



MINUTES OF LLANBEDR AIRSPACE MEETING
Held at Aviation House, Gatwick on Tuesday 15th October 2019

22nd October 2019

Present

Appointment

Snowdonia Aerospace LLP

[REDACTED]

CEO Snowdonia Aerospace LLP
Aerodrome Manager
Consultant Director

Civil Aviation Authority

[REDACTED]

Airspace Change Account Manager
Airspace Regulator (Technical)
Airspace Regulator (Utilisation)
Principal Airspace Regulator (Engagement and Coordination)
Airspace Regulator (Economist)
Airspace Regulator (Engagement and Consultation)
Airspace Regulator (Engagement and Consultation)
Airspace Regulator (IFP)
Airspace Regulator (Environment)
Airspace Specialist (Environmental)
Principal Inspector ATM

Meeting between Snowdonia Aerospace and CAA to discuss the airspace issues and opportunities at Llanbedr Aerodrome.

CAA noted that a number of slides had been received in advance of the Meeting and confirmed that these would be published together with minutes of the meeting on the CAA Airspace Change Portal.

Item 1 – Introduction

█ thanked everyone for coming and invited all to introduce themselves.

█ read the Assessment Meeting opening statement ‘The CAA has received the Statement of Need, Assessment Meeting Agenda and meeting presentation in advance of this Assessment Meeting and can confirm that the documents will be published together with the minutes of this meeting on the CAA Website. It must be noted that this is an Assessment Meeting and not a Gateway. The Change Sponsor will be required to provide a broad description of their proposed approach to meeting the CAA’s CAP1616 requirements however the CAA will not at this stage decide whether the proposed approach met the detailed requirements of the CAA’s process. The purpose of the Assessment Meeting as set out in detail in CAP 1616 is broadly for the Sponsor to present and discuss their Statement of Need, to enable the CAA to consider whether the proposal concerned falls within the scope of the formal airspace change process and to enable the CAA to consider the appropriate provisional Level to assign to the change proposal. Additionally, the sponsor is required to provide information on how it intended to proceed to fulfil the requirements of the airspace change process and to provide information on timescales. Lastly, the sponsor is required to provide information on how it intends to meet the engagement requirements of the various stage of the airspace change process.’

Post meeting note:

The meeting held on 15 October 2019 will be considered a pre-meet between Snowdonia Aerospace and CAA to discuss the airspace issues and opportunities at Llanbedr Aerodrome. The meeting did not satisfy the Assessment Meeting requirements of CAP1616, as the sponsor was unable to identify at the time of the meeting how they wish to proceed. Post meeting [REDACTED] provided Snowdonia Aerospace with policy statements (1. Establishment and dimensions of Aerodrome Traffic Zones, 2. Danger Areas, 3. Special Use Airspace – Safety Buffer Policy for Airspace Design Purposes, 4. Unmanned Aircraft System Operations in UK Airspace – Guidance and Policy) to assist Snowdonia Aerospace with deciding how to proceed.

Item 2 – Statement of Need (discussion and review)

[REDACTED] said for the benefit of all to appreciate the Statement of need he would run through a brief background referring to the pre-printed copies of the slides provided.

Slide 1 showed a 2002 1:500,000 chart depicting the Llanbedr ATZ 2.5nm radius and the Danger Area D201 across Cardigan Bay to 6,000ft where for some 70 years, with a lull over the last 15 years, drones and military aircraft had utilised this airspace. The best known drone was a target drone, the Jindivik, which type made some 7,000 flights from the 1960's to 2004. The Danger Area and ATZ were both 'lost' soon after the Welsh Government purchased the aerodrome from MOD in 2004. Snowdonia Aerospace LLP completed on the purchase of the airfield some seven years ago and commenced the revival of airfield operations particularly for the test and evaluation of new drones.

Slides 2 & 3 show a Temporary DA which after broad public consultation was approved by CAA in 2014. The purpose of this was not only to fly drones BVLOS in the immediate vicinity but to enable longer flight trials and to link to the DA 201 the large airspace area to unlimited altitude over the Irish Sea. This airspace had been activated a number of times.

[REDACTED] pointed out that the business drivers today were 1) The RAF – who needed an ATZ, and, 2) Experimental flying which required a Danger Area – similar if not identical to that illustrated.

[REDACTED] pointed out that area C had not been used.

[REDACTED] agreed though said that an amazing 27m span solar electric power high altitude drone had flown from Llanbedr this year and that an even larger model would be expecting to get access to D201 via area A, B, and C early next year for a first high altitude flight. [REDACTED] added that he was not trying to present this airspace as a solution it was merely indicative of what had been used and it would be for stakeholders to influence how this might look in the future. The 5nm radius Area A shown had been selected as adequate to accommodate expected needs of operators but also because it was the size of a MATZ, familiar to pilots. Area B and C were the link over a 14NM distance from Llanbedr to D201 with Area C different as influenced by the RAF in order that traffic could pass under this airspace.

Slide 4 was to flag that while an ACP was what this meeting is to discuss it had been suggested that a Trial Airspace might be a way of enabling activity while the full ACP was progressed. Qualifying aspects included the possibility of innovative design, air traffic management, including ADSB, and other new technology.

[REDACTED] said a Trial is for investigating the feasibility of or validating proposals for innovative, airspace design, technology air traffic control procedures. The presentation as it appeared did not suggest that it was designed to achieve these aims. Rather it appeared that it was the request of the Sponsor to use the Trial process to bridge the gap until a permanent ACP had been completed and not to influence the design of a future ACP or trial innovative activity. Further it was stated that the intended activity had been conducted previously using TDAs as there was an intention to continue

using TDA if no other solution could be provided. As presented in the meeting this did not suggest this would satisfy the requirement for trial as this seemed to indicate a long-term requirement that had been conducted previously and was now informing their current ACP. Further [REDACTED] asked for clarification as to whether this was one ACP or multiple as the UAS element and the ATZ element seemed to satisfy different drivers. [REDACTED] went on to highlight there were potential benefits when considering them as a Single ACP, but also potential risks due to creating interdependencies. He highlighted this would be up to the Sponsor to consider how they would like to proceed.

[REDACTED] also highlighted stakeholder engagement would be required for access and use with the D201 complex specifically when considering various LOA and activation protocols established that applied in that airspace.

When considering one driver was for the establishment of an ATZ; the establishment of an ATZ was for a defined purpose and there is a specific CAA Policy Statement which outlines how they are created. Furthermore, the requirement outlined by the Sponsor at this stage suggested the ATZ would be used for an ongoing requirement to attract the use of Military FW. [REDACTED] highlighted that there were various Policy statements that could be required also to be considered for this submission including, Buffer Policy, Danger Area Policy and ATZ Policy. He agreed to email links to these documents on completion of the meeting. Further to enable the Sponsor to consider whether post consideration of their submission, one or more element may constitute a temporary or trial and to enable them to make that decision [REDACTED] agreed to send the links to the temp and trials section in CAP1616

[REDACTED] commented that the level of innovation in relation to a trial application could be significant in terms of equipment on board drones for conspicuity and methods to be used for UTM by the AFISO.

Slide 5 Showing the bigger picture, Llanbedr at the top end of Cardigan Bay, the Trawsfynedd power-station Restricted Area, the ranges over the Irish Sea.

Slide 6 To emphasise the first objective of Supporting the safe operation of all traffic on the manoeuvring area and all aircraft flying in the vicinity.

Slide 7 Illustration of the wider need for the Safe operation of RDT&E activities and the ability to transit safely to/from D201 to undertake extended range/endurance/altitude testing (in accordance with extant D201 procedures).

Slide 8 Showing the area in which we envisage the safe operation of small and light UAS operation in coastal areas around Cardigan Bay to support UK Gov BVLOS Drone Pathfinder initiative.

Slide 9 A photographic image of a large part of that Cardigan bay area which was used as a part of a presentation which has secured Snowdonia Aerospace a trial sponsored by UK Space Agency and Welsh Government – explained in:
Slide 10

Slide 11 The NATS satellite image showing the dearth of commercial activity over mid and north wales apart from the flights in the airway to Dublin. Discussion followed about the level of the application. [REDACTED] highlighted that there was a specific ATZ policy statement for the establishment of ATZ. This policy outlined all the requirements for submission, in general this statement outlines the 'level' of ACP that the Establishment of an ATZ would fall within, should the application meet these requirements. In general, ACPs would not have the level confirmed until the define gateway.

[REDACTED] highlighted that in accordance with CAP722 BVLOS UAS operations are usually conducted in segregated airspace. Due the rules that govern ATZ, these structures cannot be segregated.

Civilian BVLOS operations that occur are approved by the CAA UAS team, individual Safety Cases put forward to that team could put forward a safety case to operate BVLOS within an ATZ; where the Safety Argument may satisfy this segregation short fall. An ATZ does not imply segregated status.

█ said that the ATZ would be NOTAM closed to other traffic for the purpose of a drone trial and the ATZ and wider DA NOTAM activated as required.

█ said that the intention of CAP 1616 in respect of traffic patterns was all about significant movements of commercial traffic. Llanbedr, a remote location in North Wales, did not even have traffic patterns so it was hard to see by any stretch of the imagination that the change could be Level 1. █ said he understood █ comment but strictly it was not true.

Post Meeting Note:

This is incorrect CAP 1616 is not only about significant movements of commercial traffic. CAP 1616 is the process for Airspace Design: guidance in the Regulatory process for changing airspace design including community engagement requirements. This CAP details Airspace design in the UK and it is important any applicant fully understand this process.

█ remarked on contrary factors: we are below 7,000ft but not over inhabited areas and the majority of airspace would be over the sea. In fact circuit patterns off the main runway are all out to sea away from the local villages. In fact he said stakeholders might suggest airspace need not be over the villages at all. Although this could also have the effect of channelling any traffic around airspace and over the villages.

It was suggested that the previous activity in the former ATZ by the RAF both in support of BVLOS activity and for flight training, and the BVLOS activity, epitomised most significantly in the Jindivik operations from the 1960s to 2004, in the former DA, also with fast jet support, were a history and evidence of how the airfield had been utilised. Llanbedr had been an operational airfield for nearly 70 years and the drop in activity since 2004 and its slow increase again were merely part of a cycle and this extraordinary asset needed airspace once again in order that it can be utilised properly and fulfil its potential for UK aviation and most importantly in the creation of hundreds of jobs.

CAA highlighted that with certain ACPs it was possible to scale the ACP, CAP1616 outlines where scaling can occur- this can include using multi-gateways on one day-, it is up to the Sponsor to justify this scaling requirements and how they have satisfied the overall intent. The ATZ policy outlines specific scaling that can be applied when establishing an ATZ.

█ said the environmental requirements for an airspace change proposal depend on the assigned ACP level, however, the requirements are scalable, but where scaled a rationale would be needed.

█ also commented that any assessments should be consistent with CAP1616 Appendix B and the altitude based priorities as set out in CAP1616 B29.

█ said in relation to this that a large number of drones were electric powered and the RAF had identified that by training at Llanbedr instead of their present options they would make massive fuel savings and thus an environmental benefit to North Wales.

█ asked the economic representative what they would look for and █ said they would look for a business impact on stakeholders and the environmental impact assessment which might be scalable depending on the level assigned to the ACP. For Level 2C changes, if the anticipated impact is negative, both qualitative and quantitative assessment of fuel and CO2 impacts of the proposed change using WebTAG would be required whereas if the anticipated impact is positive, a qualitative assessment and explanation would be adequate. For Level 1 changes, for all the significant impacts of the proposed change, both qualitative and quantitative assessment is required unless it is disproportionate to quantify costs and benefits.

■, Engagement and Consultation Specialist, advised the sponsor that any previous consultations run by the sponsor will be a good starting point for considering which stakeholders should be targeted for engagement and consultation. This information will need to be developed further to reflect the current situation and the nature and level of the ACP/ACPs.

Careful consideration should be given to the potential for stakeholder confusion and/or fatigue when running 2 ACPs, whether together or on separate timelines.

CAP 1616 sets out an accepted standard for the length of a consultation at 12 weeks. Where it is proposed that a consultation is run for a time other than 12 weeks, the rationale for doing so must be set out in the sponsor's consultation strategy and this will be considered by the CAA at the consult gateway. Consideration should be given to allowing extra time when a major holiday falls within the consultation period.

■, following up on an earlier comment, clarified that a TDA is not considered to be permanent airspace.

■ was concerned about timescales and asked what was the view if we keep making TDA applications? ■ said he would report back to SA after the meeting.

■ questioned whether Snowdonia Aerospace would need full air traffic control for the RAF using the ATZ. ■ said that a FIS was sufficient and had worked well when Hawks flew for a week at Llanbedr in August 2017. The only difference verbally was a Controller would say 'cleared to land' whereas an AFISO would say 'land at your discretion'. Both would ask to 'check gear'.

■ informed the sponsor that due to new legislation if an ATZ was established then subject to their aerodrome status an FRZ would also be established.

■ asked the Tech Reg ■ for the indicative Level- he said at this point in accordance with information that had been provided to create fixed structures over land below 7000ft would indicate this would be an indicative Level 1- this was however only an indicative level. It was noted that the Sponsor was not sure how they would like to proceed whether as one or two ACPs, they stated they would review the information and then resubmit Statement of Needs as required. ■ further highlighted that we would have expected a proposed timeline to have been presented at the Assessment meeting, understanding the Sponsor would now be going to consider their proposed course of action he requested when they determine how they would like to proceed that they also provide a realistic timeline.

■ concluded the meeting and suggested that the sponsor determine how they would like to proceed.

Item 7 – Next steps

- 1) ■ highlighted that today's meeting was NOT an Assessment meeting as all the requirements need refining.
- 2) Snowdonia Aerospace are considering whether to proceed with ATZ and DA applications in series or parallel.
- 3) Before the next (first) assessment meeting Snowdonia Aerospace will refine the requirements and produce a draft 1616 timeline for discussion.
- 4) CAA agreed to provide a number of Policy documents.

Item 8 – Any other business

None.