

All NATMAC Representative

21 December 2015

*Dear Stakeholders,*

## CAA DECISION LETTER

### CARDIFF AIRPORT INTERNATIONAL LTD (CIAL) RNAV IAP REPLICATIONS

#### 1. INTRODUCTION

- 1.1. In line with current UK policy and the Government's Future Airspace Strategy (FAS) initiative, on 31 Mar 15 CIAL submitted an Airspace Change Proposal (ACP) to the CAA following a statutory consultation period. The proposal is to replicate current aircraft approach tracks when introducing new RNAV approach procedures that will reduce reliance on ground based navigation aids.

#### 2. INFORMATION THAT HAS BEEN CONSIDERED

- 2.1. In making my decision, I have considered a number of documents including the sponsor's consultation document, the change sponsor's ACP and the CAA's Operational Report, Consultation Report and Environmental Analysis. These documents will be published on the CAA's website shortly.

#### 3. PROPOSAL OVERVIEW

- 3.1. CIAL, as sponsor, proposed the introduction of RNAV instrument approach procedures for Rwy 12 and 30 at Cardiff Airport. The intention is to replicate current Instrument Approach Procedures (IAPs) and operate both RNAV and the current IAPs in parallel. Over time, these new procedures will lead to less lateral dispersion of flight paths, but a greater concentration of traffic along the actual design track of each procedure.
- 3.2. The introduction of RNAV IAPs aligns with government policy to reduce reliance on ground-based navigation aids, allows airlines to operate using the full capability of their respective FMS and provides more accurate navigation guidance that will in turn minimise the number of people affected by direct over-flight.
- 3.3. The ACP considered 3 options: Do nothing, develop new routes or replicate existing routes. It was assessed that the 'do nothing' option would limit operational improvement in the longer term and deny the use of the improved technology now available on many aircraft fleets. Developing new routes was also discounted because current government guidance states existing track replication should be developed in preference to new routings wherever this is possible.

## **4. CONSULTATION**

- 4.1. The Sponsor undertook a consultation through NATMAC and the Cardiff Airport Consultative Committee (ACC) aviation and environmental stakeholders from 15 Dec 14 to 24 Mar 15, a period of 14 weeks including the Christmas break. The Stakeholder Consultation Document will be published on the CAA's website shortly.
- 4.2. Additionally, the CAA's Safety and Airspace Regulation Group (SARG) has conducted its own assessment of the consultation. This assessment will also be published on the CAA's website shortly. SARG concluded that the Consultation Report and associated material met SARG requirements.
- 4.3. Sponsors must conduct their consultation exercise in accordance with the criteria set out in the Cabinet Office's Consultation Principles (2013 Update).
- 4.4. I have carefully considered this information and I am satisfied that the consultation was in accordance with the requirements of CAPs 724 and 725. This was a well-run consultation and the Sponsor demonstrated a willingness to engage with the various stakeholders in order to mitigate the issues raised.

## **5. STATUTORY DUTIES**

- 5.1. 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.<sup>1</sup>
- 5.2. In summary, the CAA's primary duty under section 70(1) of the Act requires that the CAA exercises its air navigation functions so as to maintain a high standard of safety in the provision of air traffic services. This duty takes priority over the remaining factors set out in section 70(2). Where an airspace change proposal satisfies all of the factors identified in section 70(2) and where there is no conflict between those factors, the CAA will, subject to exceptional circumstances, approve the airspace change proposal. Where an airspace change proposal satisfies some of the factors in section 70(2) but not others, this is referred to as a conflict within the meaning of section 70(3). In the event of a conflict, the CAA will apply the material considerations in the manner it thinks is reasonable having regard to them as a whole. The CAA will give greater weight to material considerations that require it to "secure" something than to those that require it to "satisfy" or "facilitate". The CAA regards the term to "take account of" as meaning that the material consideration in question may or may not be applicable in a particular case and the weight the CAA will place on such material considerations will depend heavily on the circumstances of the individual case. The analysis of my statutory duties is set out below.

### **5.3. Safety**

- 5.3.1. 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.<sup>2</sup> It is recognised that introduction of these procedures introduces an additional level of safety by providing alternative approach options that are not solely reliant on ground-based systems. The introduction of these procedures introduced no additional risk as existing airspace constructs remain the same.

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<sup>1</sup> Revised in 2014 by the DfT (the Guidance).

<sup>2</sup> Transport Act 2000, Section 70(1).

- 5.3.2. I am content that the introduction of these procedures has a positive safety benefit for operations into Cardiff Airport by providing an alternative method of approach to both runways.

#### **5.4. The most efficient use of airspace**

- 5.4.1. I am required to secure the most efficient use of the airspace consistent with the safe operation of aircraft and the expeditious flow of air traffic.<sup>3</sup> The CAA considers that the most efficient use of airspace is defined as:

“The most aircraft movements through a given volume of airspace over a period of time in order to make best use of the limited resource of UK airspace from a whole system perspective.”

- 5.4.2. I am confident that the introduction of RNAV IAPs will also have a positive impact on efficiency as this procedure provides an alternative approach option that might prevent a go-around, associated delays and possibly diversion should a ground-based system fail in poor weather.

#### **5.5. Requirements of aircraft operators and owners**

- 5.5.1. I am required to satisfy the requirements of operators and owners of all classes of aircraft.<sup>4</sup>

- 5.5.2. All operators will be able to take advantage of these new procedures if their aircraft are suitably equipped. Those aircraft not yet fitted with RNAV equipment will still be able to conduct normal approaches. Additionally, the introduction of these procedures provides a training opportunity for those carrying RNAV equipment.

- 5.5.3. The CAA’s Operational Assessment will be published on the CAA’s website shortly.

#### **5.6. Interests of any other person**

- 5.6.1. 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. The CAA examined a number of anticipated impacts, some of which attracted feedback during the consultation process outlined above.

- 5.6.2. In this respect, I am content that the consultation exercise attracted a range of diverse comments with only one objection highlighted. The sponsor’s response to this single objection with 3 points added clarity to actual vertical flight paths that will be flown and the minimum heights that, even before this introduction, could be flown on existing procedures. I am also content that the impact of noise has been considered and the introduction of RNAV IAPs will, over time, minimise the numbers of people affected by direct overflight in line with governmental guidelines.

#### **5.7. Guidance on environmental objectives**

- 5.7.1. In performing my statutory duties, I am obliged to take account of the extant guidance provided by the Secretary of State,<sup>5</sup> namely the 2014 Guidance to the CAA on Environmental Objectives. Additionally, where a proposed PBN SID represents the

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<sup>3</sup> Transport Act 2000, Section 70(2)(a).

<sup>4</sup> Transport Act 2000, Section 70(2)(b).

<sup>5</sup> Transport Act 2000, Section 70(2)(d)

replication of a conventional SID, it is the CAA's policy that further environmental requirements apply.<sup>6</sup>

5.7.2. The Environmental Research and Consultancy Department (ERCD) has undertaken an assessment of the environmental impact of this change, the findings of which will be published on the CAA's website shortly.

5.7.3. Having carefully considered this information, I have concluded that, whilst any environmental benefits cannot currently be proven, this change will have neither a positive or negative overall environmental impact in the longer term and there is therefore no reason to disagree with this proposal on environmental grounds.

## **5.8. Integrated operation of ATS**

5.8.1. 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.<sup>7</sup>

5.8.2. This proposal and its associated implementation will not change either the dimensions or class of local airspace structures. There will therefore be no impact in this regard.

## **5.9. Interests of national security**

5.9.1. I am required to take into account the impact any airspace change may have upon matters of national security.<sup>8</sup> There are no implications for national security.

## **5.10. International obligations**

5.10.1. I am required to take into account any international obligations entered into by the UK and notified by the Secretary of State.<sup>9</sup>

## **5.11. No conflicts**

5.11.1. In accordance with section 70(3) of the Act and the CAA published policy, I am required to consider whether the airspace change proposal produces any conflicts between the material considerations identified in section 70(2). For the reasons given above, I do not consider that there is any conflict between the factors I have a duty to take into consideration.

## **6. REGULATORY DECISION**

6.1. I am content that the proposed airspace design is safe, which satisfies my primary statutory duty. For the reasons given above, I am also content that the proposed change has neither a positive or neutral impact on each of the other factors identified in section 70(2) of the Act. In those circumstances, in the absence of exceptional circumstances, it is CAA policy to approve the airspace change proposal. There are no exceptional circumstances in this case to justify departing from the CAA's standard practice.

6.2. I have therefore decided to support the implementation of RNAV IAPs at Cardiff Airport subject to successful completion of the SARG approvals of IFP Designs (AR Procedure Designer) and the associated Safety Case (ATS Inspector).

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<sup>6</sup> See the CAA's Guidance on PBN SID Replication for Conventional SID Replacement paragraph 10]

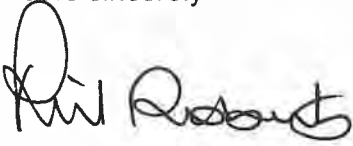
<sup>7</sup> Transport Act 2000, Section 70(2)(e).

<sup>8</sup> Transport Act 2000, Section 70(2)(f).

<sup>9</sup> Transport Act 2000, Section 70(2)(g).

- 6.3. It is currently estimated the the procedures will become effective from (AIRAC 4/2016) promulgated via a double AIRAC cycle. If you have any queries, the SARG Project Leader, may be contacted on [REDACTED]
- 6.4. In line with our standard procedures the implications of the change will be reviewed after one full year of operation, at which point, my staff will engage with interested parties to obtain feedback and data to contribute to the analysis.

Yours sincerely



Mark Swan  
Director, Safety and Airspace Regulation Group