

Safety Regulation Group
Aircraft Maintenance Standards Department
Maintenance Requirements & Policy Section

1 May 2005
Our Ref 9/98/4/102

LETTER TO OWNERS / OPERATORS NO. 2782
AEROPLANES & HELICOPTERS (PISTON ENGINED) NOT EXCEEDING 2730 KG MTWA
LIGHT AIRCRAFT MAINTENANCE SCHEDULE (LAMS)

1. Purpose

The purpose of this LTO is to advise light aircraft aeroplane and helicopter owners of the publication of Edition 5 of the Light Aircraft Maintenance Schedule CAP 411 and CAP 412.

2. Content

The Fourth edition of the Light Aircraft Maintenance Schedule was published to account for the implementation of the European Council Regulation (EC) No 1592/2002 and Commission Regulation 2042/2003. This Fifth edition incorporates corrections to errors discovered after publication of the fourth edition, including clarification of cross-references to the Air Navigation Order. To avoid ambiguity with previous editions this Fifth edition changes the approval references to CAA/LAMS/A/1999 Issue 2 and CAA/LAMS/H/1999 Issue 2.

At Edition Four a number of changes were made in sections 1 through 5 and some minor changes to sections 6, 7 and 8.

The changes made were as follows:

Section 2 Reference to the applicable European Council requirements.

Section 3 Addition of Airworthiness Life Limitations issued by EASA.
Addition of Airworthiness Directives issued by EASA.
Introduction of new 'CAA Generic Requirements', which replace mandatory Airworthiness Notices.
General Inspection Standards now include the remaining Airworthiness Notices.
Inclusion of 'Additional Inspections Requirements' in CAP 543 'Time limited Tasks, Additional Inspections and Component Change Record'.
Introduction of 'Instructions for Continuing Airworthiness' replacing 'Service Information'.
'Modifications' reclassified as 'Changes'.
Additional definitions for 'Continuing Airworthiness', 'Commercial Air Transport' and 'Non-Commercial Air Transport'.

Section 4 Reference to EASA Part 145 requirements for the issue of a Certificate of Release to Service (CRS) and Certificate of Maintenance Review (CMR).
Additional note for commercial air transport aeroplanes operated in accordance with JAR-OPS.

Section 5 Reference to EASA Part 145 requirements for CRS and CMR.
Acceptance of a Part 66 licence for CRS and CMR
Certificate of Maintenance Review requirements for aeroplanes with National or EASA Certificates of Airworthiness.
Clarification of pilot maintenance for aeroplanes operated for private purposes.

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Section 6 Reference to generic requirements (GR) in the notes.

Section 7 Additional note for non-commercial air transport.

Section 8 Task 4 has an additional task description.
Task 65 description rearranged.

3. Action

To comply with the European Regulations you are required to replace Edition 3 and 4 of the Light Aircraft Maintenance Schedule (CAA/LAMS/A/1999 Issue 1 and CAA/LAMS/H/1999 Issue 1) with this Edition 5 (CAA/LAMS/A/1999 Issue 2 and CAA/LAMS/H/1999 Issue 2). This becomes effective at the time of the next scheduled maintenance inspection due on your aircraft following receipt of this letter.

Note: Owners are reminded that all overhaul, additional inspections and test periods as specified in paragraph 7 of Section 3 to LAMS shall be recorded in CAP 543 or an appropriate equivalent record system.

Additional Information

The latest version of this document and all applicable amendments are available in electronic format at www.caa.co.uk/publications.

Additional copies of this edition in A4 and A5 may be obtained from:

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Yours faithfully



D LEWIS
Head of Maintenance Requirements & Policy Section

CAP 412

Light Aircraft Maintenance Schedule – Helicopters

CAA/LAMS/H/1999 Issue 2

Operator's Schedule Ref:

Helicopter Type/Model:

Engine Type:

Registration(s):

AOC No:

Operator's Name and Address:

Safety Regulation Group



CAP 412

Light Aircraft Maintenance Schedule – Helicopters

CAA/LAMS/H/1999 Issue 2

April 2005

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Section 1 Amendments to the Schedule

1 Introduction

- 1.1 When necessary, amendments to the schedule will be made by the CAA. The owner/operator will be notified in the form of replacement pages bearing the amendment date and page affected. On each page material differences from the previous issue will be indicated by a marginal line.
- 1.2 CAA amendments must be incorporated in the schedule without delay and recorded on the Amendment Record in the front of this book.

2 Revisions in this Edition

- 2.1 The fourth edition of the Light Aircraft Maintenance Schedule was issued in January 2005, to account for the implementation of the European Council Regulation (EC) No. 1592/2002 and Commission Regulation 2042/2003. This fifth edition incorporates corrections to errors discovered after publication of the fourth edition, including clarification of cross-references to the Air Navigation Order and changes the CAA Approval Reference to CAA/LAMS/H/1999 Issue 2.
- 2.2 The changes incorporated at edition four included a number of changes in Sections 1 through 5 and some minor changes to Sections 6, 7 and 8 as listed below:

Section 2 Reference to the applicable European Council requirements.

Section 3 Addition of Airworthiness Life Limitations issued by EASA.

Addition of Airworthiness Directives issued by EASA.

Introduction of new 'CAA Generic Requirements', which replace mandatory Airworthiness Notices.

General Inspection Standards now include the remaining Airworthiness Notices.

Inclusion of 'Additional Inspections Requirements' in CAP 543 Time Limited Tasks, Additional Inspections and Component Change Record.

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- Section 4 Reference to EASA Part 145 requirements for the issue of a Certificate of Release to Service (CRS) and Certificate of Maintenance Review (CMR).
Additional note for commercial air transport helicopters operated in accordance with JAR OPS.
- Section 5 Reference to EASA Part 145 requirements for CRS and CMR.
Acceptance of a Part 66 licence for CRS and CMR.
Certificate of Maintenance Review requirements for helicopters with a National or EASA Certificate of Airworthiness.
Clarification of pilot maintenance for helicopters operated for private purposes.
- Section 6 Reference to Generic Requirements in Notes.
- Section 7 Additional note for non-commercial air transport.
- Section 8 Task 4 has an additional task description.
Task 65 description rearranged.

Section 2 Foreword

1 Applicability

- 1.1 This schedule, at edition 5, incorporates corrections to edition 4 which was published to address the implementation of the European Parliament and Council Regulation (EC) No. 1592/2002 as required at January 2005. Further amendments may be anticipated as required to address continuing implementation of that Regulation.
- 1.2 This schedule is approved in accordance with Commission Regulation (EC) No. 2042/2003 Annex 1 (Part M) and has been compiled in accordance with M.A.302.(c).(2) by the CAA.
- 1.3 Pursuant to article 10(1)(a) of the Air Navigation Order 2000 (as amended) and Part M, the UK Civil Aviation Authority (CAA) hereby approves, subject to the conditions hereto, the following maintenance schedule (the schedule):
 - CAA Approval Reference:** CAA/LAMS/H/1999 Issue 2
 - Helicopters Applicability:** Piston Engined Helicopters not exceeding 2730 kg MTWA
- 1.4 The schedule addresses the scheduled maintenance requirements for helicopters used for Commercial Air Transport and Non-Commercial Air Transport and is applicable to EASA regulated helicopters as per (EC) No. 1592/2002 article 4 and non EASA regulated aircraft as per Annex II of (EC) No. 1592/2002.
- 1.5 Helicopters using the schedule must be identified by completing the required details on the Cover Page and must use CAP 543 or an appropriate equivalent to record 'Time Limited Tasks, Additional Inspections and Component Changes'.
- 1.6 Non-compliance with any of the requirements of the schedule will invalidate the Certificate of Airworthiness insofar as it applies to a particular helicopter.

2 Light Aircraft Maintenance

CAA Publication CAP 520 titled 'Light Aircraft Maintenance', contains guidance material and a more detailed explanation of the intended application of the schedule.

Section 3 Responsibilities and Standards

1 Owner/Operator Responsibilities

Owners/operators are responsible for the accomplishment of the maintenance prescribed in the schedule.

2 Certifying Persons Responsibilities

- 2.1 Certifying persons must use their engineering skill and judgement in determining the depth of inspection needed and other matters which could affect the airworthiness of the helicopter. In order to claim any alleviation on subsequent inspections, the helicopter maintenance records must record the extent of previous inspections upon which the alleviation is based.
- 2.2 Certifying persons are responsible for recording in the appropriate log book or worksheet, any defects, deficiencies or additional maintenance required as a result of implementation of the schedule.

3 General Inspection Standards

- 3.1 The general inspection standards applied to individual task inspections must meet the recommended standards and practices of the organisation responsible for the type design and are normally published in maintenance manuals.
- 3.2 In the absence of general inspection standards, refer to CAA CAP 562 Civil Aircraft Airworthiness Information and Procedures (CAAIP) or other CAA recommended standards and practices i.e. Airworthiness Notices.
NOTE: Airworthiness Notices should be assessed for applicability and where necessary included in this Maintenance Programme.
- 3.3 Inspections may be carried out without component removal or dismantling unless considered necessary or where required by the schedule.

4 Airworthiness Life Limitations (Retirement/Scrap Lives)

- 4.1 Airworthiness life limitations shall be those published by EASA, the CAA and the state of design Type Certificate or Supplementary Type Certificate Holder.
- 4.2 Airworthiness life limitations shall be recorded in CAP 543 Time Limited Task, Additional Inspections and Component Change Record, or an appropriate equivalent.

5 Airworthiness Directives

- 5.1 All applicable Airworthiness Directives issued by EASA, the CAA and any applicable Third Country Airworthiness Authority who is responsible for the state of design must be complied with.
- 5.2 Compliance with Airworthiness Directives shall be recorded in the helicopter log books (Part C of CAPs 398, 399 and 400), or an approved equivalent.

6 CAA Generic Requirements (GRs)

All applicable mandatory CAA Generic Requirements (CAP 747) must be complied with. Compliance with CAA Generic Requirements shall be recorded in Part C of the relevant log books, reference CAPs 398, 399 and 400, or an approved equivalent.

7 Overhaul, Additional Inspections and Test Periods

- 7.1 Overhaul, additional inspections and test periods shall be those recommended by the organisation responsible for the type design.
- 7.2 EASA and the CAA may vary or mandate overhaul and test periods and additional inspections by the issue of an Airworthiness Directive or CAA Generic Requirement. (Note: Airworthiness Notice 35 and GR No. 17 relate to engines and propellers respectively).
- 7.3 The overhaul, additional inspections and test periods shall be recorded in CAP 543 Time Limited Task, Additional Inspections and Component Change Record, or an appropriate equivalent.

8 Instructions for Continuing Airworthiness

- 8.1 Instructions for continuing airworthiness consist of inservice data published by type design organisations and must be considered by the owner/operator in addition to this maintenance schedule in order to ensure the approved maintenance schedule remains valid for the helicopter listed.
- 8.2 Instructions for continuing airworthiness (Service Bulletins, Service Letters, etc.) should be formally technically assessed by the owner/operator and adopted if required to ensure operational safety and reliability.
- 8.3 Instructions for continuing airworthiness applicable to this helicopter shall be included in CAP 543 Time Limited Task, Additional Inspections and Component Change Record or an appropriate equivalent, and form part of this maintenance schedule.

8.4 Compliance with adopted continuing airworthiness information shall be recorded in Part C of CAPs 398, 399 and 400, or an approved equivalent.

9 Changes (Repairs or Modifications)

9.1 Approved 'changes' which have been carried out to the helicopter, engine, components and radio after original manufacture, must be recorded in the appropriate log book(s).

9.2 Any recurring inspection, or maintenance task resulting from approved 'changes', shall be recorded in CAP 543 Time Limited Task, Additional Inspections and Component Change Record Record, or an appropriate equivalent.

10 Duplicate Inspections

When required to perform a critical task inspection or following initial assembly or disturbance of a control system or vital point, the procedures outlined in British Civil Airworthiness Requirements (BCAR) Section A/B, Chapter A6-2/B6-2 and A5-3/B5-3 shall be applied. Certifications must be recorded in the appropriate worksheet, log book or aircraft technical log.

11 Certificates of Release to Service

11.1 On completion of any check required by the schedule including any additional or out of phase inspections resulting from the review of instructions for continued airworthiness (see Section 3 paragraph 8), except pilot maintenance (see Section 5) and Check A (see Section 7), an entry shall be made in Column 6 of CAP 398 Aircraft Log Book, CAP 399 Engine Log Book or an approved equivalent. The certifying person's signature, authority and date must be made in Column 7 against the relevant category (Airframe, Engine, Radio).

11.2 The following is an example of an entry acceptable to the CAA:

Company Name (if required): Cross refer to workpack ref:	Approval No. (if required):	Airframe
50 hr/100 hr/Annual Check/Star Inspection (delete as appropriate) has been carried out to my satisfaction at total airframe hours.		Engine
Maintenance Schedule Ref.	CAA/LAMS/H/1999 Issue 2	Radio (Annual check only)

- 11.3 A Certificate of Release to Service is required for all tasks accomplished to satisfy the requirements of Section 3 paragraphs 5, 6, 7, 8, 9 and 10.
- 11.4 Where pilot maintenance has been performed, there is a need for assessment and re-certification (the issue of a Certificate of Release to Service) as necessary prior to the helicopter being operated for the purposes of Commercial Air Transport, Public Transport or Aerial Work.

12 Scheduled Maintenance Worksheets

- 12.1 Worksheets shown in Section 8 must be issued and the tasks certified for all scheduled maintenance checks. These worksheets become part of the maintenance records required to be kept by the owner/operator.
- 12.2 All maintenance carried out in connection with a particular check should be certified on suitably referenced worksheets and included in the helicopter records. These worksheets must be cross-referenced in the appropriate log book(s) giving general details of the additional maintenance carried out.

13 Definitions

- 13.1 Throughout the schedule the following terms and abbreviations have the stated definitions;

Service/Lubrication (Service/LUB)

The term 'Service or Lubrication' requires that a component or system should be serviced and/or replenished as necessary with fuel, oil, grease, water, oxygen, etc., to a condition specified in the appropriate maintenance manual. The term 'service' may also be used to require filter cleaning or replacement.

Inspect (INSP)

An 'Inspection' is a visual check performed externally or internally in suitable lighting conditions from a distance considered necessary to detect unsatisfactory conditions/discrepancies using, where necessary, inspection aids such as mirrors, torches, a magnifying glass etc. Surface cleaning and removal of detachable cowlings, panels, covers and fabric may be required to be able to satisfy the inspection requirements.

Operational Check (OP/C)

An 'Operational Check' is a test used to determine that a system or component or any function thereof is operating normally.

Functional Check (F/C)

A 'Functional Check' is a detailed examination of a complete system, sub-system or component to determine if operating parameters are within limits of range of movement, rate of flow, temperature, pressure, revolutions per minute, degrees of travel, etc., as specified in the appropriate maintenance manual. Measured parameters should be recorded.

Check (CHK)

A 'Check' is the verification of compliance with the type design organisation's recommendations.

Continuing Airworthiness

Means all of the processes ensuring that, at any time in its operating life, the helicopter complies with the airworthiness requirements in force and is in a condition for safe operation.

Commercial Air Transport

The provisions of this maintenance schedule related to Commercial Air Transport are applicable to helicopters operated by licensed air carriers i.e. operators issued with an Air Operator's Certificate (AOC).

Non-Commercial Air Transport

The provisions of this maintenance schedule related to Non-Commercial Air Transport are applicable to helicopters operated for Private purposes or Public Transport or Aerial Work as defined in article 130 of the Air Navigation Order 2000 (as amended) and not used for Commercial Air Transport.

NOTE: The definitions of Public Transport and Aerial Work shall be those specified by articles 129 and 130 of the Air Navigation Order 2000 (as amended). In summary and for guidance the following general rules apply:

- **Aerial Work Purposes**

A flight is for the purpose of aerial work if payment is made in respect of the flight, unless the flight is in fact for the purposes of public transport.

Example: Flying training/instruction where a payment is made for the hire of the helicopter and for the services of the instructor.

- **Public Transport Purposes**

a) Where payment is made for the carriage of passengers or cargo; or

b) Where valuable consideration (hire and reward) is given for a person to fly the helicopter, then the flight is deemed to be public transport for continuing airworthiness purposes. The flight may be considered private for all other purposes.

Example: A private pilot, not being the owner/group owner of the helicopter, paying for hire of a helicopter from an owner or flying club.

- **Private Purposes**

A flight for private purposes means a private flight in accordance with article 129 of the Air Navigation Order 2000 (as amended).

Section 4 Certification – Commercial Air Transport

1 Certification of Maintenance - Commercial Air Transport

Maintenance carried out to the schedule requires the following certification:

Certificate of Release to Service (CRS) in accordance with EASA Part 145.A.50

- The signatories for the CRS shall be persons authorised by an organisation appropriately approved in accordance with EASA Part 145.

Certificate of Maintenance Review (CMR) - (See BCAR Section A/B, Chapter A6-2/B6-2)

- The signatories for the CMR shall be persons authorised by an organisation appropriately approved in accordance with EASA Part 145.
- The period of validity of the CMR must not exceed the due date of the next annual check and may be anticipated by up to 62 days to coincide with the annual check.

NOTE: For commercial air transport helicopters that are operating in accordance with Joint Aviation Requirements (JAR-OPS 3) the requirement for a Certificate of Maintenance Review may be exempt.

2 Certificate of Airworthiness Renewal - Star Inspection

A Star Inspection (see Section 6) and associated work must be completed before making a recommendation for the renewal of the Certificate of Airworthiness under the supervision of an organisation approved by the CAA in accordance with EASA Part 145 and BCAR Section A, Chapter A8-15.

Section 5 Certification – Non-Commercial Air Transport

1 Certification of Maintenance - Non-Commercial Air Transport

Maintenance carried out to the schedule requires the following certification:

Certificate of Release To Service (CRS) - (See BCAR Section A/B, Chapter A6-2/B6-2) or in accordance with EASA Part 145.

The signatories for the CRS following a maintenance check shall be one of the following:

- The holder of a United Kingdom Aircraft Maintenance Engineers Licence with the appropriate type ratings in categories A (Airframe), C (Engine) and R (Radio);
- A person appropriately authorised by an organisation approved by the CAA for that purpose;
- A person appropriately authorised by an organisation approved in accordance with EASA Part 145 for that purpose;
- Any ICAO Annex 1 aircraft maintenance licence holder in accordance with article 12(8)(b) of the Air Navigation Order 2000 (as amended);
- The holder of an EASA Part 66 licence with the appropriate type or group ratings.

Certificate of Maintenance Review (CMR) for helicopters operated for the purpose of aerial work or public transport when issued with a National Certificate of Airworthiness or an EASA Certificate of Airworthiness.

The signatories for the CMR shall be one of the following:

- The holder of a United Kingdom Aircraft Maintenance Engineers Licence with a type rating valid in at least two categories, each category being appropriate to the helicopter type;
- A person appropriately authorised by an organisation approved by the CAA for that purpose;
- The holder of an EASA Part 66 B1 or B2 category Aircraft Maintenance Engineers Licence with the appropriate type or group ratings approved in accordance with article 10 of the Air Navigation Order 2000 (as amended).

The period of validity of the CMR must not exceed the due date of the next annual check and may be anticipated by up to 62 days to coincide with the annual check.

2 Pilot Maintenance

A licensed pilot who is the owner or operator of the helicopter may carry out certain maintenance tasks prescribed in Regulation 16 of the Air Navigation (General) Regulations 1993 (as amended), but only if the helicopter is operated for private purposes. The issue of a Certificate of Release to Service is not required. The pilot must include his/her pilot's licence number with his/her signature in the appropriate log book(s).

3 Annual Check

The annual check and all associated work must be accomplished under the supervision of an organisation appropriately approved in accordance with BCAR Section A, Chapter A8-3, A8-15, EASA Part 145, or the holder of a United Kingdom Aircraft Maintenance Engineers Licence with the appropriate type rating or the holder of an EASA Part 66 Category B1 licence with the appropriate type or group rating.

4 Certificate of Airworthiness Renewal - Star Inspection

A Star Inspection (see Section 6) and associated work must be completed before making a recommendation for the renewal of the Certificate of Airworthiness under the supervision of an organisation appropriately approved by the CAA in accordance with BCAR Section A, Chapter A8-15.

Section 6 Check Cycle and Variations

1 The Maintenance Check Cycle

Check title	Content	Period
Check A	Check A	Prior to the first flight of the day.
50 hour check	50 hour check items.	Not exceeding 50 flying hours, or 6 months, whichever is the sooner.
100 hour check	50 and 100 hour check items.	Not exceeding 100 flying hours.
Annual check	50, 100 hour and annual check items.	Not exceeding 12 months (see Note 5).
Star inspection	Annual check and BCAR Section A/B, Chapter A/B 3-4 procedures.	Coincident with the renewal of the Certificate of Airworthiness.

2 Permitted Variations (see Notes)

Tasks controlled by flying hours	Maximum Variation
50 hour and 100 hour	10%
Tasks controlled by calendar time	Maximum Variation
6 months Annual	1 month None
Tasks controlled by more than one limit	
The more restrictive limit shall be applied.	

- NOTES:**
- 1 Permitted variations may **not** be applied to applicable airworthiness life limitations, airworthiness directives, Generic Requirements or overhaul and test periods.
 - 2 Permitted variations for tasks controlled by flying hours should not be understood to be a maintenance planning tool, but as an exceptional means to allow the operator to fly for a limited period of time until the required maintenance is performed.
 - 3 Any application of a permitted variation to the maintenance check cycle period must be recorded in the appropriate log book(s) together with the reason for the variation by a person who is authorised to sign the log book entry for that particular check. Details of the permitted variation must be made visible to the pilot.
 - 4 Permitted variations are not required to be deducted from the next scheduled check.
 - 5 The annual check may be anticipated by a maximum period of 62 days without loss of the continuity of the maintenance check cycle. Thus, for example, where the full 62 days is invoked, the following annual check would become due 14 months after the completion of the annual check which was anticipated. The period by which the annual check was anticipated and the date of the next annual check shall be recorded in the appropriate log book(s).

Section 7 Pre-Flight

1 Pilot's Pre-Flight Check

Pre-flight checks are to be carried out in accordance with the Helicopter Flight Manual, Pilot's Operations Handbook, Pilot's Notes or Operations Manual.

2 Check A - Prior to First Flight of the Day

Commercial Air Transport - requires the issue of a Certificate of Release to Service (see Section 4).

Non-Commercial Air Transport – does not require the issue of a Certificate of Release to Service.

- | | | |
|----|----------------|---|
| A1 | General | Remove frost, snow or ice, if present.
Check that the helicopter documents are available and in order.
Check - moveable ballast weights correctly positioned.
Ensure all loose equipment is correctly stowed and the aircraft is free of extraneous items.
If the helicopter has not been regularly used, ensure before resumption of flying that:
a) either i) the engine has been turned weekly or run fortnightly; or
ii) the manufacturer's recommendations have been complied with;
b) previously reported defects have been addressed. |
| A2 | Transparencies | Inspect for damage and cleanliness. |
| A3 | Fuselage | Inspect - skin/covering, struts, and tubular structure for damage, corrosion and security of all items.
Inspect - drain holes and vents for freedom from obstruction.
Remove pitot head cover/static port blanks, and inspect orifices for cleanliness.
Inspect - radio aerials for damage and security. |

A4	Landing Gear	<p>Check - shock absorbers, struts for leaks and that extension appears normal.</p> <p>Check - tyres for inflation, damage and creep.</p> <p>Inspect - brake installation for external evidence of leaks, and for damage and security.</p> <p>Inspect - landing gear skid and cross tubes for damage, excessive deflection and worn skid shoes.</p> <p>Check - ground handling wheels retracted or removed.</p>
A5	Flying Controls	<p>Inspect - flying control surfaces for damage and security of all items and for freedom of operation.</p> <p>Inspect - hydraulic cylinders for leakage.</p> <p>Check - hydraulic reservoir fluid level.</p>
A6	Powerplant/ Engine	<p>Check - oil level; security of filler cap and dipstick.</p> <p>Inspect - engine, as visible, for leaks, signs of overheating, and security of all items.</p> <p>Inspect - air filter/intake for cleanliness.</p> <p>Check - fan belts for adequate tension and for condition.</p> <p>Inspect - engine mounts for damage and security.</p> <p>Inspect - controls for security and damage.</p> <p>Check - security of cowlings, access doors and panels.</p>
A7	Fuel System	<p>Check visually that quantities are compatible with indicator readings.</p> <p>Drain fuel sample from each drain point into a transparent container and check for water, foreign matter and correct colour.</p>
A8	Main Transmission and Rotor	<p>Check - transmission for damage, leaks and correct oil level.</p> <p>Check - freewheel operation.</p> <p>Inspect - rotating controls for damage, security and freedom of operation.</p> <p>Check - levels in oil reservoirs and dampers.</p> <p>Inspect - main rotor blades for damage and security; drain holes for freedom from obstruction.</p> <p>Check - blade inspection monitor.</p> <p>Remove blade tie downs.</p> <p>Inspect - rotor assembly for damage, security and freedom of operation.</p> <p>Check - security of cowlings, access doors and panels.</p>

A9	Tail Transmission and Rotor	<p>Check - gearbox oil level(s) and for signs of leaks.</p> <p>Inspect - rotor assembly for damage, security and freedom of operation.</p> <p>Inspect - rotor blades for damage and security.</p> <p>Check - strike indicators.</p> <p>Inspect - drain holes for freedom from obstruction.</p> <p>Inspect - controls for damage and security.</p> <p>Check - security of cowlings, access doors and panels.</p>
A10	Cabin Area	<p>Check - flying and engine controls for full and free movement in the correct sense; friction devices for correct operation.</p> <p>Check - instrument readings are consistent with ambient conditions.</p> <p>Perform manual override and disengagement check on auto-stabiliser system.</p> <p>Check - avionic equipment operation, using self-test facilities where provided.</p> <p>Inspect - seats, belt harnesses for satisfactory condition, locking and release.</p> <p>Check - emergency equipment properly stowed and inspection dates valid.</p> <p>Test operation of electrical circuits.</p> <p>Inspect - cabin and baggage doors for damage, security and for correct operation and locking.</p> <p>Check that markings and placards are legible.</p>
A11	Agricultural Operations	<p>Inspect - hopper, hopper lid, tank, pump, boom assemblies, pipe runs, blowers and spreaders for damage and security.</p> <p>Check - emergency dump doors, fan brake and pump control for correct operation.</p> <p>NOTE: At the conclusion of agricultural operations the helicopter shall be completely cleaned to remove chemicals, and an inspection of those parts of the structure which are likely to have been contaminated, e.g. skin/covering and exposed control cables, shall be carried out before the helicopter is returned to any work other than agricultural operations.</p>
A12	Marine Helicopters	<p>Inspect - floats, spreaders, struts, bracing wires for damage, security and corrosion.</p> <p>Check - fixed float inflation pressures.</p>
A13	Special Purpose Equipment	<p>Inspect - emergency flotation gear, lifting hooks, rescue hoists, stretcher installations and similar equipment for damage and security.</p> <p>Check - lifting hook release operation.</p>

Section 8 Scheduled Maintenance

Scheduled Maintenance Worksheets

Maintenance Organisation Name: Site where maintenance was accomplished:			Page 1 of Note: Enter total pages issued
A/C Reg: G-	Type: Engine Type:	Serial No: Serial No:	Workpack Ref:
A/C Total Hours:	Cycles/Landings:	Check Start Date:	Operator:
Check Type: [50 FH/6 Months] [100 FH] [Annual] [Annual + Star Inspection]			
Note: Delete checks which are not being carried out and identify any not applicable worksheet tasks as N/A.			

Maintenance Manual Reference	Issue/Revision No.	Date
Airframe:		
Engine:		

Final Checks (Include with all checks)

Ground Run:

Task No.	Task Description	Task Nature	Task Interval	Insp	Certifying Person*
1	Powerplant, liquid, air and gas systems for leaks during and following ground run.	INSP	All Checks		
2	Instruments, systems and services. Radio for electromagnetic interference.	OP/C	All Checks		
3	Following ground run, ensure all cowlings, access panels and doors are secure.	CHK	All Checks		

Certification:

4	Workpack and Log Book entries have been completed and certified. Ensure items due in accordance with CAP 543 have been accomplished and certified.	CHK	All Checks	N/A	
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Type Certificate and Schedule Review:

5	Aircraft and engine - compliance with Type Certificate Data Sheet/Airworthiness Approval Note.	CHK	Annual	N/A	
6	Mandatory placards are installed and legible.	CHK	Annual	N/A	
7	Review the schedule to ensure that the maintenance needs of the aircraft are being met such that continuing safe operation can be assured. Account should be taken of previous maintenance history, operating environment and utilisation.	CHK	Annual	N/A	

* See Sections 4 or 5, as appropriate

50 Hour Check: Task Nos. 1 - 48

Structural/Zonal:

Task No.	Task Description	Task Nature	Task Interval	Mech	Insp
8	External structure of cabin, centre section, tail boom, cowlings, nacelles, stabilisers.	INSP	50 FH/ 6 Months		
9	Normal and emergency doors and windows, door hinges, door hinge attachment points, required placards and operating instructions.	INSP	50 FH/ 6 Months		
10	Doors, hatches and windows latching and locking.	OP/C	50 FH/ 6 Months		
11	Agricultural Installations: Hopper, hopper lid, tank, pump, fan, boom assemblies, pipe runs, blowers and spreaders.	INSP	50 FH/ 6 Months		
12	Agricultural Installations: Emergency dump doors, fan brake, pump control.	OP/C	50 FH/ 6 Months		
13	Marine Helicopters: Floats, spreaders, struts, bracing wires.	INSP	50 FH/ 6 Months		

Landing Gear:

14	Landing gear assemblies, shock-absorber struts/units for leaks and correct extension, brake system, brake linings, drums/discs, wheels, tyres.	INSP	50 FH/ 6 Months		
15	Tyre pressures, hydraulic brake system fluid level.	SERVICE	50 FH/ 6 Months		
16	Cross tubes for excessive deflection, skid shoes.	INSP	50 FH/ 6 Months		

Flying Controls:

Task No.	Task Description	Task Nature	Task Interval	Mech	Insp
17	Primary/secondary flight controls and trim systems for full and free movement in the correct sense, friction devices for correct operation. Position indicators agree with surface movement.	OP/C	50 FH/ 6 Months		

Liquid, Air and Gas Systems:

18	Hydraulic, pneumatic, vacuum, other fluid systems.	INSP	50 FH/ 6 Months		
19	Fluid levels in reservoirs, accumulator pressures.	SERVICE	50 FH/ 6 Months		
20	Pitot/static system vents, pitot head, drains clear. Pitot head correctly aligned.	INSP	50 FH/ 6 Months		

Equipment and Environmental:

21	Correct stowage of equipment, validity of date on emergency equipment.	CHK	50 FH/ 6 Months		
22	Seats, belts/harnesses, attachment, locking and release.	INSP	50 FH/ 6 Months		
23	Fire extinguisher for leakage or discharge.	CHK	50 FH/ 6 Months		

Transmission Installation:

24	Gearboxes, driveshafts, flexible couplings, belts, mast assembly, rotor brake, mountings, support bearings, clutch, freewheel.	INSP	50 FH/ 6 Months		
25	Magnetic plugs, system hoses, vents.	INSP	50 FH/ 6 Months		

Rotors:

Task No.	Task Description	Task Nature	Task Interval	Mech	Insp
26	Main rotor head and blades assembly.	INSP	50 FH/ 6 Months		
27	Tail rotor hub and blades assembly.	INSP	50 FH/ 6 Months		
28	Main and tail rotors freedom of movement in all planes.	CHK	50 FH/ 6 Months		

Helicopter Lubrication:

29	Lubricate helicopter in accordance with type design organisation recommendations.	LUB	50 FH/ 6 Months		
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Powerplant Installation:

30	Engine controls for full and free movement - throttle, mixture, carburettor heat.	OP/C	50 FH/ 6 Months		
31	Powerplant installation.	INSP	50 FH/ 6 Months		
32	Engine cooling fan installation.	INSP	50 FH/ 6 Months		

Air Induction:

33	Air filter, intake and induction system, turbocharger impeller.	INSP	50 FH/ 6 Months		
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Exhaust:

34	Exhaust manifold, mufflers.	INSP	50 FH/ 6 Months		
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Engine Lubrication:

Task No.	Task Description	Task Nature	Task Interval	Mech	Insp
35	Magnetic plugs.	CHK	50 FH/ 6 Months		
36	Engine oil change. Oil filter. Screens. Next due: Note: In accordance with type design organisation recommendations.	SERVICE	50 FH or See Note		

Fuel System:

37	Filters for cleanliness and tank vents unobstructed. Drain samples from all drain points and check for presence of water, foreign matter and correct colour.	CHK	50 FH/ 6 Months		
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Electrical System:

38	Battery, stowage/compartments, vents and drains. Electrolyte level.	INSP and SERVICE	50 FH/ 6 Months		
39	Alternator/generator drive belt tension and condition.	INSP	50 FH/ 6 Months		

Radio:

40	Aerials, insulators, controllers, instruments, displays, microphones, headsets, jackplugs and sockets.	INSP	50 FH/ 6 Months		
41	Placards and markings legible.	INSP	50 FH/ 6 Months		
42	VHF ground function.	OP/C	50 FH/ 6 Months		
43	Cables and terminals, cooling systems, moisture trap areas.	INSP	50 FH/ 6 Months		

Instrument Systems:

Task No.	Task Description	Task Nature	Task Interval	Mech	Insp
44	Instruments. Legibility of markings and associated placards, band ranges and limit markings.	INSP and CHK	50 FH/ 6 Months		
45	Readings consistent with ambient conditions.	CHK	50 FH/ 6 Months		
46	Compass 'deviation' or 'steer by' cards - valid until next check.	CHK	50 FH/ 6 Months		

Auto-Pilot/Stabiliser:

47	Displays, instruments, controllers.	INSP	50 FH/ 6 Months		
48	Manual override, disengagement functions.	OP/C	50 FH/ 6 Months		

100 Hour Check (Include 50 Hour Check Items): Task Nos. 1 - 83

Structural/Zonal:

Task No.	Task Description	Task Nature	Task Interval	Mech	Insp
49	Internal structure of cabin centre section, tail boom, engine bay, transmission platform. Floors, bulkheads, pylons, structural attachment joint assemblies, ballast weight attachments.	INSP	100 FH		
50	Internal structure of stabiliser, fin assemblies.	INSP	100 FH		
51	Internal corrosion protective treatments, drain holes and paths.	INSP	100 FH		
52	Static discharge wicks and attachment bases.	INSP	100 FH		

Landing Gear:

53	Structural members, attachment fittings, pivot points, shock absorbing devices, main wheels, nose wheel, bearings, skids, hoses and lines. Note: Carry out with weight off the landing gear.	INSP	100 FH		
54	Parking brake.	OP/C	100 FH		

Flying Controls:

55	Hinges, brackets, push-pull rods, bellcranks, damper weights, control horns, cables, pulleys, chains, tubes, guides, fairleads, servo-actuators. Note: The need for removal of flying control cables and control system components for detailed inspection must be assessed when accomplishing this task at the annual check.	INSP	100 FH		
56	Turnbuckles, locking devices in safety.	CHK	100 FH		
57	Rotating control assemblies, stabiliser bars, dampers, swashplates.	INSP	100 FH		
58	Control locking systems.	OP/C	100 FH		

Liquid, Air and Gas Systems:

59	Tanks, powerpacks, valves, pipelines, hoses, actuators, filters, venturis.	INSP	100 FH		
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Equipment and Environmental:

Task No.	Task Description	Task Nature	Task Interval	Mech	Insp
60	Cabin air system, heater, blower.	INSP and OP/C	100 FH		
61	Air conditioner, oil level.	OP/C and SERVICE	100 FH		

Transmission Installation:

62	Lubrication system, tank, sump, cooler, pipelines.	INSP	100 FH		
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Powerplant Installation:

63	Crankcase, accessory housings, cylinder assemblies, accessory drive belts, accessories, engine shock mounts, mount frames, bulkheads, firewalls and sealing, cooling baffles, cowlings, breathers and vents, items in engine bay for mutual interference.	INSP	100 FH		
64	Valve operating mechanism. Next due: Note: In accordance with type design organisation recommendations.	CHK	100 FH or See Note		
65	Cylinder compression and leakage. Record results below. Method:	CHK	100 FH		

Eng Cyl	Result	Eng Cyl	Result
1		4	
2		5	
3		6	

Air Induction:

Task No.	Task Description	Task Nature	Task Interval	Mech	Insp
66	Carburettor heat, alternative air bypass doors, control systems.	INSP and OP/C	100 FH		
67	Flame traps, drains.	INSP	100 FH		

Ignition:

68	Magnetos, harnesses, leads, switches, starting vibrators, contact breakers, cooling system and ventilators.	INSP	100 FH		
69	Magneto internal timing and timing to engine.	CHK	100 FH		
70	Magneto cam. Next due: Note: In accordance with type design organisation recommendations.	LUB	100 FH or See Note		
71	Spark plugs. Next due: Note: In accordance with type design organisation recommendations.	CHK	100 FH or See Note		

Exhaust:

72	Cabin heat exchanger.	INSP	100 FH		
73	Turbocharger, control system, pipelines, hoses.	INSP	100 FH		

Engine Lubrication:

74	Tanks, sumps, coolers, hoses, pipelines, vents.	INSP	100 FH		
75	Engine controls in accordance with type design organisation recommendations.	LUB	100 FH		

Fuel System:

Task No.	Task Description	Task Nature	Task Interval	Mech	Insp
76	Tanks, filler caps, selector valves, pumps, pipelines, hoses, carburettor, injector systems, throttle, mixture control, fuel selector control, filler point placard.	INSP	100 FH		

Electrical Systems:

77	Components, wiring, terminals, connectors.	INSP	100 FH		
78	Warning circuits.	OP/C	100 FH		
79	Correct type and rating of fuses and circuit breakers. Correct spare fuses carried.	CHK	100 FH		
80	Lamps and lighting. Correct spare lamps carried.	CHK	100 FH		
81	Brushes in starters, alternators and generators. Next due: Note: In accordance with type design organisation recommendations.	CHK	100 FH or See Note		

Instrument Systems:

82	Instruments, displays, controllers, panels, mounts, pipes, hoses, electrical wiring, gyro filters, flux detectors, instrument transmitters.	INSP	100 FH		
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Auto-Pilot/Stabiliser:

83	Computers, amplifiers, power supplies, servo motors, connections to flying control systems, manometric system inter-connections.	INSP	100 FH		
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Annual Check/Non-Aligned Tasks (Include 50 and 100 Hour Check Items): Task Nos. 1 - 118

Structural/Zonal:

Task No.	Task Description	Task Nature	Task Interval	Mech	Insp
84	Emergency exits by internal and external release methods.	OP/C	Annual		
85	Lightning strike bonding.	CHK	Annual		
86	Internal condition of struts, control tubes and similar hollow members. Next due: Note: In accordance with type design organisation recommendations.	INSP	See Note		

Flying Controls:

87	Control cables for correct tension. Control neutrals and travels. Record results below.	CHK	Annual		
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Cable Identification	Temperature	Tension		Control and Position (Neutral, min, max, etc.)	Angle/Measurement	
		Required	Actual		Required	Actual

Liquid, Air and Gas Systems:

Task No.	Task Description	Task Nature	Task Interval	Mech	Insp
88	Pitot/static system sense and leak.	F/C	Annual		
89	Hydrostatic test of pressure vessels. Next due: Note: In accordance with type design organisation recommendations.	INSP and CHK	60 Months or See Note		
90	Flexible fuel and oil hoses pressure test. Next due: Note: In accordance with type design organisation pressure testing recommendations but in either case only until the ultimate service life, if stated, is achieved.	CHK	72 Months from new, then every 36 Months or See Note		
91	Internal examination and pressure testing of fluid tanks and reservoirs. Next due: Note: In accordance with type design organisation recommendations.	CHK	See Note		

Transmission Lubrication:

92	Transmission oil change. Oil filter, screens. Next due: Note: In accordance with type design organisation recommendations.	SERVICE	100 FH or See Note		
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Equipment and Environmental:

93	Fire extinguisher contents by pressure/weight.	CHK	Annual		
94	Combustion heater. Next due:	CHK	iaw GR11		

Exhaust:

Task No.	Task Description	Task Nature	Task Interval	Mech	Insp
95	Cabin heat exchanger pressure test. Next due: Note: In accordance with type design organisation recommendations.	CHK	Annual or See Note		

Electrical Systems:

96	Over/under-volt system, warnings.	OP/C	Annual		
97	All ground operable electrical circuits. Exercise manually operated circuit breakers.	OP/C	Annual		
98	Nickel-cadmium battery capacity test. Next due: Note: In accordance with equipment manufacturer's recommendations where capacity checks are recommended by the equipment manufacturer.	F/C	12 months or See Note		
99	Lead-acid battery capacity test. Next due: Note: In accordance with equipment manufacturer's recommendations where capacity checks are recommended by the equipment manufacturer.	F/C	12 months or See Note		

Radio:

100	HF Communication.	OP/C	Annual		
101	ADF - ground function using station(s) of known bearing to establish accuracy. Audio on all bands.	F/C	Annual		
102	ILS Localiser and Glide Slope - with a Field Test Set, including flag warnings of single tone failure, centre-line accuracy, sense, course widths, audio.	F/C	Annual		

Task No.	Task Description	Task Nature	Task Interval	Mech	Insp
103	VOR - with a Field Test Set, including flag warnings, omni-radial resolving, radio-magnetic indicator accuracy at 90° intervals, sense and course width.	F/C	Annual		
104	Marker - with a Field Test Set, including 3-tone operational check, high/low sensitivity.	F/C	Annual		
105	DME - with a Field Test Set, including range accuracy, audio.	F/C	Annual		
106	ATC Transponder - with a Field Test Set, including frequency tolerance, side lobe suppression, mode 'C' and 'S'.	F/C	Annual		
107	Airborne Search and Weather Radar - all modes.	OP/C	Annual		
108	Area and Satellite Navigation (GPS).	OP/C	Annual		
109	Audio, including emergency operation.	OP/C	Annual		
110	ELT, including battery. Next due: Note: In accordance with manufacturer's recommendations.	CHK	See Note		
111	VHF Communication - with a Field Test Set, including frequency tolerance of transmitted frequencies. Next due: Note: In accordance with equipment manufacturer's recommendations, only where frequency tolerance checks are recommended by the equipment manufacturer.	F/C	36 Months		
112	HF Communication - with a Field Test Set, including frequency tolerance of transmitted frequencies. Next due: Note: In accordance with equipment manufacturer's recommendations, only where frequency tolerance checks are recommended by the equipment manufacturer.	F/C	36 Months		
113	Aerials and Feeders - VSWR (DME and ATC Transponder), insulation (HF). Next due:	F/C	36 Months		

Instrument Systems:

Task No.	Task Description	Task Nature	Task Interval	Mech	Insp
114	Air Speed Indicator calibration (in situ is permissible).	F/C	Annual		
115	Altimeter calibration (in situ is permissible).	F/C	Annual		
116	Instruments and indicators - satisfactory condition, mounting, marking and operation. Note: This task is applicable to all instruments and indicators that could affect the airworthiness or operating safety of the aircraft.	F/C	Annual		
117	Compass swing. Next due:	F/C	36 Months		

Auto-Pilot/Stabiliser:

118	Auto-Pilot/Stabiliser - all modes. Note: Refer to Airworthiness Notice No. 3 for limitation of certification privileges.	OP/C	Annual		
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