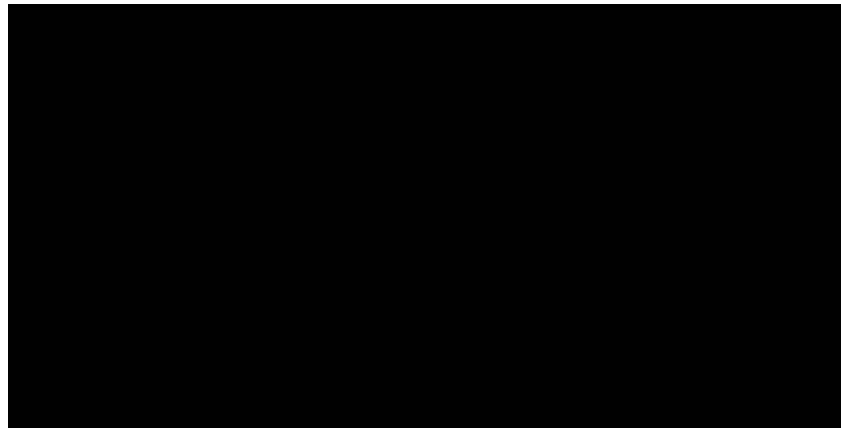


Meeting Minutes

Project Title	Carlisle Airport Development of GNSS Approaches
Client	Carlisle Airport
Purpose of Meeting	Framework Brief
Date of Meeting	25 th April 2017
Held at	CAA. Kingsway, London
Present	







Classification	Commercial in Confidence
Osprey Reference	71046/004
Issue	Issue 1

This document is of UK origin and has been prepared by Osprey Consulting Services Limited (Osprey) and, subject to any existing rights of third parties, Osprey is the owner of the copyright therein. The document is furnished in confidence under existing laws, regulations and agreements covering the release of data. This document contains proprietary information of Osprey and the contents or any part thereof shall not be copied or disclosed to any third party without Osprey's prior written consent.

© Osprey Consulting Services Limited 2017



Meeting Summary

Item	Person
<p>Opening introductions</p> <p>Present as above</p>	
<p>Summary of Discussions</p> <p>The purpose of the Framework Briefing for Carlisle Airport was to allow the Airport to outline their plans for an Airspace Change Proposal (ACP) that will introduce Area Navigation (RNAV) procedures at the Airport. The ACP involves the development of Global Navigation Satellite System (GNSS) approaches to Runway (RW) 06 and RW 24 at Carlisle Airport and the introduction of Point in Space (PINS) approaches to the threshold of RW 18 and RW 36 and the 'B' intersection; it does not involve any proposed changes to airspace classification.</p> <p>Carlisle Airport has successfully secured funding from the European GNSS Agency (GSA) through a joint application with London Southend Airport (also owned and operated by Stobart Aviation). Carlisle Airport is planning to introduce passenger services including a twice-daily service to Southend and daily services from Carlisle to Belfast and Dublin. However, before these services can be introduced, significant infrastructure works need to be completed. It was hoped that this work would have already commenced, but there is uncertainty about when this will now start, and how long it will take before completion. The infrastructure works also need to be completed before the proposal for the new RNAV procedures can be submitted to the CAA for approval.</p>	
<p>PowerPoint Presentation</p> <p>A PowerPoint presentation was delivered to set the scene for the project, outlining the proposed infrastructure improvements planned at Carlisle Airport, together with the current routine operators, and details of the proposed change. The justification for the implementation of RNAV Procedures was presented: the Airport is seeking to enhance the services already provided to its existing customers, and the development of GNSS approaches will complement the existing Instrument Flight Rules (IFR) procedures. The current IFR procedures utilise the NDB, which is approaching the end of its life. There is no immediate plan to withdraw the NDB, as it is utilised by many of the existing Airport users, but developing RNAV procedures will provide additional resilience. A copy of the presentation is attached to these notes.</p>	
<p>General</p> <p>The CAA Case Officer requested details on plans for commercial growth at Carlisle Airport, and how the new RNAV procedures would contribute to that plan.</p> <p>The Airport is planning to introduce passenger services in the future. Whilst no fixed plans have been made, there is an aspiration to introduce a twice-daily service between Carlisle and London Southend, and daily flights to Belfast and Dublin from</p>	

Item	Person
<p>Carlisle. This will likely be utilising ATR 42 aircraft. Whilst it is fair to say that having RNAV procedures will add to the attractiveness of the airport, these services are likely to be introduced irrespective of positive approval for RNAV procedures. Therefore, Carlisle Airport is not expecting to garner a significant increase in traffic levels as a result of this ACP.</p> <p>Details on what was driving the need to develop PINS approaches were also requested. It was explained that most of the helicopters operating in and out of Carlisle Airport currently make VFR approaches either to the 19 threshold or to the 'B' intersection. This affords easier access to the apron and the car park area. Developing a PINS approach would enable them to continue to make approaches to the threshold when the weather does not allow VFR operations.</p>	
<p>Environmental Considerations</p> <p>█ stated that public consultation would be required as the proposed procedures resulted in tracks over the ground where there are currently no published procedures. It was recognised that the RNAV for RW 06 would overfly Carlisle city, and therefore a degree of consultation would be required. However, it was acknowledged that the generic aircraft operations at Carlisle were mainly General Aviation (GA) aircraft, and although passenger services are being planned, they are not expected to generate a significant increase in traffic. Further, the introduction of passenger services is not reliant upon the introduction of RNAV procedures. That said, any anticipated changes in fleet mix such as the introduction of commercial aircraft at the Airport would need to be considered and reflected when assessing any noise impacts.</p> <p>█ stated that it makes sense to consider options for the best location for the hold based on a number of factors (such as operational and environmental reasons) rather than automatically trying to replicate existing procedures. This may prove to be beneficial in removing exposure to noise / emissions within existing areas by proposing a less densely populated area. █ also stated that it is important to consider the effect that moving the threshold location for the existing RW 07 (which will become RW 06) will have on noise exposure for the purposes of consultation and proposal submission. However, since the majority of aircraft operating at the Airport will continue to be light aircraft, it is not anticipated that this will make a significant difference.</p> <p>Whilst the PINS approaches represent 'new tracks', the reality is that the PINS approaches will replicate what is currently being conducted by VFR traffic. This will be explained within the consultation document and the proposal.</p> <p>Although it is important to be candid about the future aspirations of Carlisle Airport, it is important to consider that the timescales for introduction of passenger services cannot currently be estimated. The passenger services will require the infrastructure work to be completed and a new passenger terminal building is being considered. However, it is not yet known if planning permission has been sought or</p>	<p>█</p> <p>█</p> <p>█</p>

Item	Person
<p>obtained for the building. ■ will check on the status of development of the newly proposed Passenger Terminal building.</p> <p>The CAA advised that sponsors should ensure that any future consultation or proposal submission in respect of this project includes an analysis of all of the options considered together with an explanation of why they were included or not included for either environmental or operational reasons. A comparison between typical existing VFR routes and the proposed RNAV routes would be helpful to articulate the nature of the proposed change.</p>	
<p>Air Traffic Services</p> <p>■ asked for confirmation about the types of ATS provided by Carlisle Airport. The Airport does not have a surveillance capability and IFR services are provided with Approach Procedural (APP) rated controllers. Difficulty in recruiting suitable ATC controllers with the relevant qualifications and experience has led to the Airport being forced to provide ATC services Monday to Friday, and an Air/Ground (A/G) only service at weekends. However, controller strength has improved considerably over the last 6 months since the Airport entered into a commercial arrangement with ATCSL to provide controllers. A new SATCO and DSATCO have started and both are now validated in Aerodrome Control (ADI); training for the APP rating has commenced. The intention is to be in a position to provide ATC services 7 days a week as soon as sufficient qualified controllers are available to support the roster. The CAA ATS inspector for Carlisle Airport sent an email stating how much ATC service provision has improved over the last few months and he is pleased with the progress that has been made.</p> <p>There is no intention to try to introduce RNAV procedures without ATC, since that would invoke processes outlined within CAP 1122.</p>	■
<p>CAP 725 Process</p> <p>It was suggested in the outline of the project that since the RNAV procedures could not be finalised until the infrastructure works had taken place, the ACP would most likely be subject to the 'new' CAP 725 process. However, discussion during the meeting considered whether the RNAV procedures could be designed and be consulted on as soon as practicable, so that the final proposal could be compiled and only submitted to the CAA for approval once the infrastructure was complete. There is a possibility that if public consultation for this ACP can start before the new CAP 725 process is introduced, then it could follow the existing CAP 725 process. There is a risk for the Airport that if, following the infrastructure work and the subsequent surveys, there are any significant changes to the procedure designs, there may be a requirement to re-consult. Since the runway designs, and the proposed threshold positions have been completed, this may be a risk that the Airport is willing to take.</p> <p>■ explained that the new CAP 725 process is currently subject to a public consultation exercise, which concludes on 30th June 2017. It was anticipated that</p>	■

Item	Person
<p>the new process, should it be approved, would come into force approximately November 2017. However, since the consultation phase commenced, the Prime Minister announced that the UK would hold a General Election on 8th June 2017. This means that the purdah rules currently apply, and is likely to affect when the new process is implemented. This potentially affords a degree of latitude to Carlisle Airport to continue with the existing process.</p> <p>Whilst it may be possible to complete this project under the existing CAP 725 process, it is important that sponsors apply the spirit of the new process. Therefore, early informal stakeholder engagement ahead of formal consultation is encouraged. Sponsors are reminded to ensure that any engagement is recorded and documented should anyone require evidence that consultation activities took place.</p> <p>■ explained that in order to facilitate resource allocation to projects, the CAA plans its resources around the project proposal submission date. Since there is so much uncertainty surrounding this project as far as timings are concerned as there are no fixed start dates for the infrastructure improvements, it was suggested that the timelines surrounding the GSA funding in support of the project should be used to provide an indication of timings to the CAA. The GSA project commenced July 2016, and therefore, the new procedures should be implemented by July 2019. This allows both CAA and the Airport to work backwards, taking account of a single AIRAC cycle, to ascertain the latest proposal submission date. ■ agreed to discuss this and provide feedback to the CAA as soon as the latest proposal submission could be estimated.</p>	<p>■</p>
<p>Instrument Flight Procedures</p> <p>■ asked whether any consideration had been given to designing a hold in an alternative location to the existing NDB hold. This has not yet been considered as the initial intention had been to minimise the change to the existing flight profiles as far as possible. This was in an attempt to reduce the introduction of ‘new tracks’ to reduce the potential environmental impact, and therefore minimise the level of public consultation required.</p> <p>However, since it is clear that some public consultation will inevitably be required due to the potential overflight of Carlisle city on approach to RW 06, then consideration could be given to selecting an alternative area for an RNAV hold that would be more beneficial from an operational perspective.</p> <p>■ expressed some concern that developing an alternative hold as well as the existing NDB hold could present a problem for ATC when providing procedural separation to aircraft within the respective holds. Whilst vertical separation could be safely applied between ‘participating’ aircraft, some careful consideration would be required to identify a suitable location whereby an ATC deeming convention could be applied.</p> <p>This will be discussed with the Procedure Designer and the ATC team at Carlisle.</p>	<p>■</p> <p>■</p>

Item	Person
<p>■■■ asked whether the Airport intended to have RW 06 re-categorised as an instrument runway following the infrastructure works. If this is the case, the Airport will need to consider the Obstacle Free Zone (OFZ) as part of its assessment. This may have an effect on the lowest minima that could be permitted for the LPV 200 approach. For example, if it was a non-precision instrument runway, the CAA may stipulate a minima of 300' instead of 200'. However, ■■■ stated that it may be possible for a minima as low as 250' to be obtained with an LNAV approach. ■■■ also suggested canvassing the aircraft operators at Carlisle to see how many of them could actually fly LNAV/VNAV approaches as it is considered that very few aircraft are correctly equipped. This could reduce some of the Procedure Design costs for the Airport.</p> <p>■■■ was asked his opinion of the off-set LPV approach to RW 24, given the close proximity to the boundary of D510 (Spadeadam Range). Although only concept trajectories at this stage, the offset approach remains outside the boundary but is very close to its edge. ■■■ agreed to investigate what the acceptable parameters would be and would provide some feedback via the Case Officer.</p> <p><i>Post meeting note – ■■■ stated that SBAS APV I or CAT I approaches are restricted to straight in final approach, initial and intermediate missed approach segments. The intermediate segment shall also be aligned with the final approach segment.</i></p> <p>Some confusion arose concerning the statement within the presentation concerning an existing NDB procedure facilitating arrivals outside of D510 when it was active as ■■■ was unable to identify the relevant procedures. ■■■ also asked if there were any records kept of any Carlisle aircraft infringing Spadeadam airspace, as, although RNAV procedures are considered to be more accurate than the existing NDB, this could affect the likelihood of approval by the CAA. ■■■ and ■■■ undertook to investigate if any records or statistics are held.</p> <p><i>Post meeting note: a review of the NDB arrivals for RW 25 published within the UK IAIP show that aircraft are required to manoeuvre outside the lateral confines of the danger area.</i></p>	<p>■■■</p> <p>■■■</p>
<p>Any Other Business</p> <p>■■■ advised that it is CAA policy to publish meeting notes and other relevant project material on the CAA website. Under the existing CAP 725 process, this will not happen until the final decision (approval or otherwise) has been made by the CAA. However, under the new process, information will be available in the public domain incrementally as the project progresses. The CAA provided advice pertaining to the redaction of documents, in order to ensure that sensitive information is removed, including meta-data, prior to publication.</p> <p>■■■ asked ■■■ whether any noise contours would be required as part of the environmental assessment, and he replied that on the basis of the proposal to date noise contours would not be required for this project because it was unlikely that the proposal would result in any change to the 57 dBA Leq noise contour. However, indicative noise levels should be described within the Consultation Document, as it</p>	<p>■■■</p>

Item	Person
<p>was still necessary to consider the extent of any noise impacts up to 7,000ft. It is important to state that any increase in traffic produced by the introduction of passenger services is not directly attributable to the implementation of RNAV procedures. The consultation should make it clear that the consultation is not about the development of Carlisle Airport.</p>	
<p>Summary</p> <p>Whilst the timeline for delivering the procedures is unclear, it is likely that the sponsor will inform the CAA of their intention to continue with the project. If the project delays unduly, there may be a requirement to hold a second Framework Briefing to appraise the CAA of any changes of direction.</p>	