

Introduction of Instrument Approach Procedures (IAPs) to Runway 03 at Cranfield Airport – Post Implementation Review

CAP 1791



Published by the Civil Aviation Authority, 2019

Civil Aviation Authority
Aviation House
Beehive Ring Road
Crawley
West Sussex
RH6 0YR

You can copy and use this text but please ensure you always use the most up to date version and use it in context so as not to be misleading, and credit the CAA.

First published 2019

Enquiries regarding the content of this publication should be addressed to:

Airspace
ATM and Aerodromes
Safety and Airspace Regulation Group
Civil Aviation Authority
Aviation House
Beehive Ring Road
Crawley
West Sussex
RH6 0YR

The latest version of this document is available in electronic format at: www.caa.co.uk/CAP1791

Contents

Contents	3
Executive summary	4
Scope and Background of the PIR	5
What is a Post Implementation Review	5
Background to our conclusions in this PIR Decision	5
Conditions attached to the CAA's decision to approve the change.	6
Relevant events since change proposal submitted (if any)	7
Data collected for the purpose of the PIR	7
Other data we have considered	7
Objectives and Anticipated Impacts	8
The original proposal and its objectives	8
Anticipated Impacts	8
CAA Assessment	9
Operational Assessment	9
Safety	9
Operational Feedback	9
Air Navigation Service Provision	9
Utilisation, Track Keeping and Traffic	10
Infringements and Denied Access	10
Letters of Agreement	10
Environmental Assessment	10
Ministry of Defence Operations	11
Any other impacts	11
Conclusion	12
Note on plain language	13
Annex A – Decision Letter	14
Annex B - RNAV Approaches to Cranfield statistics	19
Annex C – Post Implementation Review Feedback	20

Executive summary

The CAA's airspace change process applicable to this airspace change proposal is a seven-stage mechanism that is set out in detail in CAP 725. Under this process Cranfield Airport submitted proposals to the CAA to introduce Instrument Approach Procedures (IAPs) to Runway 03 at Cranfield Airport. Stage 7 of this process is a Post Implementation Review (PIR) that normally begins one year after implementation of the change. The NDB/DME procedure was implemented on 28th June 2012 and the RNAV (GNSS) procedure was implemented on 26th July 2012. Consequently the period under review is 28th June 2012 to 25th July 2013 (i.e. 12 months from the implementation dates of the procedures). Competing priorities for the allocation of resources resulted in a delay to us starting this particular review. The CAA commenced the PIR of the impact of its decision and the implemented change on 25th September 2018 when Cranfield were sent an initial request for PIR feedback data. The content and outcome of that review process by the CAA is discussed in detail in this report including its annexes.

On 2 January 2018 the CAA introduced a new process (CAP1616) for making a decision whether or not to approve proposals to change airspace design. Irrespective of whether the CAA decision to approve the change was made under the previous process (set out in CAP 725), we will conduct all Post Implementation Reviews in accordance with the process requirements of CAP1616. However, when assessing the expected impacts against the actual impacts we will use the methodology adopted at the time of the original CAA decision in order to do so.

During the review process, the CAA considered responses from the Sponsor following requests for information/data and a review of the ECCAIRS Mandatory Occurrence Report (MOR) database, the AIPROX database and the CA939 (Report on Alleged Infringements of Air Navigation Legislation) database for any occurrences attributable to the new procedures during the review period.

As a result the CAA has reached the following conclusion:

The CAA is satisfied that the introduction of Instrument Approach Procedures (IAPs) to Runway 03 at Cranfield Airport in 2012 satisfactorily achieved the objective and terms of the CAA's decision, and the change is confirmed.

This report, and its annexes, provide a summary of the information the CAA has reviewed and taken into account before reaching its conclusions. However, all the information the CAA has taken into account is published on our website/portal.

Scope and Background of the PIR

What is a Post Implementation Review

1. The CAA's approach to decision-making in relation to proposals to approve changes to airspace is explained in its Guidance on the Application of the Airspace Change Process, CAP [725/1616]. This detailed Guidance provides that the seventh and last stage of the process is a review of the implementation of the decision, particularly from an operational perspective, known as a Post Implementation Review (PIR).
2. The Guidance states that the purpose of a PIR "is for the change sponsor to carry out a rigorous assessment, and the CAA to evaluate, whether the anticipated impacts and benefits in the original proposal and published decision are as expected, and where there are differences, what steps (if any) are required to be taken."
3. If the impacts are not as predicted, the CAA will require the change sponsor to investigate why, and consider possible mitigations or modifications for impacts that vary from those which were anticipated to meet the terms of the original decision.
4. A PIR is therefore focused on the effects of a particular airspace change proposal. It is not a review of the decision on the airspace change proposal, and neither is it a re-run of the original decision process.

Background to our conclusions in this PIR Decision

5. On 10th April 2012 the CAA approved implementation of Instrument Approach Procedures (IAPs) to Runway 03 at Cranfield Airport. The NDB/DME procedure was implemented on 28th June 2012 as part of AIRAC 7/12, the RNAV (GNSS) procedure was implemented on 26th July 2012 as part of AIRAC 8/12. In our Decision document dated 10th April 2012 we provided factual information and background to the change. The Decision document can be found at Annex A.
6. IAPs to Runway 03 had existed at Cranfield Airport in the past but were withdrawn more than 16 years ago due to a decline in operational demand. The previous IAPs arrangement required that, when Runway 03 was in use, aircraft must make an instrument approach to Runway 21 followed by a visual circling manoeuvre to land on Runway 03. Cranfield Airport felt that increase in overall demand for IAPs, particularly from modern corporate aircraft types, made it appropriate to re-establish IAPs in order to enable poor-weather operations to be conducted safely and efficiently.
7. The proposal was to introduce NDB/DME and RNAV (GNSS) procedures to Runway 03. In examining the design options, the sponsor considered that the 'do nothing' option should be rejected as it did not address the prime objective of establishing

more effective air operations. Due to the constraints of the adjacent controlled airspace (CAS) and the potential impact on the airspace arrangements a limited number of alternative options were available for consideration. Positioning of the NDB/DME IAP to the south-side of the extended Runway 03 centreline was dismissed as the procedure design protection areas would infringe the Luton Control Zone. The normal full array of 'T' or 'Y' Initial Approach Segments could not be provided to either side of the Final Approach Track for the RNAV (GNSS) procedure due to the proximity of CAS.

8. The sponsor concluded that the only practical and justifiable option was the establishment of NDB/DME Non-Precision Approach procedure based on the CIT NDB (L) and utilising the airport sited DME facility to the north of the extended Runway 03 centreline, and a RNAV (GNSS) Non-Precision Approach procedure also to the north of the Runway 03 centreline.
9. At that time Cranfield Airport did not have a surveillance radar facility, so it was necessary for arriving aircraft operating under Instrument Flight Rules to carry out the whole of the published IAP. The proposed NDB procedure for Runway 03 includes a Direct Approach option thus negating the requirement for pilots to fly the whole procedure. Prior to the change aircraft had to fly the whole procedure for Runway 21 followed by visual positioning for Runway 03. Post the change aircraft can start the IAP to Runway 03 and then break off for a visual approach.

Conditions attached to the CAA's decision to approve the change.

10. To support introduction of the proposed IAPs, Cranfield Airport were required to install approach lighting, Precision Approach Path Indicators, stop lighting and the associated control and monitoring system for Runway 03.
11. **CAA comment:** The Sponsor has reported that the required additional airfield lighting was installed. However, due to the changes to the Air Navigation Service Provider at Cranfield, the Sponsor reports that the completion date for this work is not available.
12. A warning note highlighting glider activity, should be included on the appropriate aeronautical charts, together with appropriate glider symbology on the graphic.
13. **CAA comment:** A warning note highlighting glider activity was included on the appropriate aeronautical charts. However, the glider symbology (a capital G within a circle) is normally only applicable for the site where gliders take off/land and as such would not normally be used to indicate general glider activity even if that activity was considered to be high intensity. Consequently the "glider symbology" mentioned in the Decision Letter does not appear on the charts.
14. The sponsor will be required to undertake a post implementation review of the new arrangements, which will include information on the number and types of approach undertaken.

15. **CAA comment:** These statistics can be found at Annex B.

Relevant events since change proposal submitted (if any)

16. The current Sponsor reports that since this airspace change proposal was first submitted in 2011, Cranfield University brought Air Traffic Services in house in 2017 with CAA approval being granted for their ANSP in April 2017. As part of the transition, Cranfield University approved all safety cases that had previously been written by SERCO.

Data collected for the purpose of the PIR

Sources of Information

Change Sponsor

17. In response to a series of email requests sent by the CAA between 25th September 2018 and 1st April 2019 the Sponsor provided the analysis/data required to complete this report.
18. **CAA comment:** The Decision Letter placed a specific requirement upon the Sponsor that the post implementation review will include information on the number and types of approach undertaken and it is implicit in that letter the statistics should apply for approaches to Runway 03. Although the Sponsor has provided statistics relating to the number of approaches, the Sponsor is unable to correlate those statistics with the runway in use. However, in the UK the typical meteorological conditions suggest a ratio of two thirds westerly operations to one third easterly operations. Consequently, it is reasonable to assume that one third of the movements shown at Annex B relate to approaches to Runway 03.
19. It also states that work to install approach lighting, Precision Approach Path Indicators, stop lighting and the associated control and monitoring system for Runway 03.
20. **CAA comment:** The Sponsor has reported that the required additional airfield lighting was installed. However, due to the changes to the Air Navigation Service Provider at Cranfield, the Sponsor reports that the completion date for this work is not available.

Other data we have considered

21. The CAA has reviewed the ECCAIRS Mandatory Occurrence Report (MOR) database, the AIPROX database and the CA939 (Report on Alleged Infringements of Air Navigation Legislation) database for any occurrences attributable to the new procedures during the review period (28th June 2012 to 25th July 2013).

Objectives and Anticipated Impacts

The original proposal and its objectives

22. The key objective for this change was to enable poor-weather operations to Runway 03 at Cranfield Airport to be conducted safely and efficiently.
23. The Sponsor reports that the implementation of the instrument approaches was highly efficacious; it gave the airport the ability to increase all-weather operations; it reduces air traffic delay for aircraft arriving from the south and west; and, safety improvement was achieved via the withdrawal of instrument approaches contra to the runway in use.

Anticipated Impacts

24. Given the restrictions imposed by extant CAS, the overflight of Milton Keynes by aircraft carrying out an NDB/DME could not be avoided. In mitigation due regard was taken by the sponsor to restrict overflight of Milton Keynes to not below 2500 ft amsl; a lower level would have been permitted if the obstacle environment alone was considered. It must also be noted that under current arrangements overflights of Milton Keynes by aircraft inbound to Cranfield Airport, whether under the IFR or the Visual Flight Rules, may take place under the current airspace arrangements in accordance with Class G requirements at levels below 2,500 ft amsl.

CAA Assessment

Operational Assessment

25. The CAA assessed the Instrument Flight Procedure Design at the time and the CAA's role in applying both UK Government and CAA guidance. The following sets out the CAA's conclusions.

Safety

26. The Sponsor reports safety improvement was achieved via the withdrawal of instrument approaches contra to the runway in use.
27. The CAA has reviewed the ECCAIRS Mandatory Occurrence Report (MOR) database, the AIPROX database and the CA939 (Report on Alleged Infringements of Air Navigation Legislation) database for any occurrences attributable to the new procedures during the review period (28th June 2012 to 25th July 2013).
- The MORs for this period have all been closed and none were associated with the new procedures.
 - A review of the AIRPROX data did not reveal any incident associated with the new procedure.
 - No CA939 reports were received by the CAA's Investigation and Enforcement Team associated with the new procedure.
28. The CAA is satisfied with the Sponsor's conclusion.

Operational Feedback

29. The Sponsor has reported that no observations were received from aviation stakeholders during the 12 months following implementation. (28th June 2012 to 25th July 2013).
30. The CAA is satisfied there is no adverse operational feedback.

Air Navigation Service Provision

31. The Sponsor has reported that they assume a training package was written by the previous airport operator (SERCO) and was completed. They further report from their archives that all ATCOs completed TRUCE training by 23/08/2012. This was prior to the 2015/340 training and licensing requirement for ATCOs. Consequently, the Sponsor cannot confirm whether the training package had to be approved by SARG as conversion training does now and their change assessments at the time states "ATC procedures approved by CAA as completed on 01/06/2012".

32. The Sponsor has reported that “SERCO did not recruit extra controllers to implement the change”.
33. The CAA is satisfied that Air Navigation Service provisions were met.

Utilisation, Track Keeping and Traffic

34. At the time of implementation Cranfield did not have surveillance equipment, consequently data relating to track keeping is not available. Statistics relating to utilisation and traffic during the review period (28th June 2012 to 25th July 2013) can be found at Annex B.
35. The CAA is satisfied that although insufficient detail on the number and types of approaches were recorded at the time, the statistics subsequently provided by the Sponsor are adequate for us to reach our overall conclusion.

Infringements and Denied Access

36. Not applicable as no new controlled airspace was implemented in conjunction with this proposal.

Letters of Agreement

37. The Sponsor has reported that they are not aware of any new Letters of Agreement (LOA) or Memorandum of Understanding (MOU).

Environmental Assessment

38. It was recognised that the introduction of the NDB/DME IAP would result in a small proportion of Cranfield’s arriving aircraft overflying Milton Keynes. However, both the proposed NDB/DME and RNAV (GNSS) procedures are located in Class G airspace where other aircraft may operate freely in accordance with the airspace classification and in accordance with the rules of the air. Such aircraft may not be associated with Cranfield Airport or known to Cranfield Air Traffic Control and no records of random airspace activity outside controlled airspace were maintained. Based upon noise modelling analyses and the estimated frequency of flights, the expected noise impact of aircraft that cross Milton Keynes using the NDB/DME approach to Runway 03 was not expected to be discernible in most cases, and if audible, they are unlikely to be significant.
39. As the Sponsor reported that no observations were received from Community Stakeholders during the 12 months following implementation (28th June 2012 to 25th July 2013), the CAA is satisfied that no post-implementation environmental analysis was considered necessary given the interval since implementation.

Community Stakeholder observations

40. The Sponsor has reported that no observations were received from Community Stakeholders during the 12 months following implementation (28th June 2012 to 25th July 2013).
41. The CAA is satisfied with the Sponsor's report.

Ministry of Defence Operations

42. The Sponsor has reported that no observations were received from the Ministry of Defence during the 12 months following implementation (28th June 2012 to 25th July 2013).
43. The CAA is satisfied with the Sponsor's report.

Any other impacts

44. At the time of the change proposal the CAA concluded that the Sponsor completed a satisfactory consultation with all affected aviation stakeholder groups. Although some concern was raised in regard to the mix of IFR flights and gliders in Class G airspace, the Sponsor provided adequate mitigation. No other impacts have been identified during the review period (28th June 2012 to 25th July 2013).

Conclusion

45. The CAA is satisfied that the introduction of Instrument Approach Procedures (IAPs) to Runway 03 at Cranfield Airport satisfactorily achieved the objective and terms of the CAA's decision, and the change is confirmed.

Note on plain language

46. The CAA has attempted to write this report as clearly as possible. Our approach has been to include all the relevant technical material but also to provide a summary and of the conclusions the CAA has reached in reliance on it in as understandable a way as possible. Nevertheless, when summarising a technical subject there is always a risk that explaining it in more accessible terms can alter the meaning.

Annex A – Decision Letter

Directorate of Airspace Policy



All NATMAC Representatives
10 April 2012

CAA DECISION LETTER

Dear Asthayanis,

INTRODUCTION OF INSTRUMENT APPROACH PROCEDURES (IAPs) TO RUNWAY 03 AT CRANFIELD AIRPORT

1 INTRODUCTION

- 1.1 Cranfield Airport issued a consultation document in October 2011 seeking comments on a proposal to introduce IAPs to Runway 03 at the Airport. Upon receipt of the proposal, DAP staff, supported by colleagues from the Safety Regulation Group of the CAA, undertook a detailed analysis of the material, which included an examination of the operational, environmental and consultative requirements of the Airspace Change Process. The purpose of this letter is to provide you with an overview of the proposal and my subsequent decision on it.

2 PROPOSAL OVERVIEW

- 2.1 IAPs to Runway 03 have existed at Cranfield Airport in the past but were withdrawn more than 10 years ago due to a decline in operational demand. The current IAPs arrangement requires that, when Runway 03 is in use, aircraft must make an instrument approach to Runway 21 followed by a visual circling manoeuvre to land on Runway 03. Cranfield Airport now feel that recent increase in overall demand for IAPs, particularly from modern corporate aircraft types, now make it appropriate to re-establish IAPs in order to enable poor-weather operations to be conducted safely and efficiently.
- 2.2 The proposal is to introduce NDB/DME and RNAV (GNSS) procedures to Runway 03.
- 2.3 In examining the design options, the sponsor considered that the 'do nothing' option should be rejected as it did not address the prime objective of establishing more effective air operations. Due to the constraints of the adjacent controlled airspace (CAS) and the potential impact on the airspace arrangements a limited number of alternative options were available for consideration. Positioning of the NDB/DME IAP to the south-side of the extended Runway 03 centreline was dismissed as the procedure design protection areas would infringe the Luton Control Zone. The normal full array of 'T' or 'Y' Initial Approach Segments could not be provided to either side of the Final Approach Track for the RNAV (GNSS) procedure due to the proximity of CAS.
- 2.4 The sponsor concluded that the only practical and justifiable option was the establishment of NDB/DME Non-Precision Approach procedure based on the CIT NDB (L) and utilising the airport sited DME facility to the north of the extended

Civil Aviation Authority
CAA House K6 45-59 Kingsway London WC2B 6TE www.caa.co.uk
Telephone 020-7453-6500 Fax 020-7453-6565 mark.swan@caa.co.uk

Runway 03 centreline, and a RNAV (GNSS) Non-Precision Approach procedure also to the north of the Runway 03 centreline. Both IAPs are depicted in the draft charts at Enclosure 1.

- 2.5 Cranfield Airport does not currently have a surveillance radar facility, so it is necessary, for arriving aircraft operating under Instrument Flight Rules to carry out the whole of the published IAP. The proposed NDB procedure for Runway 03 includes a Direct Approach option thus negating the requirement for pilots to fly the whole procedure.
- 2.6 In order to support the introduction of the proposed IAPs, Cranfield Airport have plans in place for the installation of approach lighting, Precision Approach Path Indicators, stop lighting and the associated control and monitoring system for Runway 03. Work is due to commence during April 12, to be completed by the planned implementation date.

3 STATUTORY DUTIES

- 3.1 My statutory duties are set out in Section 70 of the Transport Act 2000 (the Act); the CAA (Air Navigation) Directions 2001, as varied in 2004 (the Directions); and Guidance to the CAA on Environmental Objectives relating to the Exercise of its Air Navigation Functions issued in 2002 by the DfT (then called Department of Transport, Local Government and the Regions (the Guidance)) and as updated by an addendum in February 2012.

3.2 Safety

- 3.2.1 My primary duty is to maintain a high standard of safety in the provision of air traffic services and this takes primacy over all other duties.¹ The proposed new procedures would provide a full instrument approach capability to Runway 03 and, particularly in the case of the RNAV (GNSS) procedure, offer substantial improvements to the landing minima in comparison to the visual circling manoeuvre minima following an instrument approach to Runway 21 (about 460 ft lower for larger aircraft).
- 3.2.2 Some concern was expressed during consultation with respect to the mix of IFR flights and gliders in Class G airspace in an area where gliding operations routinely takes place. CAA personnel have confirmed that the proposed design and associated airspace management arrangements can nonetheless be safely implemented; a warning note, highlighting glider activity, would be included on appropriate aeronautical charts, together with appropriate glider symbology on the graphic. I am therefore content that the potential adverse flight safety impact on those aircraft operating in the vicinity of the new arrangements can be adequately managed.
- 3.2.3 The appropriate safety management processes have already been undertaken for both the proposed RNAV (GNSS) and NDB/DME procedures. I am therefore satisfied that the proposed airspace design can be safely adopted.

3.3 Airspace Efficiency

- 3.3.1 I am required to secure the most efficient use of airspace consistent with the safe operation of aircraft and the expeditious flow of air traffic². The proposed procedures

¹ Transport Act 2000, Section 70(1).

² Transport Act 2000, Section 70 (2)(a)

recognise the need for efficient use of the airspace by all airspace users and are cognisant of the restrictions imposed by adjacent CAS. The proposal is appropriate to the provision of a full instrument approach capability to Runway 03 at the Airport, and is unlikely to have a noticeable impact in controller or pilot workload, albeit it will remove the need for circling approaches and provide much lower instrument minima by virtue of an aligned final approach. I consider the introduction of these arrangements will represent a significant improvement in overall airspace efficiency.

3.4 Airspace Users

- 3.4.1 I am required to satisfy the requirements of operators and owners of all classes of aircraft.¹ The sponsor completed a satisfactory consultation with all affected aviation stakeholder groups. Although some concern was raised in regard to the mix of IFR flights and gliders in Class G airspace, the sponsor provided adequate mitigation and therefore, I am satisfied that this proposal meets the requirements of airspace users.

3.5 Interests of Other Parties.

- 3.5.1 I am required to take account of the interests of any person (other than an owner or operator of an aircraft) in relation to the use of any particular airspace or the use of airspace generally.² One consultee expressed concern in respect to the potential overflight of parts of Milton Keynes. Given the restrictions imposed by extant CAS, the overflight of the town by aircraft carrying out an NDB/DME could not be avoided. In mitigation due regard was taken by the sponsor to restrict overflight of Milton Keynes to not below 2500 ft amsl; a lower level would have been permitted if the obstacle environment alone was considered. It must also be noted that under current arrangements overflights of Milton Keynes by aircraft inbound to Cranfield Airport, whether under the IFR or the Visual Flight Rules, may take place under the current airspace arrangements in accordance with Class G requirements at levels below 2,500 ft amsl. I am therefore satisfied that the overall interests of other parties have been considered.

3.6 Environmental Objectives and Impact

- 3.6.1 I am also obliged to take account of any guidance on environmental objectives given to the CAA by the Secretary of State³, which has been provided in the detailed Guidance to the CAA on Environmental Objectives relating to the Exercise of its Air Navigation Functions⁴. It is recognised that the introduction the NDB/DME IAP will result in a small proportion of Cranfield's arriving aircraft overflying Milton Keynes. However, both the proposed NDB/DME and RNAV (GNSS) procedures are located in Class G airspace where other aircraft may operate freely in accordance with the airspace classification. Such aircraft may not be associated with Cranfield Airport or known to Cranfield Air Traffic Control and no records of random airspace activity outside controlled airspace are maintained. Based upon noise modelling analyses and the estimated frequency of flights, the expected noise impact of aircraft that cross Milton Keynes using the NDB/DME approach to Runway 03 is unlikely to be discernible in most cases, and if audible, they are unlikely to be significant. The sponsor will be required to undertake a post implementation review of the new arrangements, which will include information on the number and types of approach undertaken.

¹ Transport Act 2000, Section 70(2)(b).

² Transport Act 2000, Section 70(2)(c).

³ Transport Act 2000, Section 70 (2)(d)

⁴ Issued by the then Department for Transport, Local Government and the Regions in January 2002.

3.6.2 Given the advice provided by my expert Environmental Research and Consultancy Department (ERCD) and my personal consideration of the proposal, I am satisfied that the proposed changes do not indicate there will be a significant impact on the environment.

3.7 Integrated operation of ATS

3.7.1 I am required to facilitate the integrated operation of air traffic services provided by or on behalf of the Armed Forces of the Crown and other air traffic services.¹ In this respect, the MOD has been engaged during the consultation process and has stated that they are satisfied with the change proposed.

3.8 National Security

3.8.1 I am required to take into account the impact any airspace change may have upon matters of national security.² The MOD has confirmed that national security will not be impacted by this proposal.

3.9 International Obligations

3.9.1 I am required to take into account any international obligations entered into by the UK and notified by the Secretary of State.³ No new international obligations arise as a result of the proposal. The new airspace is in accordance with national regulatory requirements.

3.10 Consultation with the MOD

3.10.1 Consultation requirements with the Secretary of State for Defence are set out in the Air Navigation Directions (the Directions)⁴. The MOD has confirmed that they are content with the proposal.

4 ENVIRONMENTAL CONSIDERATIONS

4.1 Environmental considerations have already been considered in a previous paragraph. It is not possible to accurately determine the overall environmental impact of this change proposal as no reliable data is available on GA aircraft activity in the area of the change, but it is considered to be limited and therefore I am content that there is no requirement to refer this proposal to the Secretary of State.

5 CONSULTATION

5.1 The Sponsor undertook consultation in accordance with the requirements of CAPs 724 and 725. Assessment of the proposal by DAP Airspace Policy Coordination and Consultation Section concluded that the conduct of the consultation was of a high standard and in accordance with the guidance contained in CAP 725. The sponsor was very proactive in seeking responses and responded in a positive manner to queries and objections.

¹ Transport Act 2000, Section 70(2)(e).

² Transport Act 2000, Section 70(2)(f).

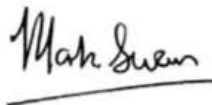
³ Transport Act 2000, Section 70(2)(g).

⁴ The Civil Aviation Authority (Air Navigation) Directions 2001 as varied by the Civil Aviation Authority (Air Navigation) (Variation) Direction 2004.

6 REGULATORY DECISION

- 6.1 I am content that the proposed procedure design can be safely adopted and that flight safety will be enhanced by the provision of a full instrument approach capability to Runway 03, thus satisfying my principal statutory duty. I am equally content that airspace efficiency will not be affected and the needs of the principal users will be met. I am satisfied that the final option presented provided the most pragmatic solution.
- 6.2 The intention is that the NDB/DME procedure will become effective on the AIRAC 7/2012 implementation date of 28 June 2012, and as the RNAV (GNSS) procedures requires a double AIRAC schedule; it would become effective at AIRAC 8/2012 on 26 July 2012. My staff will review the effectiveness of the arrangements 12 months after introduction and the results of this review will be published.
- 6.3 If you have any queries, the DAP Case Officer, Dean Miller, may be contacted on 0207 453 6554, or via e mail to dean.miller@caa.co.uk.

Yours sincerely,



M Swan
Director

Enclosure:

1. Charts showing proposed NDB/DME and RNAV (GNSS) Non-precision Approach procedures.

Annex B - RNAV Approaches to Cranfield statistics

RNAV Approaches to Cranfield – Review Period is 28th June 2012 to 25th July 2013

	2012	2013
January		16
February		20
March		24
April		19
May		38
June	18	26
July	8	30
August	7	
September	12	
October	21	
November	10	
December	15	
Total	91	173

Note 1: These statistics refer to all RNAV approaches to Cranfield during the review period. Cranfield are unable to confirm the runway to which an approach was made. However, in the UK the typical meteorological conditions suggest a ratio of two thirds westerly operations to one third easterly operations. Consequently, it is reasonable to assume that one third of the movements shown above relate to approaches to Runway 03.

Note 2: These statistics relate to whole months encompassing the review period 28th June 2012 to 25th July 2013.

Annex C – Post Implementation Review Feedback

Post Implementation Review Feedback Form

Title: Instrument approach procedures (IAPs) to runway 03 at Cranfield Airport	Post Implementation Review Feedback
ACP Ref: ACP12-03	Approval Date: 10/04/2012
Decision Letter: Click Here	Implementation Date: 28/06/2012

1. Did the original proposal meet the intended objectives as described on the CAA's decision letter to approve the change?	Yes
If no, please provide additional comments...	
2. Did the original proposal meet any conditions described on the CAA's decision letter to approve the change?	Yes
If no, please provide additional comments...	
3. Did the Sponsor receive any observations from community stakeholders, aviation stakeholders or the Ministry of Defence from the 12 months following implementation?	No
If yes, please provide additional comments...	

Name of individual	[REDACTED]
Position	Airport Manager
Date	28/09/2018

06 September 2018



Page 1 of 2

Post Implementation Review Feedback Form

For CAA use only.

Has the Sponsor indicated that the original proposal met the objectives as described in the CAA's decision to approve the change?	Yes
Has the Sponsor indicated that the original proposal met any conditions as described in the CAA's decision to approve the change?	Yes
Has the Sponsor highlighted any observations from community stakeholders, aviation stakeholders or the Ministry of Defence?	No

Sign Off

Does the CAA recommend that a post implementation review is conducted?	Yes
Signed:  Name:  Manager Airspace Regulation/Principal Airspace Regulator (delete as applicable)	
Date: 30/07/2019	