the original effective date of this Directive and thereafter at each Annual Check. Inspect each Sutton harness for evidence of broken stitches, cuts and tears, chafing, signs of contamination due to acid, oil, grease or water, deterioration due to sunlight. Where any signs of degradation are found the harness is to be replaced before further flight.<br><br>An installed life of 9 years from the initial date of fitment is introduced for Sutton harnesses. If it is not possible to determine from the aircraft technical records the date of initial fitment of the Sutton harnesses, they are to be replaced not later than 1 July 2002.<br><br>NOTE: British Aerospace have issued Mandatory Technical News Sheet No. 33 (CAA AD No. 007–03–99) on this subject for De Havilland DH60, DH60G, DH60M, DH60X, DH82, DH82A, Queen Bee, DH83, and DH94 aircraft variants. This Directive has been raised for other aircraft types not covered by the British Aerospace Technical News Sheet. Revision 2 aligns the replacement date where it is not possible to determine from the aircraft technical records the date of initial fitment of the Sutton harnesses with that identified in Technical news Sheet No. 33.<br><br>The original Directive became effective on 27 January 2002 and Revision 1 became effective on 12 April 2002. Revision 2 becomes effective on 12 June 2002. |

| *CAA AD No.* | *Associated Material* | *Description* | *Applicability – Compliance – Requirement* |
|---|---|---|---|
| 002–01–2002 | AIM Aviation (Jecco) SB A340–25–022 | *Equipment/Furnishings* – LH, RH cabin dividers and in-flight beauticians bulkhead – Introduction of improved top attachment. | AIM Aviation (Jecco) cabin dividers and in-flight beauticians bulkhead fitted to Airbus A340 aircraft: G-VHOL, G-VSEA, G-VBUS, G-VAEL, G-VSKY, G-VFLY, G-VSUN, G-VAIR, G-VELD and G-VFAR. Compliance required as detailed in Service Bulletin. |
| 002–07–2002 Revision 1 | Lindstrand SB No 7 | ⅜″ bore fuel hose failures. | AD cancelled at Revision 1 and superseded by G-2003-0010. |

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| United Kingdom Civil Aviation Authority | EMERGENCY AIRWORTHINESS DIRECTIVE |
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| | **AD No: G-2003-0010** |
| | Issue Date: 24 September 2003 |

This AD is issued by the UK CAA as the Primary Aviation Authority (ICAO Annex 8 Authority of State of Design) for the affected product(s).

In accordance with Article 9(7)(b) of the Air Navigation Order 2000 as amended the following action required by this Airworthiness Directive (AD) is mandatory for applicable aircraft registered in the United Kingdom.
No person may operate an aircraft to which an AD applies except in accordance with the requirements of that AD unless otherwise agreed with the Authority of the State of Registry.

| Type Approval Holders Name: | Type/Model Designation(s): |
|---|---|
| **LINDSTRAND BALLOONS LTD** | **FUEL HOSES** |

**Type Certificate Data Sheet No:** None

**Superseded AD:** 002-07-2002

**ATA 28 - FUEL HOSES - REPLACEMENT OF DEFECTIVE HOSES**

**Manufacturer(s):** Lindstrand Balloons Ltd

**Applicability:** Pre-made 3/8" bore fuel hoses supplied by Lindstrand Balloons Ltd that have the following batch numbers FHL 38381, FH40579, FHL42036 and FHL43263 and fitted on hot air balloons.

**Reason:** Recently, two batches of defective hoses used in burner and refuelling hose applications were identified; AD 002-07-2002 and Lindstrand Service Bulletin No. 7 were issued to address this problem.

Further investigations have revealed identical problems in two later hose batches manufactured after 2 May 2002. Additional affected hoses are detailed in Lindstrand Service Bulletin No. 8.

**Effective Date:** Upon receipt from 26 September 2003.

**Compliance/Action:** Before further flight after the effective date of this AD, inspect for defective burner fuel supply and refuelling hoses in accordance with Lindstrand Balloons Service Bulletins No. 7 and No. 8.

Hoses manufactured from the material batch numbers quoted in Service Bulletins No. 7 and No. 8 must be removed from service immediately and destroyed.

**Reference Publications:** Lindstrand Service Bulletins No. 7 and No. 8 may be obtained from: Lindstrand Balloons Ltd, Maesbury Road, Oswestry, Shropshire, SY10 8ZZ, United Kingdom.
Phone:+44 (0)1691 671717 Fax:+44 (0) 1691 671122, E-mail lbluk@aol.com

**Remarks:** Enquires regarding this AD should be referred to Mr N Williams, Civil Aviation Authority, Aircraft Certification Section, Safety Regulation Group, Aviation House, Gatwick Airport South, West Sussex, RH6 0YR, United Kingdom. Phone: +44 (0)1293 573292 Fax: +44 (0)1293 573976 E-mail: neil.williams@srg.caa.co.uk

# United Kingdom Civil Aviation Authority

# AIRWORTHINESS DIRECTIVE

## AD No: G-2004-0019

Issue Date: 27 July 2004

This AD is issued by the UK CAA acting for and on behalf of the European Aviation Safety Agency as the Primary Aviation Authority (ICAO Annex 8 Authority of State of Design) for the affected product(s).

Approved by the European Aviation Safety Agency under approval number 2004-7852 on 22 July 2004.

In accordance with Article 9(7)(b) of the Air Navigation Order 2000 as amended the following action required by this Airworthiness Directive (AD) is mandatory for applicable aircraft registered in the United Kingdom.
No person may operate an aircraft to which an AD applies except in accordance with the requirements of that AD unless otherwise agreed with the Authority of the State of Registry.

| Type Approval Holders Name: | Type/Model Designation(s): |
|---|---|
| **MANN AVIATION GROUP (ENGINEERING) LTD** | **CAMERA SYSTEM INSTALLATION** |

**Type Certificate Data Sheet No:** None

**Superseded/ Revised ADs:** None

### ATA 25 - CAMERA SYSTEM INSTALLATION - REPLACEMENT OF FLOOR MOUNTED PLATFORM PANEL HOLD DOWN HOOK AND MODIFICATION OF PLATFORM BEAM

**Manufacturer(s):** Mann Aviation Group (Engineering) Ltd (MAG(E))

**Applicability:** Eurocopter Model AS350 and AS355 helicopters, certificated in any category that have been modified in accordance with MAG(E) modification 350-1521, 350-1680 or 350-1707. Installation of Camera platform**.**

**Reason:** MAG(E) have been made aware of failures of an old standard of the camera platform hold down hook (p/n 350-1521-109). Failure of the hook could result in inadequate retention of the platform and camera that might hazard the aircraft. A new standard of hook (p/n 350-1521-139) replaces the defective item.

The design investigation has also highlighted a deficiency in the way that the hold down hook interfaces with the aircraft and platform, this is resolved by re-working the platform beam.

**Effective Date:** 5 August 2004

**Compliance/Action:** Within three months after the effective date of this Airworthiness Directive (AD), accomplish the following tasks in accordance with paragraph a and b of this AD:

(a) Inspect the camera platform hold down hook to determine the standard of hook installed, in accordance with paragraph 2 of MAG(E) Service Bulletin SB-A25-002, Issue 1, dated 20 May 2004 or later EASA approved revision. If a part number 350-1521-109 hook is found to be installed, replace the -109 hook with a Part Number 350-1521-139 hook in accordance with MAG(E) Service Bulletin SB-A25-002, Issue 1 or later EASA approved revision.

(b) Modify the Mounting Arm in accordance with MAG(E) Service Bulletin SB-A25-002, Issue 1 or later EASA approved revision.

continued on next page

**Reference Publications:** MAG(E) Service Bulletin, SB-A25-002, Issue 1, dated 20 May 2004, may be obtained from Mann Aviation Group (Engineering) Ltd, Fairoaks Airport, Chobham, Woking, GU24 8HX, United Kingdom. Phone : +44 (0) 1276 857888 Fax: +44 (0) 1276 857810 E-mail: engineering@alanmann.co.uk

**Remarks:** Enquires regarding this AD should be referred to Mr. N Williams, Civil Aviation Authority, Aircraft Certification Section, Safety Regulation Group, Aviation House, Gatwick Airport South, West Sussex, RH6 0YR, United Kingdom. Phone: +44 (0) 1293 573292 Fax: +44 (0)1293 573976 E-mail: neil.williams@srg.caa.co.uk