



Consultation Document

St Athan ILS ACP Step 3A

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1 Introduction

1.1 Background – the baseline situation

Until 31st March 2019, St Athan was a military airfield regulated by the Military Aviation Authority (MAA). The Royal Air Force University of Wales Air Squadron (UWAS) is based there, as well as several civilian flying organisations, including a National Police Aviation Services unit, Bristow Helicopters (providing Search and Rescue services on behalf of the Maritime and Coastguard Agency), Horizon Air Services and two Maintenance, Repair and Overhaul (MRO) companies (eCube and Caerday). Its transition to a civil airport has been a long term plan and the Welsh Government bought and installed an Instrument Landing System (ILS) at St Athan several years ago.

An ILS is a navigation aid based on two radio beams lined-up with the runway that provides pilots with vertical and horizontal guidance during an approach to land. Using an ILS, a pilot can safely descend his aircraft through cloud to a lower altitude when making his approach.

Bearing in mind the plan to transfer it to a civil regime, the St Athan ILS procedures were developed to Civil Aviation Authority (CAA) approved standards, but as it was a military airport, they were published only in the Military Aeronautical Information Publication (Mil AIP) and not the civilian UK AIP. The Mil AIP charts of the ILS procedures can be found in Annex A1 (Figure 4 and 5) to this document.

From 1st April 2019, Cardiff Airport and the Welsh Government have operated St Athan as a civil airport under a Joint Venture, with a CAA Ordinary Aerodrome Licence regulated by the CAA. As the ILS procedures were not previously published in the UK AIP, the CAA suspended them and stated that, to publish them in the UK AIP, an Airspace Change Proposal (ACP) would be required.

When it is available, the ILS procedures are used by nearly all of the commercial aircraft arriving to use the MRO facilities at St Athan. Although they make up only about 1% of St Athan's annual aircraft movements, around 100 aircraft per year, aircraft using the MRO facilities are very important to the Cardiff Airport and St Athan Enterprise Zone and to the local economy.

The suspension of the ILS means that aircraft arriving at St Athan to use the MRO facilities are only able to fly a visual approach, staying clear of cloud. All airlines plan ahead and, if the forecast weather is unsuitable for a visual approach, airlines may have to delay, reschedule or cancel their flight to St Athan. For aircraft already airborne for St Athan, air traffic controllers can only safely descend aircraft to 2,400 feet; if the pilot is then unable to complete a visual approach, they either have to fly the aircraft in a holding pattern and hope the weather improves, or divert to an alternate airport. This places additional costs on the airline.

More aircraft use St Athan for maintenance in the winter than in the summer. This means that it has been difficult to quantify the impact of the suspension of ILS procedures since 1st April 2019. However, one aircraft did divert when the pilot was unable to make a visual approach and a second aircraft delayed for 24 hours awaiting better weather.

Also, some airlines require an exemption from their Air Operator Certificate (AOC) holder to fly to a 'visual-only' airport.

The unpredictability of operations due to weather, and the potential impact this has on aircraft fleet and crew management has made the airport less attractive to aircraft operators for their maintenance contracts. Since 1st April 2019, one airline has cancelled their planned bookings completely, taking their MRO business elsewhere.

The preferred solution to address the issues caused by the suspension of the ILS procedures is to reinstate the procedures through its publication in the UK AIP.

1.2 Introduction to the Airspace Change Process

Any proposed change to airspace, flight procedures, or nomenclature in the UK AIP is required to follow guidance in Civil Aviation Publication (CAP) 1616, "*Airspace Design: Guidance on the regulatory process for changing airspace design including community engagement requirements*". St Athan are adhering to this process and we are currently at Stage 3 Consult.

For previous stages of this Airspace Change Proposal (ACP), including the Statement of Need, Stage 1 design principles and Stage 2 design options, please visit the CAA airspace change portal on the CAA [Website](#), which details the progress that has been made to date.

1.3 The purpose of this consultation

This consultation allows the Welsh Government, who is the Change Sponsor (referred to as the 'sponsor' for the remainder of the document), to gather and consider views and information from relevant stakeholders about the potential impacts of this ACP. Stakeholders have a crucial role to play in providing relevant and timely feedback to the sponsor with their views and opinions on the impact of this ACP.

Each stakeholder is given the opportunity to provide feedback and it is possible that such feedback may vary between stakeholders. The sponsor will follow current government and CAA guidance to take forward the proposal. They will capture the outcome of this consultation in a Consultation Report which will be submitted to the CAA for consideration.

After the consultation period has ended, the sponsor will consider all of the consultation feedback received; where possible, specific responses and/or themes will influence the development of the final submission to the CAA.

2 About this Consultation

2.1 Aim and Overview

The aim of this consultation is to seek stakeholder's views on the publication of the existing St Athan Instrument Landing System (ILS) procedures, previously published in the publicly available Military Aeronautical Information Publication (Mil AIP), into its civilian counterpart, the UK (Aeronautical Information Publication) AIP. A diagram of the relevant airspace can be found at Annex 1 (A1), with the path of the ILS highlighted in red.

The scope of this consultation is to seek views on the publication of the ILS procedures to be moved from the Mil AIP to the UK AIP.

The following elements are out of scope for consultation because no changes will be made to any of these as a result of publication of the procedures in the UK AIP:

- The path over the ground which aircraft fly;
- The slope down which aircraft descend to reach the runway;
- The number of aircraft that would use the procedures;
- The type of aircraft that would use the procedures;
- Any of the supporting Air Traffic Control (ATC) procedures;
- The size, dimensions or classification of any surrounding airspace.

2.2 Duration

Consultation is nominally conducted over a 12 week period. However, we are carrying out a targeted and proportionate consultation over a shorter 4 week duration as the proposal affects only a limited and well defined number of stakeholders. In addition, these stakeholders have already been engaged throughout earlier stages of this proposal and have indicated that 4 weeks would be sufficient time for them to have their say. The CAA Airspace Regulation Department has agreed to a 4 week targeted consultation.

However, such arrangements for a targeted consultation do not preclude any other stakeholder from making an appropriate submission to the CAA regarding this proposal. Should any stakeholder request an extension to the period of consultation, the sponsor will consider it.

2.3 Stakeholders

Stakeholders are third-party groups or individuals interested in an ACP.

Taking account of the limited nature of this proposed change, i.e. :

- There is no change to impact on third parties on the ground.
- There is no change to impact on other airspace users.

- There is no change to operators or service providers.

St Athan are taking a targeted approach to consultation, consulting a clearly defined set of stakeholders who might be directly affected by the publication of the ILS procedures in the UK AIP. Nevertheless, the details of the proposal are publicly available on the CAA website and the sponsor will welcome responses from any individual or organisation that chooses to do so. The stakeholders targeted for this consultation are defined in paragraphs 2.4 and 2.5 below.

2.4 Aviation Stakeholders

The aviation stakeholders being directly contacted are:

- Aviation Stakeholders:
 - Aeros Flight Training, Cardiff;
 - Bristol Airport;
 - Bristow Helicopters, St Athan;
 - Caerdav, St Athan;
 - Cardiff Heliport;
 - Defence Airspace and Air Traffic Management (DAATM), Ministry of Defence;
 - eCube, St Athan;
 - Horizon Flight Training & Aircraft Services, St Athan;
 - National Air Traffic Services (NATS) Cardiff;
 - National Police Air Services (NPAS), St Athan;
 - Serco, St Athan;

It is not planned to consult with additional General Aviation (GA) stakeholders or national aviation groups through the CAA's National Air Traffic Management Advisory Committee (NATMAC) for the following reasons:

- The number of aircraft arriving at St Athan to use the MRO facilities, and thereby their potential impact on other aviation stakeholders, is extremely low;
- The St Athan ILS procedures are almost entirely contained within the Cardiff Control Area (CTA)/ Controlled Traffic Region or Zone (CTR). GA flightpaths and profiles are unaffected by the availability or otherwise of the St Athan ILS;
- Even since the suspension of the ILS procedures, MRO aircraft inbound to St Athan have continued to fly the same approach profile (albeit as a visual straight-in approach rather than an instrument approach). GA traffic within the Cardiff CTA/CTR will have experienced no difference in their operations.
- The ILS procedures were previously published in the Mil AIP and the proposal is simply to move them into the UK AIP. All users of the ILS procedures, and those who operate in the vicinity, are being consulted directly as per the list in paragraph 2.4; there are no other aviation stakeholders within the GA or NATMAC group who will use or be affected by the publication of the ILS procedures in the UK AIP.

2.5 Non-aviation Stakeholders

The non-aviation stakeholders to be consulted are:

- Cardiff Airport Consultative Committee, including:
 - Bridgend County Borough Council;
 - Cardiff Council;
 - Llancarfan Community Council;
 - Vale of Glamorgan Council;
 - Vale Tourism Association.

The representative bodies listed above are being consulted directly, rather than local communities and the general public through a full public consultation, for the following reasons:

- The proposal will result in no change from the procedures published in the Mil AIP up to 31st March 2019. The aircraft types and their frequency will be the same, around 100 per year, and the aircraft tracks over the ground and heights will be the same as previously;
- Since 1st April 2019 and the suspension of the ILS procedures, arriving commercial aircraft now fly a visual approach to St Athan with radar heading provided by air traffic controllers at Cardiff Airport. This is a near identical approach profile to when the ILS was available.

2.6 Environmental Stakeholders

Analysis undertaken by the sponsor demonstrates that there will be no change to factors such as noise, air quality or CO₂ emissions as a result of the proposal and no change in impact on the environment. Therefore, organisations with a particular interest in the environment have not been targeted for consultation.

2.7 Engagement Activities

The sponsor has undertaken initial engagement with all of the stakeholders listed above to make them aware of the proposal. This engagement, detailed in the consultation strategy document that is available on the CAA airspace change portal, has been through two-way correspondence via email, face to face meetings and by telephone calls. During this initial engagement, the sponsor received no comments that were opposed to the proposal.

3 Options Considered

3.1 Introduction

Five potential options to address the suspension of the St Athan ILS procedures from the Mil AIP have been considered. The Options are described below.

3.2 Permanently withdraw the ILS

The permanent withdrawal of the ILS procedures, or the 'do nothing' option, has been discounted by the sponsor because it is considered disproportionate in terms of the economic impact. The ILS equipment remains serviceable and, when the procedures are published in the UK AIP, would again be available to all operators at St Athan who previously used them when published in the Mil AIP.

The publication of the ILS procedures is of significant importance to the MRO businesses at St Athan and their customers. If withdrawn permanently, St Athan would have no instrument approach procedures and aircraft would be required to make visual approaches only. MRO customers have indicated that they would be less likely to operate to St Athan if it were a 'visual-only' airport because of the increased risk of aircraft being diverted due to poor visibility and the knock-on impact this has for fleet and crew scheduling, together with the additional requirement for exemptions from their AOC holder for visual-only approaches.

Although these customers only account for around 1% of St Athan's total annual aircraft movements, they have a disproportionately high economic importance to both St Athan and this area of South Wales and are vital for the sustainability of the MRO businesses themselves. Since 1 April 2019 and the withdrawal of the ILS procedures, arriving commercial aircraft can only fly a visual approach, receiving vectors by NATS Cardiff ATC; this has caused uncertainty for MRO operations at St Athan as they are now more heavily weather-dependant. While they fly a near identical approach profile to when the ILS was available, these aircraft are only able to descend to 2,400 ft until the pilot acquires the required visual references to complete a visual approach.

3.3 Introduce Area Navigation (RNAV) procedures instead of ILS through a full (Level 1) airspace change application

RNAV procedures use information provided from satellites rather than from equipment on the ground like an ILS, to help pilots navigate safely. RNAV procedures could be introduced to replace the ILS procedures but this would involve a lengthy, expensive airspace change application that the sponsor feels would be disproportionate, especially as the ILS equipment is already in place. In addition, the introduction of RNAV procedures would result in a change in aircraft heights and tracks over the ground and have a potentially significant impact on all stakeholders. Furthermore, aircraft being delivered to St Athan for recycling may not be able to fly RNAV approaches due to not having correct/functioning equipment onboard: many

of these end-of-life aircraft may have already had their on-board equipment decommissioned. In addition, end-of-lease aircraft often need to use the ILS for aircraft flight tests and flights that demonstrate the aircraft's performance.

3.4 Publish the ILS procedures in the UK AIP as a Level 0 change

A 'Level 0' change is described in CAP 1616 as a change that concerns solely nomenclature or qualifying remarks relating to an existing published airspace design. This would have involved simply transposing the ILS procedures published in the Mil AIP to the UK AIP without going through the CAP 1616 process. Although the most timely, least resource intensive and therefore most attractive option to the sponsor, this option was discounted by the CAA because the proposal is greater than a change in nomenclature to the UK AIP.

3.5 Publish the ILS procedures in the UK AIP following a full, Level 1 CAP 1616 process

Most ACPs are subject to the full Level 1¹ CAP 1616 process, which, if successful, can take in the region of 2 years to complete. It represents a change that has the potential to alter traffic patterns below 7000ft and requires lengthy and detailed planning and submissions by the sponsor to the CAA to meet a range of Gateways, together with a public consultation, normally of 12 weeks duration. The sponsor made the case to the CAA that to conduct a full Level 1 CAP 1616 process to publish the ILS procedures in the UK AIP was too lengthy, costly and disproportionate as there is no change to the procedures; no alteration to traffic patterns below 7000ft. The CAA agreed and approved a scaled approach for the proposal and assessed the change as Level 2C².

A brief explanation of the Levels is contained in the footnotes below and further information can be found in the CAP1616 guidance:

<https://publicapps.caa.co.uk/modalapplication.aspx?appid=11&mode=detail&id=8127>

3.6 Publish the ILS procedures in the UK AIP following a scaled, proportionate and accelerated application of CAP 1616

Publishing the ILS procedures in the UK AIP following a scaled, proportionate and accelerated application of CAP 1616 is the sponsor's **preferred option** and the approach has been agreed by the CAA.

¹ Level 1 Change is a change to the notified airspace in the UK AIP that has the potential to alter traffic patterns below 7000ft – there is no change to St Athan's traffic patterns as a result of this proposal.

² Level 2 is a change that does not have the potential to alter traffic patterns below 700ft and is further scaled as A, B or C depending on the impact.

3.7 Benefits and impacts of the preferred option

3.7.1 Predictability for airline operations to St Athan

The main benefit of publishing the St Athan ILS procedures in the UK AIP is that it provides predictability for airline operators who wish to use the MRO facilities. Without the ILS, pilots will be heavily dependent on favourable weather conditions of reaching St Athan. With the ILS, pilots will be able to descend safely to not below 640 feet above mean sea level (AMSL) (depending on the procedure in use) and fly to St Athan when either the forecast or actual cloud base is much lower than the 2,400 feet AMSL minimum necessary for a visual approach.

3.7.2 Economic benefits for St Athan region

For some operators the availability of ILS procedures is a pre-requisite for the flight. Even where it is not, the greater predictability would help airlines in their maintenance and crew scheduling, enhance their efficiency and cut costs, and therefore help to make St Athan and its MRO facilities a more attractive business proposition; thereby continuing to benefit the local economy.

Again, although MRO aircraft only comprise around 1% of St Athan's total annual aircraft movements, they have a disproportionately high economic importance to both St Athan and this area of South Wales and are vital for the sustainability of the MRO businesses themselves.

3.7.3 Noise, visual intrusion, fuel and CO²

The sponsor has assessed that, as no change to the previously published procedures is proposed, there would not be any discernible impact from aircraft noise, visual, intrusion, fuel burn or CO² emissions. No additional environmental analysis has therefore been undertaken.

3.7.4 Impacts on other airspace users

The sponsor has assessed that because the St Athan ILS procedures are almost entirely contained within the controlled airspace environment provided by the Cardiff Airport CTA/CTR, the flightpaths and profiles of other aircraft operating in that airspace will be unaffected by the availability, or otherwise, of the St Athan ILS. This includes other aircraft based at St Athan, arrivals and departures from Cardiff and Bristol Airports, any military aircraft operating in the area and GA aircraft arriving at St Athan or transiting adjacent airspace. Even with the suspension of the ILS procedures, MRO aircraft inbound to St Athan have continued to fly a very similar approach profile, albeit as a straight-in visual approach rather than an instrument approach.

3.7.5 Impacts on communities

As no change is planned to the type or frequency of aircraft movements as a result of the proposal, or to the heights and tracks over the ground that aircraft will fly, the sponsor has assessed that there would be no discernible impact for the communities living and working beneath the airspace subject to this proposal.

4 Consultation Participation

4.1 What is being asked

The Welsh Government is asking you to consider what impact this proposal would have on you or your organisation's activities, what suggestions you may have regarding those impacts, and how acceptable they are to you.

4.2 How to respond

This consultation commences on Monday 30th September 2019 and ends on Monday 28th October 2019; a period of **4 weeks**.

This consultation is being conducted by the Welsh Government, using the CAA's online consultation portal. The page dedicated to this change can be accessed here: <https://airspacechange.caa.co.uk/PublicProposalArea?pid=81>.

The CAA's Airspace Regulation Department will oversee the consultation and ensure that it adheres to the CAP 1616 process and government guidelines.

This consultation document and all supporting documents are available on the CAA portal. Please submit your response directly to the sponsor via the CAA portal at the link above.

Respondents can also submit a postal response to the consultation. We will not commit to respond to postal responses directly; however respondents are welcome to include a stamped addressed envelope if they do require a reply. Postal responses can be sent to the following address:

St Athan ACP Consultation
Osprey Consulting Services Ltd
The Hub
Fowler Avenue
Farnborough Business Park
GU14 7JP

Please note that when submitting feedback you will be asked to provide the following information:

- Your name, and your role if you are responding on behalf of an organisation;
- Your contact details;
- A feedback category: SUPPORT, NO COMMENT, AMBIVALENT, OBJECT;
- Your general feedback comments, with an opportunity to provide more detail.

All responses will be analysed, with any common themes extracted and summarised. The sponsor will actively monitor the consultation portal and will formally respond to any queries and these responses will also be shared with the CAA.

4.3 What happens with the responses?

All responses will be published. Responses will be moderated, managed and uploaded to the consultation portal as appropriate. If any responses contain commercially sensitive data then we would expect the CAA to redact that information as part of its moderating practice. Guidance on the moderation of consultation responses can be found in CAP1619 on the CAA website:

<http://publicapps.caa.co.uk/modalapplication.aspx?appid=11&mode=detail&id=8131>

On completion of the consultation, the sponsor will analyse the responses received and produce a feedback report, summarising themes arising from the feedback, alongside the sponsor's response to any issues raised. The feedback report will be uploaded onto the portal. Any new requirements identified will be considered in the on-going design process. This will lead to the production of a formal proposal that will be submitted to the CAA, referring to any changes that have been made to take account of consultation feedback.

Subject to approval, we plan to implement the final version of this proposal as soon as reasonably practical in line with the UK AIP AIRAC publication schedule.

A1 Maps and Charts of the St Athan ILS



Figure 1 UK AIP AD EGFF-4-1 extract showing St Athan ILS extended centreline and Cardiff area airspace

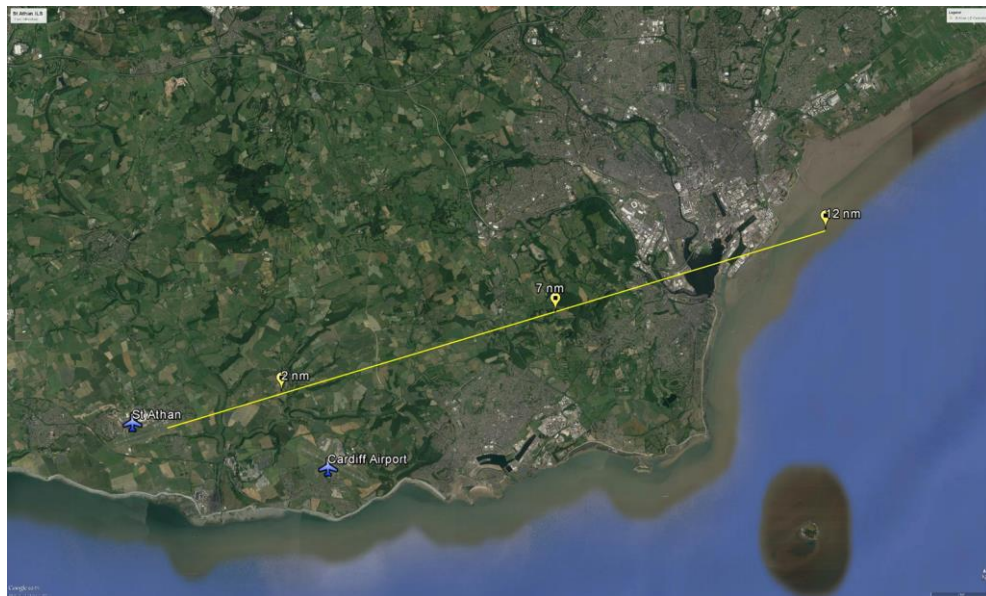


Figure 2 Satellite representation of the St Athan ILS procedures track over the ground (Map data: Google Earth)



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Figure 3 OS map representation of the St Athan ILS procedures track over the ground (Map data: Ordnance Survey)

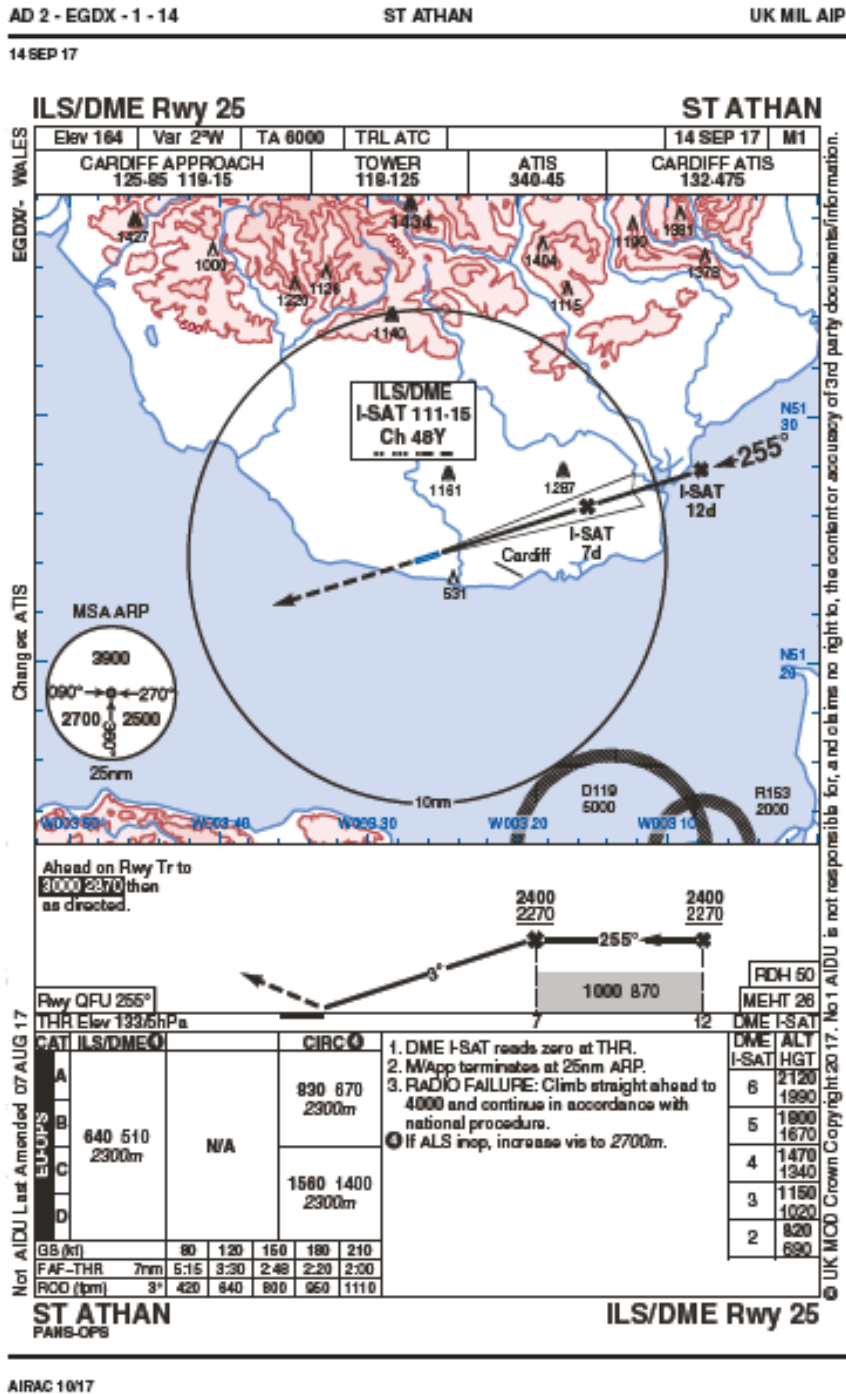


Figure 4 ILS/DME Runway 25 (UK Military AIP entry)

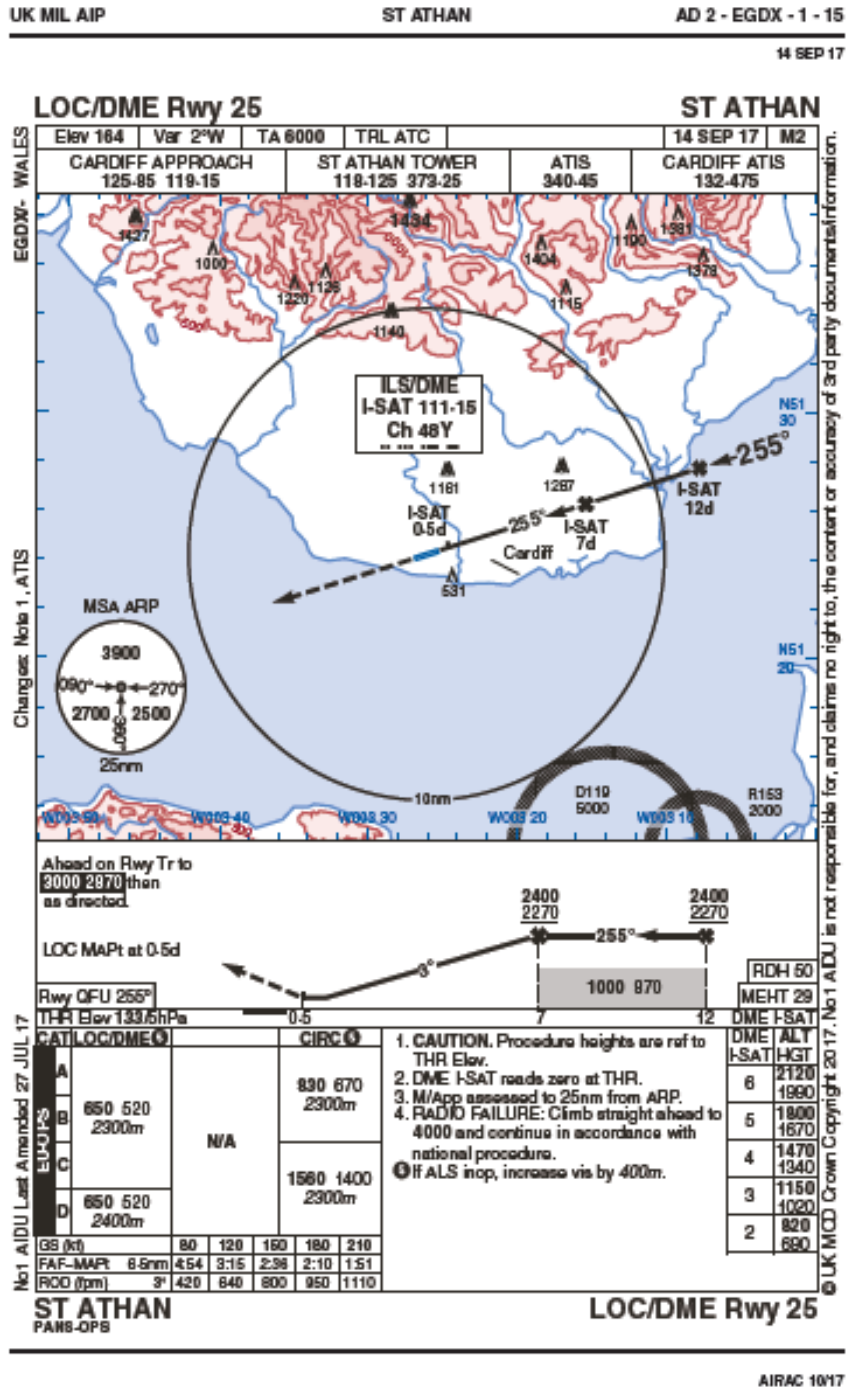


Figure 5 LOC/DME Runway 25 (UK Military AIP entry)