



Ministry
of Defence

HQ 11 Group
Air Command
Hurricane Block
RAF High Wycombe
Walter's Ash
Buckinghamshire
HP14 4UE
Tel: +443001 641013
Email:
thomas.hammond945@mod.gov.uk

21 July 2023

Future Combat Airspace, ACP-2020-026

CONSULTATION REVIEW: STAGE 4A



Initial Issue

References

Ref no.	Description	Hyperlink
1	Stage 1 Statement of Need	Link to document
2	Stage 1 Assessment Meeting Minutes	Link to document
3	Stage 1 Design Principles	Link to document
4	Stage 2 Design Options	Link to document
5	Stage 2 Design Principle Evaluation	Link to document
6	Stage 2 Initial Options Appraisal and Safety Assessment	Link to document
7	Stage 3 Consultation Strategy	Link to document
8	Stage 3 Consultation Document	Link to document
9	Stage 3 Full Options Appraisal	Link to document
10	Stage 3 Collate and Review	
11	Stage 4 Final Options Appraisal	
12	Airspace change: Guidance on the regulatory progress CAP 1616	Link to document
13	UK Government Department for Transport's 2017 Guidance to the CAA on its environmental (abbreviated to ANG2017)	Link to document
14	ACP-2021-048 Future Combat Airspace - Interim Solution	Link to document
15	ACP-2020-042 Future Combat Airspace Trial	Link to document
16	ACP-2021-007 Future Combat Airspace Interim Solution	Link to document
17	Citizen Space Portal	Published Responses

Notes

This publication provides notification of a Ministry of Defence sponsored proposal for the creation of a new portion of segregated *Special Use Airspace in the form of a Danger Area* in which military exercises involving large numbers of different aircraft types can train for operations. The Change Sponsor for this proposal resides within 11 Group, A7.

Roles

Action	Role	Date
Produce	11Gp, A7	21 Jul 23
Review	DAATM	21 Jul 23

Drafting and Publication History

Issue	Date	Change Summary
Initial Issue	21 Jul 23	

Contents

Introduction

Section 1 - Consultation (We Asked)	6
Section 2 - Summary of Consultation Responses (You Said)	9
Section 3 - Categorisation of Consultation Responses (We Did)	13
Section 4 - Summary, Corrections and Next Steps	16

Annexes

- A. Stakeholder List (Stakeholder responses highlighted)*
- B. Sponsor Email Engagement*
- C. Citizen Space Consultation Summary Report*
- D. Dundee Airport Limited Consultation Meeting Record (4 April 2023)*
- E. Newcastle International Airport Consultation Meeting Record (12 April 2023)*
- F. DAATM Future Combat Airspace Stage 3 Feedback (11 May 2023)*
- G. NATS Operational Policy Response (22 May 2023)*
- H. Stage 3D Categorisation of Responses – separate to this document*
- I. Consultation Log – separate to this document*

Introduction

This document forms part of Stage 4A of the Civil Aviation Publication (CAP)1616 for Airspace Change Proposal ACP-2020-026, which aims to facilitate the usage of Future Combat Airspace (FCA) by the United Kingdom and coalition partners during infrequent but planned large scale, highly complex, multi-domain, collective training exercises that are used to prepare aircrews for operational environments.

The aim of this document is to provide appropriate evidence that the Change Sponsor has adhered to the process laid out in CAP1616. It follows the ‘we asked, you said, we did’ principle in order to:

- Demonstrate the Consultation Strategy was strictly adhered to in accordance with Reference 7
- Summarise Consultation responses and analyse key themes identified through the Citizen Space feedback
- Summarise the actions of the Sponsor following Consultation.

This document will then summarise and outline the next steps prior to submitting all remaining documentation within the timeline agreed with the CAA.

As a result of the Consultation it has been assessed by the Sponsor that no further Consultation is required. This is due to the analysis conducted at Stage 3D which concluded that no feedback received significantly affected the overall design at the final proposal. Whilst some additional actions were identified (such as creating a Letter of Agreement refined by temporary activations), the Sponsor believes that no issues raised are required to be reconsulted upon. In addition, it is assessed that the Consultation Strategy was successful in reaching a sufficient number and variety of Stakeholders to make the associated analysis valid.

Section 1

Consultation (*We Asked*)

1.1 In accordance with Reference 7 (*Consultation Strategy*), the Sponsor completed a 13-week consultation (6 February 2023 to 8 May 2023). This extended period covered the 2023 Easter Holiday and allowed the greatest opportunity for Stakeholder participation.

1.2 A total of 61 Stakeholders were directly targeted (Stakeholder list available at Annex A). These Stakeholders included:

- i. Primary Stakeholders
- ii. NATMAC Members
- iii. Internal MOD Stakeholders

Internal MOD Stakeholders were consulted via Defence Airspace and Air Traffic Management (DAATM).

1.3 As a result of the dissemination of material by NATMAC members to other Stakeholders, a potentially greater number of respondents had the opportunity to read the consultation material and submit a response.

1.4 The following documentation was provided electronically on the open-source platform 'Citizen Space' from 6 February 2023, a link to which was promulgated on the launch email to targeted Stakeholders.

- **Consultation Strategy**, outlining the audience, approach, material and length of the consultation period required for ACP-2020-026.
- **Consultation Document**, providing background information of the Airspace Change Process, details of the '*preferred design option*' and the associated environmental net benefit and baseline modelling for airspace activity in the area of interest.
- **Full Options Appraisal**, providing analysis of the '*preferred design option*' against a baseline 'do nothing option', factoring in safety and environmental impacts.
- **Frequently Asked Questions**, allows the Sponsor to respond to those Stakeholders who require a more immediate response.

1.5 All previously identified Primary Stakeholders, NATMAC Members and Ministry of Defence Stakeholders were emailed on 6 February 2023, notifying them that the 13-week consultation window had opened. Consultation material was available via Citizen Space, was disseminated directly via email and could be accessed by the CAA online portal. All groups were advised of the feedback method and the deadline for responses (Annex B).

The following activity was completed as part of the Stage 3 Consultation.

- i. **4 April 2023** – Sponsor visit to Dundee Airport Limited. Confirmed receipt of Consultation material and that ACP-2020-026 was the subject of Consultation.

Meeting attended by SATCO/DSATCO Dundee, DAATM representative (through virtual means) and ACP Sponsor in person. SATCO/DSATCO Dundee post the Consultation provided the ACP Sponsor with an operational visit of Dundee Airport. A record of the meeting can be found at Annex D.

- ii. **12 April 2023** – Virtual meeting with Newcastle International Airport. Meeting attended by Head of Air Traffic Services Newcastle International Airport, DAATM representative, RAF 11 Group representative and ACP Sponsor. The Sponsor provided Newcastle with a summary of the Consultation Documentation and the Feedback Questionnaire that was associated with the Consultation Documents. A record of the meeting can be found at Annex E.
- iii. **11 May 2023** – Virtual meeting with DAATM in order to discuss responses received from Internal MOD Stakeholders. A record of the responses can be found at Annex F
- iv. **18 May 2023** – Virtual meeting with NATS, attended by NATS Military Interface Lead, DAATM and Sponsor in order to seek clarification regarding NATS responses to Citizen Space feedback questionnaire. A record of the exchange can be found at Annex G.

1.6 As outlined in the Consultation Strategy (Reference 7) the following processes were adhered to throughout the Consultation phase:

Date	Activity	Location
3 February 2023	Stage 3B Consult Extraordinary Gateway	
6 February 2023	Stage 3C Consultation Launch	Citizen Space, CAA ACP Portal (News Feed), targeted correspondence
(Throughout Consultation)	Face-to-face and virtual events	Identified Stakeholder locations, virtual
6 March 23	Reminder to Stakeholders	Email and phone correspondence
20 March 23	Consultation Reassessment	Citizen Space
9 April 23	Easter Holiday – additional week added	
17 April 23	Reminder to Stakeholders	Email and phone correspondence
8 May 23	Consultation closes	13-week duration (additional week for Easter Holiday)
12 May 2023	NATS Consultation response received after closure date	Email, feedback uploaded to Citizen Space by Sponsor

1.7 **Summary of Consultation activity.** Both the virtual and physical events were deemed successful having reached a wide variety of Stakeholders. No additional issues or questions were raised outside of those within the Consultation Documentation issued as part of Stage 3 or that had been addressed during previous Stages. As per the Consultation Strategy details regarding bespoke meetings were arranged with certain Stakeholders. Direct Consultation with Primary Stakeholders was deemed to have provided tangible responses.

1.8 **Unforeseen Events.** No challenging events were encountered during the Consultation period and the Sponsor concludes that with regular reassessment throughout the consultation period the level of responses were deemed appropriate.

Section 2

Summary of Consultation Responses (*You Said*)

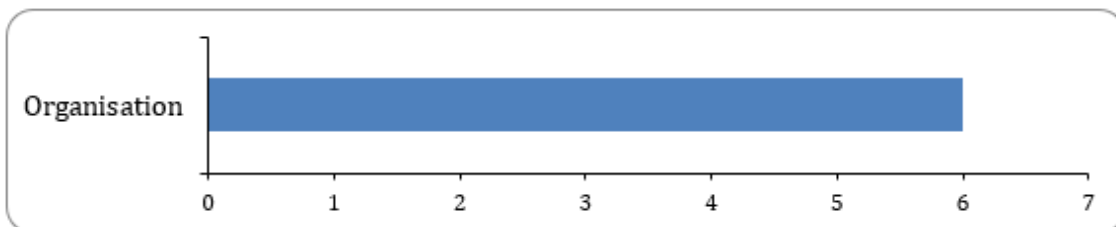
2.1 This section represents the Consultation responses submitted via the *Future Combat Airspace* Feedback Form on Citizen Space. The Sponsor encouraged all Stakeholders to respond formally via this platform, however ongoing dialogue has occurred with Defence Airspace and Air Traffic Management (DAATM), Dundee Airport Limited, Newcastle International Airport and National Air Traffic Services (NATS). A summary of these exchanges can be found at Annexes D, E, F and G. The NATS Consultation response (raw response at Annex G) was received after Consultation closure and was manually uploaded by the Sponsor to Citizen Space. The response received from BAE Systems Warton (raw response at Annex F)(through DAATM) was also uploaded manually to Citizen Space.

2.2 The Sponsor encouraged all Stakeholders to respond formally via Citizen Space, however the Sponsor did receive direct email feedback from the British Hang Gliding and Paragliding Association; this Consultation response did not align with the framework of the Citizen Space feedback form and could not therefore be manually uploaded by the Sponsor. A record of the email exchange is provided at Annex B for reference.

2.3 No feedback was received via post.

2.4 A total of 6 responses were consolidated on Citizen Space, all of which were provided on behalf of organisations. The associated Consultation Summary report can be found at Annex C. The figures below are extracted from the Consultation Summary Report.

Are you responding as an individual or do you represent an organisation?



Option	Total	Percent
Individual	0	0.00%
Organisation	6	100.00%
Not Answered	0	0.00%

2.5 Out of the 6 responses:

2.5.1 All responses were sent on behalf of organisations.

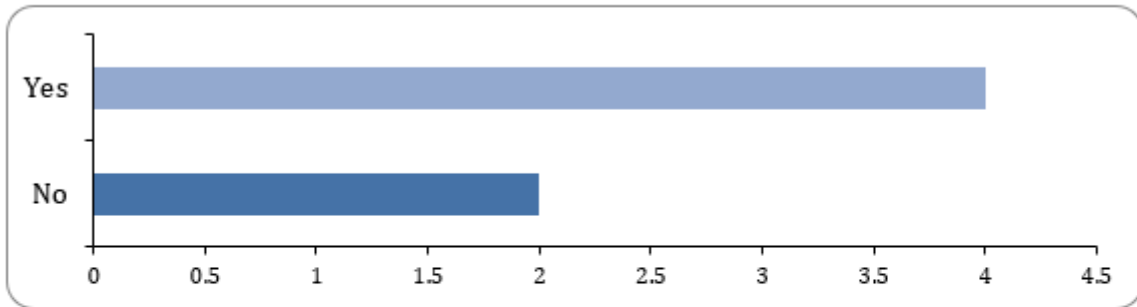
2.5.2 Half of the responses were received from Primary Stakeholders

2.5.3 A third of the responses were received from NATMAC Stakeholders

2.5.4 Final response received through via DAATM (BAE Systems Warton).

2.6 Do you support the preferred design option associated with Future Combat Airspace, ACP-2020-026?

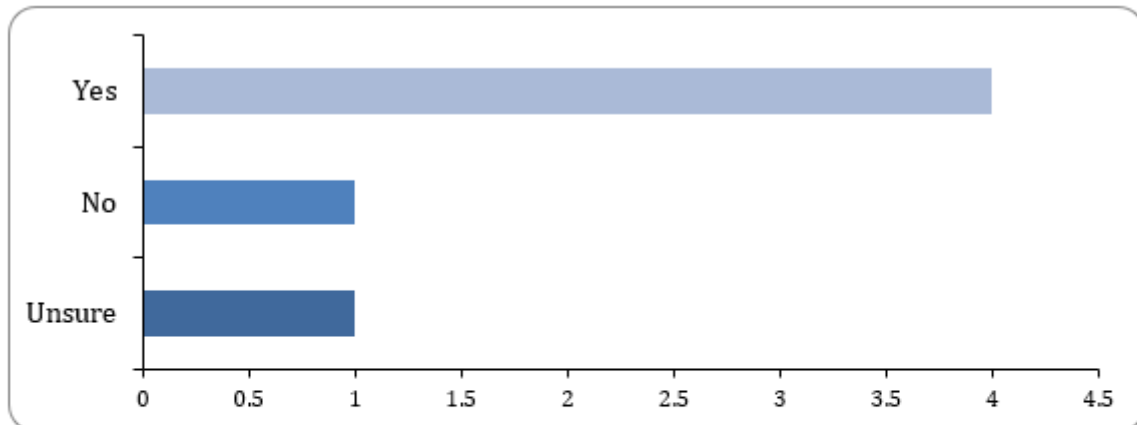
There were 6 responses to this part of the question.



Option	Total	Percent
Yes	4	66.67%
No	2	33.33%
Unsure	0	0.00%
Not Answered	0	0.00%

2.6.1 The Sponsor offered just a single airspace design for ACP-2020-026 and two-thirds of the respondents were in support of this proposal.

2.7 Do you agree with the reasoning behind the selection of the preferred design option?



Option	Total	Percent
Yes	4	66.67%
No	1	16.67%
Unsure	1	16.67%
Not Answered	0	0.00%

2.7.1 Again, two-thirds of the respondents agreed with the reasoning behind the selection of the preferred design option, with 1 consultation response declaring *no* and the other *unsure* of the design selection.

2.8 In terms of the requirement for Stakeholders to be part of the planning process feedback was evenly split between the respondents – with half declaring ‘yes’ and the other half ‘no.’ The distribution of responses regarding the notification period varied between a requirement of 6 months (50% of Stakeholders), to that of 1 month and to that of 1 week (single Stakeholders respectively). Feedback received regarding activation time in relation to the Spring/Summer/Autumn/Winter Seasons was clearer cut with 5 out of 6 Stakeholders advising the summer period would cause greatest disruption for their operations. Over 66% of Stakeholders also stated that certain times of the day would cause greatest disruption.

2.9 **Additional Considerations from Stakeholders.** *Key subjects were evident in the feedback received, but very different outcomes were observed depending on the Stakeholder and their requirements.*

2.9.1 **Baseline Aviation Assessment.** It was suggested that the Baseline Aviation Assessment conducted as part of the Full Options Appraisal was inadequate and did not take into account IFR arrivals or departures from Dundee Airport – more specially IFR departures from runway 09 and Required Navigation Performance (RNP) approaches to runway 27.

2.9.2 **Reporting of Traffic Collision Avoidance System Alerts.** That any event of this nature ‘should be reported’ between Dundee and participating exercise traffic.

2.9.3 **Airspace Dimensions.** One of the Stakeholders suggested either moving the preferred design option 10 nautical miles (nm) to the east of the proposed position or shrinking the western boundary by 10nm. With another Stakeholder suggesting that the preferred design option should be segmented and not activated in its entirety.

2.9.4 **Airspace Management.** Was a common theme with Stakeholders seeking assurance that the application of airspace management procedures would be appropriately applied.

2.9.5 **Letter of Agreement.** This suggestion appeared in half of the responses but with different connotations depending on the Stakeholder, some sought amendments to existing agreements whilst other Stakeholders sought reassurance that the previously employed Letter of Agreement (under ACP-2021-048) would be used to develop any agreement for ACP-2020-026.

2.9.6 **Environmental Impact.** The environmental impact of the Airspace Change Proposal was referred to by two of the Stakeholders. One of the Stakeholders referring to an immediate negative impact upon their operations, whilst the other questioned the validity of the environmental analytics submitted as part of the Stage 3 Documentation for ACP-2020-026.

2.9.7 **Stakeholder Airspace Change Proposals.** 2 of the Stakeholders commented that they had aspirations to commence their own Airspace Change Proposals, but neither had formally started the process.

2.9.8 **Flight Plan Buffer Zone.** One of the Stakeholders requested that further analysis on the Flight Plan Buffer Zone should occur.

2.10 **NATS.** This Stakeholder posed a number of technical questions to the Sponsor and sought to understand:

2.10.1 Agreements should be in place to minimise impact on traffic flows and patterns, in particular North Atlantic Tracks, which should be managed through extant procedures.

2.10.2 Agreement on Airspace Management and the cumulative effect of other activated areas within the FIR/UIR.

2.10.3 An expectation that the reporting points used within the UK AIP Supplement for previous trial activations are included within the UK AIP ENR 4.4 on a permanent basis, in order to facilitate re-routings associated with activations.

2.10.4 That the environmental analysis does not show the impact of the preferred design option on the network when D323 and D613 are not active. *'The analysis assumes that they will always be active, but this is not always the case. It would be useful to include a scenario where no Special Use Airspace is active to more accurately reflect the impact of this proposal.'*

2.10.5 Any name change to the Danger Area Designator is provided in sufficient time to update both NATS internal systems and the EUROCONTROL flight planning system in line with the AIRAC process prior to implementation.

2.10.6 The inclusion of any Letter of Agreement associated to the temporary activations within the ACP material and notes the MODs commitment to use this as a benchmark upon which future arrangements would be based.

2.10.7 The Airspace Management process requires the airspace reservation request by 0900 D-1. NATS require as much notice of any exercise as possible (6 months plus) in order to support NATS long-term operational planning (activation notification as standard at D-1).

Section 3

Categorisation of Consultation Responses (*We Did*)

3.1 All responses were categorised post-consultation at Stage 3D and can be found at Annex H to this document. The Sponsor formally categorised data into responses which may impact the final Airspace Change Proposal and responses which do not; as per the guidance in CAP1616 (Appendix C – Consultation and Engagement). At this stage the Sponsor sub-categorised responses that could impact the ACP into those which will lead to changes to the overall submission and those which will not. The following definitions were used when analysing responses:

3.1.1 **Response may impact final submission.** Any response that has the potential to impact the final submission has been placed into this category and assessed as either:

- **Impacted.** A proposal from a Stakeholder that would impact the management of the airspace or alter the size, shape or construct of the final design that has not already been considered.
- **Not impacted.** A proposal from a Stakeholder that would impact the management of the airspace or alter the size, shape or construct of the final design but has already been considered, discounted or implemented at an earlier stage of this ACP.

3.1.2 **Response does not change the final proposal.** This category applies to all responses that do not have relevance to the final submission, either in terms of the overall airspace design, future operation of the Danger Area itself or the noise impact. Where comments have been received a response will still be provided by the Sponsor to ensure that all comments received have been appropriately considered. Any response that did not provide any supporting comment (either positive or negative) is also included in this category.

Responses which may impact the final submission

3.2 **Impacted.** The following responses were deemed to have impacted the ACP as additional considerations and are to be taken forward with actions completed as part of the final proposal at Stage 4B.

3.2.1 **Overarching Letter of Agreement.** Deemed to be an integral part of the submission. With this Letter of Agreement informed by previous temporary activations, most recently under ACP-2021-048 and inclusive of some of the Primary Stakeholders. A Letter of Agreement has previously been trialled between NATS (En Route) and HQ Air Command with additional signatories from 78 Squadron, Newcastle International Airport and Teesside International Airport, a draft Letter of Agreement will be included at the Stage 4B submission. The below considerations will also be made:

3.2.1.1 Newcastle International Airport have requested that there is to be no Newcastle Controlled Airspace crossing by any exercise participant.

3.2.1.2 Dundee Airport have suggested a revision to their Letter of Agreement with Leuchars to ensure Leuchars LARS provision is guaranteed during Special Use Airspace activation periods.

3.2.1.3 Confirmation of the requirement specified by NATS which seeks to clarify that the proposed Danger Area will not be activated during weekends, bank holidays or notified holiday periods.

3.2.1.4 Exercise planners should aim to provide 6 months' notice regarding activations of the preferred design option to Stakeholders.

3.2.2 **Reporting Points.** Those points previously articulated as part of the temporary activations and included within the UK AIP Supplement are to be included within UK AIP ENR 4.4 to ensure re-routings associated with any activations.

3.2.3 **Danger Area Designator.** Any name change to the Danger Area Designator should be provided in sufficient time to update both NATS internal systems and the EUROCONTROL flight planning system in line with the AIRAC process prior to implementation.

3.3 **Not impacted.** The following themes were evident within Consultation but deemed to have not impacted upon the final proposal as they have already been considered at an earlier stage.

3.3.1 **Formal entrance/exit gates from the DA.** Have already been considered as part of the temporary Letter of Agreement and their inclusion for exercise participants will be continued as the Letter of Agreement for the permanent Danger Area is finalised.

3.3.2 **Access to Airspace.** Agreements with the Airspace Management Cell that have been employed under temporary activations in order to minimise impact on traffic flows and patterns, in particular North Atlantic Tracks have been considered and will be included as operating procedures for submission as part of the Draft Letter of Agreement included at Stage 4B.

3.3.3 **Flight Plan Buffer Zone.** Further analysis on the design of the associated Flight Plan Buffer Zone is deemed disproportionate given that the dimensions were created in direct consultation with NATS, with the previous 5 nautical mile Flight Plan Buffer Zone deemed sufficient, with this buffer size catering for activity descriptors 'high energy manoeuvres' consistent with other Danger Areas.

3.3.4 **Environmental Analysis.** Given the scale of effort required in order to generate the Large Force Exercises, the preferred design option will only be activated on weekdays. Statistics obtained from the Military Airspace Manager prove that adjacent danger areas were active every weekday (discounting bank holidays and seasonal stand down periods) and therefore the environmental analysis that has been completed in support of this proposal remains entirely relevant.

3.4 **Responses that do not change the final proposal**

3.4.1 **Lateral Movement of Airspace.** The movement of the Western boundary of preferred design option 10nm to the East will not allow the Large Force Exercises to meet their training objectives - a portion of overland airspace is essential to meet this requirement.

3.4.2 Airspace Design. The suggestion to reduce the size of the preferred design option by 10nm was discounted at the Stage 2 Initial Options Appraisal. A reduction in size of the Danger Area will diminish the training objectives and not provide suitable airspace for the Large Force Exercise.

3.4.2.1 Segmenting the proposed Danger Area will not provide the required dimensions for the Large Force Exercise and has therefore been discounted.

3.4.3 Air Traffic Management outside of Danger Area. Operating procedures beyond the confines of the Danger Area fall outside this ACP, however it is within the interest of the exercise traffic to remain within any segregated airspace. Routine air traffic procedures will be applied to aircraft that manoeuvre outside of the Danger Area and those exercise participants that transit to and from the Danger Area.

3.4.4 Operations from local airfields. Given the ability for Dundee inbounds to position in a myriad of ways prior to instrument arrival, the publishing of network exit points will not provide appropriate situational awareness to exercise traffic. Given that Dundee traffic may be controlled by a variety of agencies, reaching a level of standardisation for this suggestion will increase complexity.

3.4.4.1 Borders Gliding Club, the addition of reporting points and altitude bands into any exercise literature is not deemed relevant. TRA(G) Northumbria North will not be available when the preferred design option is active.

3.4.5 Routine Safety Submissions. As part of occurrence reporting it is expected that any TCAS event should be reported through the routine channels and therefore there is nil change to the final proposal.

3.4.6 Objections. There were no objections to the proposal based upon the submitted Citizen Space formal responses.

Section 4

Summary, Corrections and Next Steps

4.1 The targeted 13-week consultation period was deemed successful by the Change Sponsor. Stakeholder engagement was wide ranging and feedback largely constructive which has allowed the Sponsor to re-evaluate the remaining design option in a productive manner. Additionally, direct consultation with Stakeholders allowed the Sponsor to meet in a face-to-face forum in order to discuss concerns in the most appropriate format.

4.2 Encouragingly two-thirds of respondents supported the Airspace Change Proposal, with a similar number agreeing with the reasoning behind the preferred design option. The requirement for a Letter of Agreement which clearly articulated airspace management procedures is understood by the Sponsor.

4.3 The following actions will be taken forward for further consideration or conclusion within the final proposal:

4.3.1 Creation of a Letter of Agreement for ACP-2020-026, which is to be informed by previous temporary activations.

4.3.2 Those reporting points used under the temporary activations are to be included within UK AIP ENR 4.4.

4.3.3 The Danger Area designator should be provided in sufficient time to allow for the update of systems.

4.3.4 In addition to the expected number of airspace activations as stated in Page 20 of the Consultation Document, there is a further requirement to specify that the airspace will not be activated over weekends or other notified holiday periods.

4.4 The Sponsor concludes that no change to airspace design or further Consultation is required based on the responses received.

4.5 On 14 Feb 2023 it was discovered that the hyperlink from the CAA Online Portal to the *Future Combat Airspace Citizen Space* webpage did not work – a proven version of this hyperlink was however shared with all Stakeholders via the Consultation Strategy and targeted email on 6 Feb 2023 at the start of the Consultation period. A requirement of CAP 1616 ‘Output from Step 3B to be uploaded to the online portal’ includes the Publication of Consultation Strategy and Publication of Options Appraisal (phase II – Full), this action was completed part way through Consultation by the Sponsor. The Sponsor did not receive any correspondence from Stakeholders advising that access to documentation was not possible. A discrepancy was identified by the Sponsor relating to ‘reminder dates for Consultation.’ The Consultation Strategy stated 6 March 23 for a reminder against a date of 20 March 2023 as detailed within the Consultation Document – *the Sponsor followed the date specified within the Consultation Strategy.*

4.6 Stage 4A ‘Update and Submit’ involves the completion of the Final Options Appraisal, the Sponsor will use the same approach as the Full Options Appraisal but take into account new considerations and actions identified. At this stage the Sponsor will confirm with the CAA whether or not the appraisal has fundamentally changed and whether a second

consultation is required. Provided that it is not, the Sponsor will move to Stage 4B and continue to progress the Airspace Change Proposal in accordance with the agreed timeline.

Annex A – Stakeholder List

Stakeholders were broken down into the following groups below. Those highlighted in grey represent a Stakeholder who submitted a formal Consultation response.

Primary Stakeholders

Primary Stakeholders have all been heavily involved in the design process to date, during the trial and temporary activations. Primary Stakeholders were offered in-person consultations at a location of their choice.

Primary Stakeholders		
Newcastle International Airport	Edinburgh International Airport	Dundee International Airport
Aberdeen International Airport	Teesside International Airport	The Borders Gliding Club, Milfield
Firth of Forth ACP Sponsor	Scottish Terminal Control Area ACP Sponsor	

NATMAC Stakeholders

Email correspondence was received from the British Hang Gliding and Paragliding Association (BHPA)(Annex B), however responses were not received through Citizen Space and did not meet the framework required for manual upload by the Sponsor.

NATMAC Stakeholders		
Airlines UK	Airport Operators Association (AOA)	Airfield Operators Group (AOG)
Aircraft Owners and Pilots Association (AOPA)	British Gliding Association (BGA)	General Aviation Alliance (GAA)
British Airways (BA)	BAe Systems	Guild of Air Traffic Control Officers (GATCO)
Honourable Company of Air Pilots (HCAP)	Heavy Airlines	Iprosurv
Isle of Man CAA	Navy Command HQ	PPL/IR Europe
Airspace Change Organising Group (ACOG)	British Gliding Association National Airspace Committee	Helicopter Club of Great Britain (HCGB)
Airspace4All	British Hang Gliding and Paragliding Association (BHPA)	Light Aircraft Association (LAA)
Association of Remotely Piloted Air Systems (ARPAS-UK)	British Helicopter Association (BHA)	National Air Traffic Service (NATS)
Aviation Environment Federation (AEF)	British Microlight Aircraft Association (BMAA)/General Aviation Safety Council (GASCo)	National Police Air Service (NPAS)
British Airline Pilot Association (BALPA)	British Model Flying Association (BMFA)	PPL/IR (Europe)

British Balloon and Airship Club	British Skydiving	UK Airprox Board (UKAB)
British Business and General Aviation Association (BBGA)	Drone Major	UK Flight Safety Committee (UKFSC)
Low Fare Airlines	United States Visiting Forces (USVF), HQ United States Country Rep - UK	

Internal MOD Stakeholders

MOD Stakeholders were identified by Defence Airspace and Air Traffic Management (DAATM) through the Military Airspace Users Working Group (MAUWG). A consolidated MOD response has been provided by DAATM.

MOD Stakeholders (via DAATM)		
2 Group DAAM	HQ 1 Group	HQ 2 Group
HQ 22 Group	USAF(Europe) also through NATMAC	RAF Boulmer
RAF Spadeadam	Leuchars Diversion Airfield	RAF Coningsby
19 and 20 Squadron (RAF Boulmer)	78 Squadron (RAF Swanwick)	Defence Airspace and Air Traffic Management (DAATM)
Military Airspace Management Cell (MAMC)	Military Aviation Authority (MAA)	RAF Safety Centre

Annex B – Sponsor Email Engagement

(Shared with all Primary Stakeholders and NATMAC Stakeholders, Internal MOD Stakeholders were contacted by DAATM).

From: Hammond, Thomas Sqn Ldr (Air-11Gp-A7 TrgEnablers1 SO2)

Sent: 06 February 2023 14:12

Subject: 20230206-ACP-2020-026, Future Combat Airspace Stage 3C - Consultation

Ma'ams/Sirs, all,

The MoD has identified a requirement for a suitable portion of Special Use Airspace in the form of a Danger Area in which to conduct occasional large scale training exercises, allowing modern military aircraft to train to their full capabilities in a joint operating environment - under [CAP1616](#), an airspace change proposal (ACP), **ACP-2020-026** has therefore been submitted.

As part of this process, consultation with stakeholders must take place in order to provide relevant feedback for the proposal, allowing us to understand and consider how our it may affect your operations and minimise impacts where possible. Many of you have been contacted during the early stages and some have recently been identified as stakeholders. I, as the change sponsor, warmly welcome you, and your contribution, towards this proposal.

The relevant documents for this Airspace Change Proposal can be located on the CAA's ACP Portal [Airspace change portal \(caa.co.uk\)](#)

The Consultation Strategy, Consultation Document, Full Options Appraisal and FAQs are all located at the bottom of the front page on the [Citizen Space Portal](#), they are also attached to this email for reference. Should you require a hard copy of the Consultation Feedback Form, please let me know at the earliest convenience either by replying to this email, or by writing to:

Airspace Change Sponsor

HQ 11 Group

Air Command

Hurricane Block

RAF High Wycombe

Walters Ash

Bucks

HP14 4UE

Secondly, the Online Survey in which you can provide feedback is located on the Citizen Space Portal; this is the easiest, and most straightforward way of responding. Should you require a paper copy please reply to this email or write to the address above.

In order to meet the submission deadline to the Civil Aviation Authority (CAA) for the ACP, we request submission of your feedback **no later than 8 May 2023**, where all your responses will be correlated and reviewed. Any issues or suggestions highlighted by your feedback will be considered before proceeding to the next stage of the Airspace Change Process.

Should you wish to make or receive FAQ representations offline, please contact me by replying to this email, or writing to the address above.

If you require any clarification on the points discussed within this email or documents provided, please contact us at the earliest convenience. If you require further consultation (by MS Teams, telephone or email), please contact us by replying to this email, or using the postal address above, and a meeting will be arranged.

Thank you

TOM

Squadron Leader Tom Hammond | SO2 A7 Training Enablers | HQ11 Gp | Air Command | Hurricane Block | RAF High Wycombe | Walters Ash | Bucks | HP14 4UE | [REDACTED] | Skype +443001583835 | Email: thomas.hammond945@mod.gov.uk

Reminder Email

From: Hammond, Thomas Sqn Ldr (Air-11Gp-A7 TrgEnablers1 SO2)

Sent: 06 March 2023 14:55

Subject: FW: 20230206-ACP-2020-026, Future Combat Airspace Stage 3C - Consultation

Dear all,

Good afternoon.

As a brief reminder – the Consultation deadline for ACP-2020-026 is **8 May 2023** (please see original trail below and attached documentation for reference).

If you require any clarification on the points discussed within this trail or within the provided documentation please do not hesitate to contact me. If you require further consultation (including a face-to-face meeting at a location of your preference) please contact me at the earliest opportunity so that we can agree a mutually convenient date/time.

Thank you again in advance

TOM

Squadron Leader Tom Hammond | SO2 A7 Training Enablers | HQ11 Gp | Air Command | Hurricane Block | RAF High Wycombe | Walters Ash | Bucks | HP14 4UE | [REDACTED] | Skype +443001583835 | Email: thomas.hammond945@mod.gov.uk

Second Reminder Email

From: Hammond, Thomas Sqn Ldr (Air-11Gp-A7 TrgEnablers1 SO2)

Sent: 17 April 2023 10:11

Subject: FW: 20230206-ACP-2020-026, Future Combat Airspace Stage 3C - Consultation

Good morning.

The Consultation deadline for ACP-2020-026 is **8 May 2023** (please see original trail below and attached documentation for reference).

If you require any clarification on the points discussed within this trail or within the provided documentation please do not hesitate to contact me. If you require further consultation (including a

face-to-face meeting at a location of your preference) please contact me at the earliest opportunity so that we can agree a mutually convenient date/time.

Details of this Consultation and how to provide feedback can be found on the Citizen Space Portal at the below link

[Future Combat Airspace, ACP-2020-026 - The Civil Aviation Authority and Airspace Change sponsors - Citizen Space](#)

Thank you again in advance

TOM

Squadron Leader Tom Hammond | SO2 A7 Training Enablers | HQ11 Gp | Air Command | Hurricane Block | RAF High Wycombe | Walters Ash | Bucks | HP14 4UE | [REDACTED] | Skype +443001583835 | Email: thomas.hammond945@mod.gov.uk

NATMAC Stakeholder Engagement

From: Hammond, Thomas Sqn Ldr (Air-11Gp-A7 TrgEnablers1 SO2)

Sent: 19 April 2023 09:27

[REDACTED]
[REDACTED]
[REDACTED]
Subject: RE: 20230206-ACP-2020-026, Future Combat Airspace Stage 3C - Consultation

[REDACTED] good morning – thanks for the below update.

[REDACTED] kindly wrote to me as part of this consultation on 8 March and described how most of your operational activity 'occurs between GL and a max average of 6500-7000' (standfast last summer where flying at 10k in the wave box over Wales was noted).

Thank you for the clarification of the extract from the *BHPA Electronic Conspicuity position paper August 2022* that I misinterpreted regarding 'flights take place from ground level to cloud base, although a significant portion of flight activity takes place within 500ft of the ground.'

I hope that we are in mutual agreement that with the baselevel of the preferred design option specified as FL85 and with the vast majority of the lateral limits displaced over the high seas area we present minimal obstacles to your activity with ACP-2020-026?

I appreciate that it is not always possible given the nature of your aviation activity and the fact that many of your platforms have no electrical system and therefore carrying any form of Electronic Conspicuity is not practical – so objectively quantifying your activity in relation to the preferred design option is not possible.

Figure 1 from the BHPA EC paper allows me to conduct some analysis, applying the assumptions regarding operational altitudes we discussed earlier, thank you also for the direction to ENR 5.5 regarding Aerial Sporting and Recreational Activities.

Finally if you have a recorded online presentation that I could reference or if you have the ability to deliver this presentation to me before 8 May 23 that would be greatly appreciated.

Thanks

TOM

Squadron Leader Tom Hammond | SO2 A7 Training Enablers | HQ11 Gp | Air Command | Hurricane Block | RAF High Wycombe | Walters Ash | Bucks | HP14 4UE | [REDACTED] | Skype +443001583835 | Email: thomas.hammond945@mod.gov.uk

From: [REDACTED]

Sent: 18 April 2023 17:10

To: Hammond, Thomas Sqn Ldr (Air-11Gp-A7 TrgEnablers1 SO2) <Thomas.Hammond945@mod.gov.uk>
[REDACTED]
[REDACTED]

Subject: Re: 20230206-ACP-2020-026, Future Combat Airspace Stage 3C - Consultation

Good afternoon [REDACTED]

Sorry for the delay in replying.

I am copying in the BHPA Airspace Liaison Officer [REDACTED].

In respect of your questions, I will endeavour to provide a full answer to the other questions you raise. However, in response to this one:

- Am I correct in thinking that most of your activity occurs below 500ft?

With respect - your thinking is incorrect! There is substantial HG and PG activity below 500ft above the surface and this activity is permitted by UK law, although there are certain constraints. However, HG and PG routinely fly and spend a significant amount of time above 500ft agl and this is captured in the AIP (NATS ENR 5.5 Aerial Sporting and Recreational Activities):

"5.5.2.2 The locations of cable-launched hang/paragliding sites are listed at ENR 5.5. Foot launched activity sites are severely affected by wind speed and direction existing at the time. Although activity is usually at a peak during weekends, hang-gliding and/or parascending may take place at any time, particularly in the summer months. Airspace users should be aware that single or groups of **soaring and motorised hang/para-gliders can be found flying anywhere in the open FIR up to 15,000 FT**, and are therefore not listed." (Emphasis added).

We are very happy to engage further to provide more information on our activities. We have an on-going aim to inform other air users how many of us there are, where we may be found, and the scope of our activities. I have an online / in-person presentation that you may be interested in. I routinely deliver this to DfT and CAA personnel to update them with information on hang gliding and paragliding.

Regards

██████

On 8 Feb 2023, at 16:29, Hammond, Thomas Sqn Ldr (Air-11Gp-A7 TrgEnablers1 SO2) <Thomas.Hammond945@mod.gov.uk> wrote:

██████, good afternoon – thank you for taking the time to write to me regarding ACP-2020-026.

You are indeed correct in that our proposed base-level for the Danger Area is Flight Level 85 and top level FL660 (suspect it may be a little chilly at that level in a hang-glider)!

Our intent is that the proposed Danger Area causes the least possible impact for all stakeholders - hence the relatively high base level and lateral displacement that is predominately over the high-seas area.

Going forwards I'm keen to establish links with the hang-gliding and para-gliding sites you refer to below so that we can consult early regarding any planned activations of the Future Combat Airspace and on that note we hope to operate in TDA597 (our temporary request for this Danger Area) between 6 and 24 March 2023 as part of ACP-2021-048 a link to the AIP SUP 083/2022 can be found [here](#).

Thanks also for the Electronic Conspicuity position paper – 300kms is quite an achievement without a motor! The map on page 4 provides a useful pictorial reference of the extent of your activity. I will share your informative note with DAATM (Defence Airspace and Air Traffic Management) as I know that these airspace professionals will subsequently use the information that you have provided in order to inform similar airspace proposals.

Could you please provide me with some specific details regarding the map?

- (I appreciate that it states 'typical year'), however could you let me know the most recent year that this chart was published?
- How have the flight traces been added to this map?
- Is there an equivalent map for hang-gliders?
- Am I correct in thinking that most of your activity occurs below 500ft (and if this is the case can you please provide a rough %)?

Hope that makes sense and happy to chat through if easier.

Thank you

Tom

Squadron Leader Tom Hammond | SO2 A7 Training Enablers | HQ11 Gp | Air Command |
Hurricane Block | RAF High Wycombe | Walters Ash | Bucks | HP14 4UE | [REDACTED] |
Skype +443001583835 | Email: thomas.hammond945@mod.gov.uk

From: [REDACTED]
Sent: 06 February 2023 20:12
To: Hammond, Thomas Sqn Ldr (Air-11Gp-A7 TrgEnablers1 SO2) <Thomas.Hammond945@mod.gov.uk>
Cc: [REDACTED]
Subject: Re: 20230206-ACP-2020-026, Future Combat Airspace Stage 3C - Consultation

Dear [REDACTED]

Thank you for sending this pack. It appears that the base of the proposed ACP area is FL85. Please correct me if I am wrong.

The proposed area when projected to ground may include a number of hang gliding and paragliding sites that are routinely used weekdays and weekends VFR in Class G from surface to base of any CAS, with potential multiple soaring and thermalling aircraft that do not transmit ADS-B (I note that the sponsor's document refers to ADS-B derived data for traffic forecasts).

For this and future ACP proposals you may be interested to read the BHPA's [electronic conspicuity position paper](#), which outlines how and where hang gliders and paragliders operate.

I have copied in the BHPA's Airspace Liaison Officer [REDACTED] for information.

Kind regards

[REDACTED]

[REDACTED]

BHPA Senior Technical Officer

[REDACTED]

[REDACTED]

Web: www.bhpa.co.uk

British Hang Gliding and Paragliding Association (BHPA)

Annex C – Citizen Space Consultation Summary Report

Future Combat Airspace, ACP-2020-026

<https://consultations.airspacechange.co.uk/mod/future-combat-airspace-acp-2020-026>

This report was created on Friday 26 May 2023 at 16:31

The activity ran from 06/02/2023 to 08/05/2023

Responses to this survey: **6**

1: What is your name?

Name

There were 6 responses to this part of the question.

2: What is your email address?

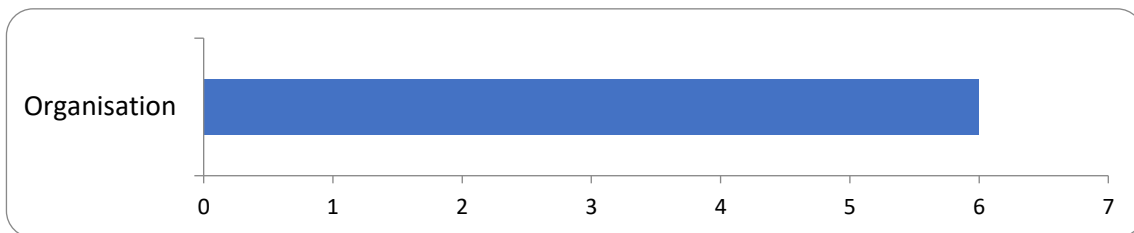
Email

There were 6 responses to this part of the question.

3: Are you responding as an individual or do you represent an organisation?

Respondent background

There were 6 responses to this part of the question.



Option	Total	Percent
Individual	0	0.00%
Organisation	6	100.00%
Not Answered	0	0.00%

4: If you are responding on behalf of an organisation, what is the name of the organisation?

Name

There were 6 responses to this part of the question.

5: If you are responding on behalf of an organisation what is your position/title?

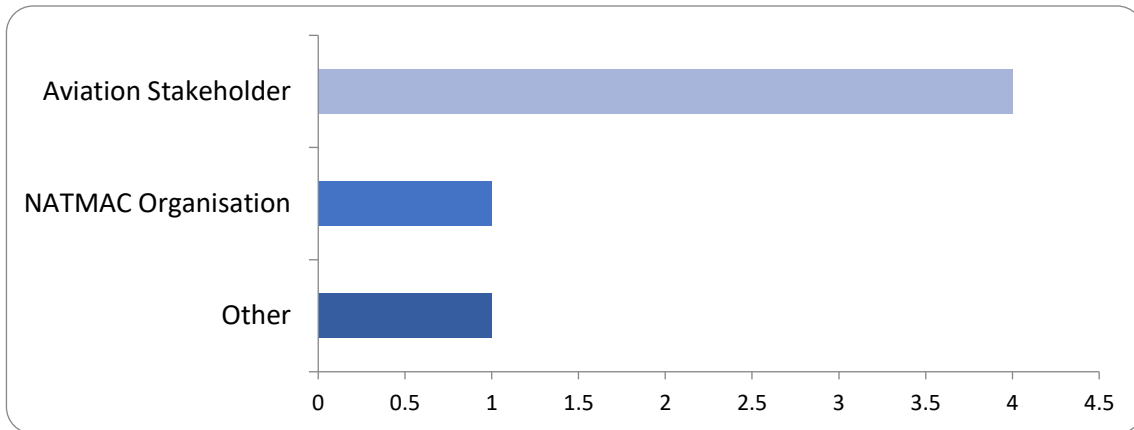
Position/title

There were 6 responses to this part of the question.

6: What best describes your association with this airspace change?

Background

There were 6 responses to this part of the question.



Option	Total	Percent
Aviation Stakeholder	4	66.67%
NATMAC Organisation	1	16.67%
Other	1	16.67%
Not Answered	0	0.00%

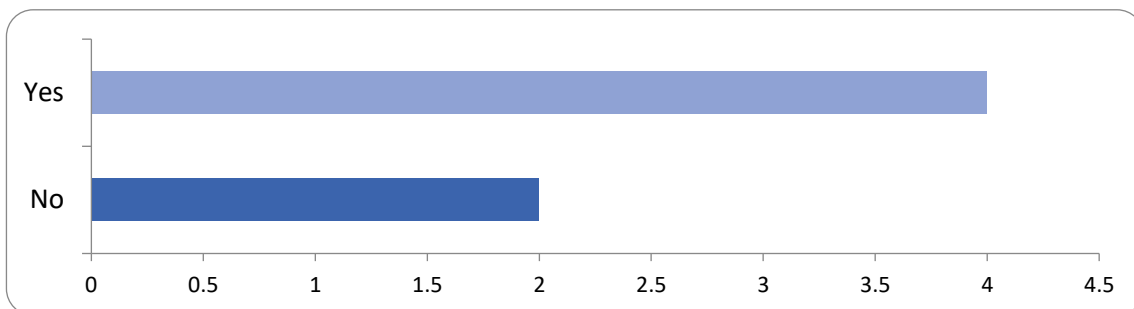
Other - please state

There were 6 responses to this part of the question.

7: Do you support the preferred airspace design associated with Future Combat Airspace, ACP 2020-026?

Background

There were 6 responses to this part of the question.



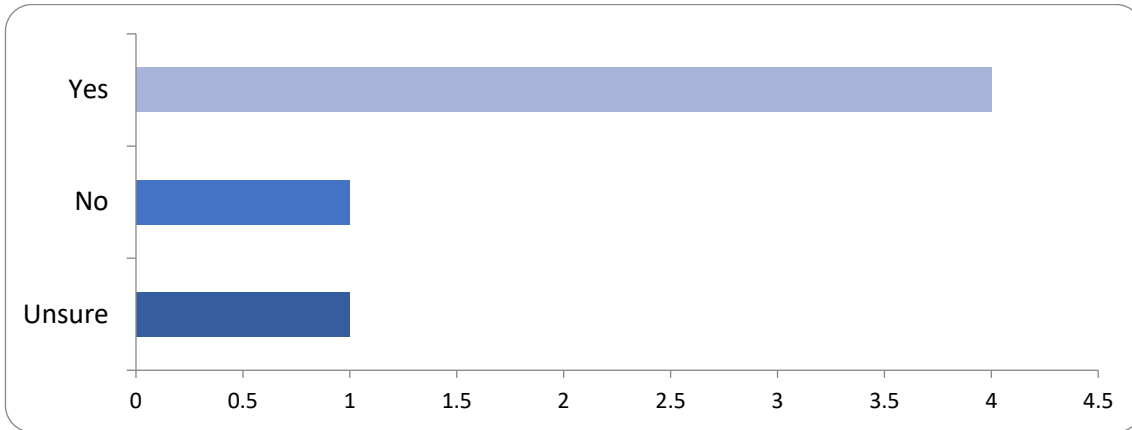
Option	Total	Percent
Yes	4	66.67%
No	2	33.33%
Unsure	0	0.00%

Not Answered	0	0.00%
--------------	---	-------

8: Do you agree with the reasoning behind the selection of the preferred design option?

Selection

There were 6 responses to this part of the question.



Option	Total	Percent
Yes	4	66.67%
No	1	16.67%
Unsure	1	16.67%
Not Answered	0	0.00%

9: If you do not agree with the selection of the preferred design option, please provide any suggestions you feel would improve the airspace design

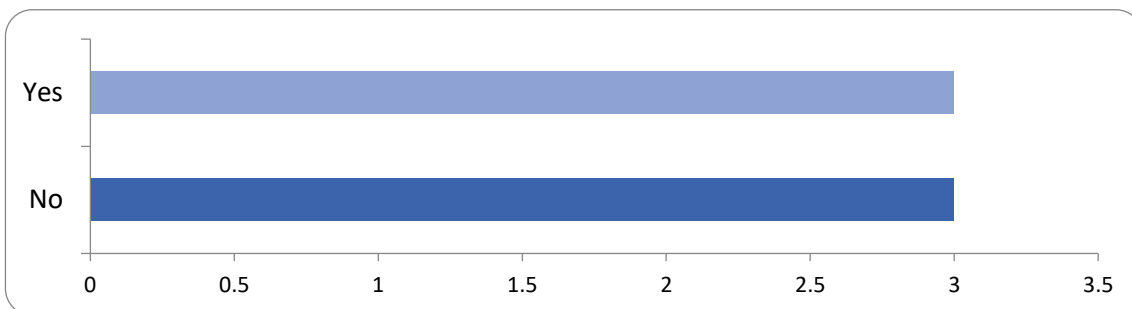
Selection

There were 3 responses to this part of the question.

10: Co-ordination meetings occur well in advance of planned activations, in order to ensure deconfliction with your requirements do you require an invite to these forums?

Selection

There were 6 responses to this part of the question.



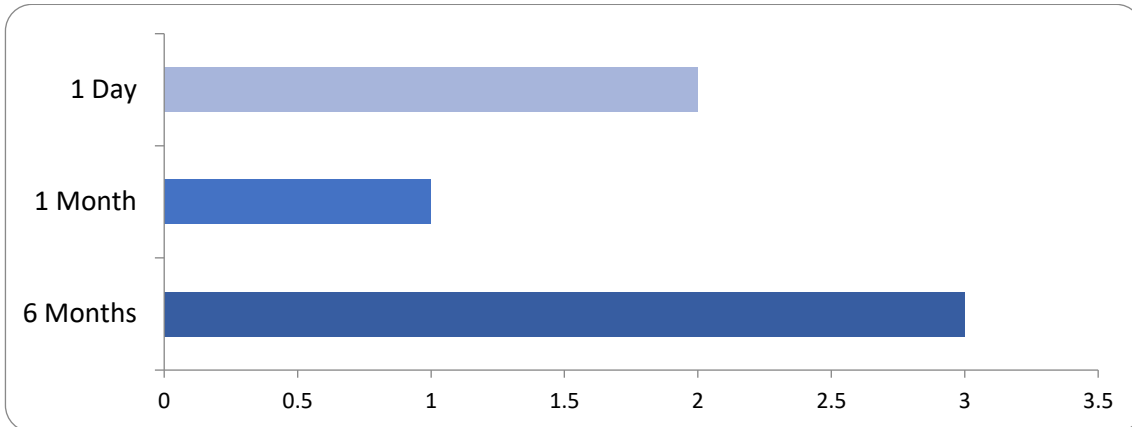
Option	Total	Percent
Yes	3	50.00%

No	3	50.00%
Unsure	0	0.00%
Not Answered	0	0.00%

11: How much notice regarding activations of Future Combat Airspace would you require?

Selection

There were 6 responses to this part of the question.

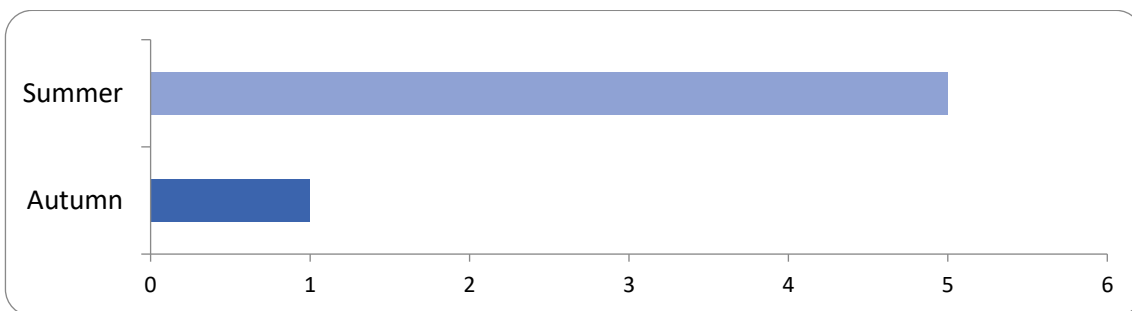


Option	Total	Percent
1 Day	2	33.33%
1 Week	0	0.00%
1 Month	1	16.67%
3 Months	0	0.00%
6 Months	3	50.00%
Not Answered	0	0.00%

12: Which activation periods will cause greatest impact for your operations?

Selection

There were 6 responses to this part of the question.

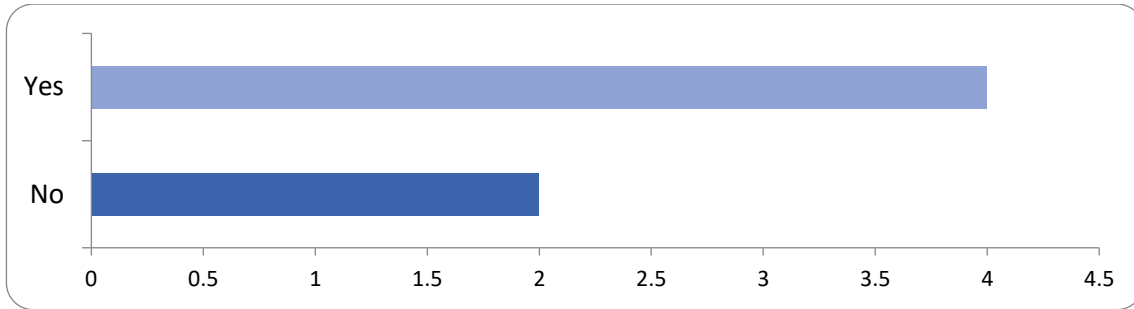


Option	Total	Percent
Spring	0	0.00%
Summer	5	83.33%
Autumn	1	16.67%
Winter	0	0.00%
Not Answered	0	0.00%

13: Is there a particular time of the day that would create a lesser impact on your business?

Selection

There were 6 responses to this part of the question.



Option	Total	Percent
Yes	4	66.67%
No	2	33.33%
Unsure	0	0.00%
Not Answered	0	0.00%

14: If so, what would be the ideal time for the activation of the Danger Area in order to minimise impact on your business?

Selection

There were 4 responses to this part of the question.

15: Subjective assessments indicate that there will be no impact to civil operations below 7000 feet caused by the activation of Future Combat Airspace, if you disagree, please explain why below

Selection

There were 3 responses to this part of the question.

16: Safety is the main priority of the MOD and in order to successfully activate the preferred Danger Area it is envisaged that a Letter of Agreement will be required that includes all affected stakeholders, what items should be included in this agreement? Examples could include Flight Plan Buffer Zones/Reporting Points/guarantee of service provision.

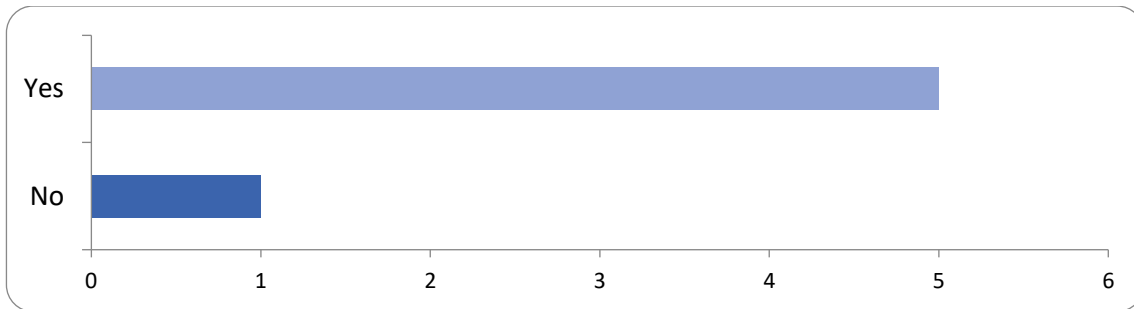
Selection

There were 5 responses to this part of the question.

17: If the airspace change was permanently introduced, would there be an increased training or infrastructure burden upon your operation?

Selection

There were 6 responses to this part of the question.



Option	Total	Percent
Yes	5	83.33%
No	1	16.67%
Unsure	0	0.00%
Not Answered	0	0.00%

18: If possible, please briefly explain why and if possible, please provide an estimate of the likely cost

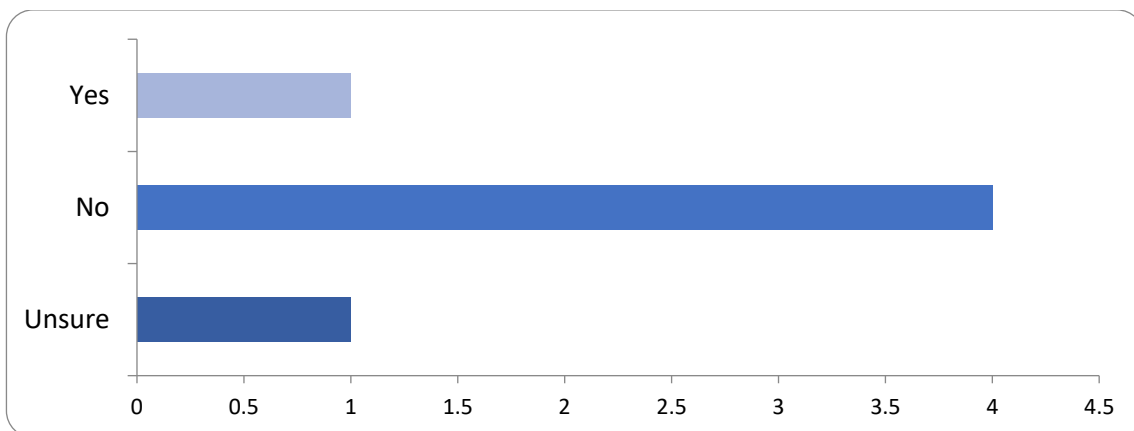
Selection

There were 5 responses to this part of the question.

19: Do you agree that the preferred design option for the identified airspace is suitably 'future proofed' and will allow airlines to fully take advantage of Free Route Airspace and therefore minimise fuel burn?

Selection

There were 6 responses to this part of the question.



Option	Total	Percent
Yes	1	16.67%
No	4	66.67%

Unsure	1	16.67%
Not Answered	0	0.00%

20: If you answered 'no' to the previous question, please briefly explain why

Selection

There were 4 responses to this part of the question.

21: If you oppose this proposal, please explain why

Comments

There were 2 responses to this part of the question.

22: The MOD is keen to reduce the impact of its operations on other airspace users. Can you suggest any mitigations that would resolve any concerns that you have?

Suggestions

There were 4 responses to this part of the question.

23: Are there any other general considerations that you would like the MOD to consider in relation to this Airspace Change Proposal?

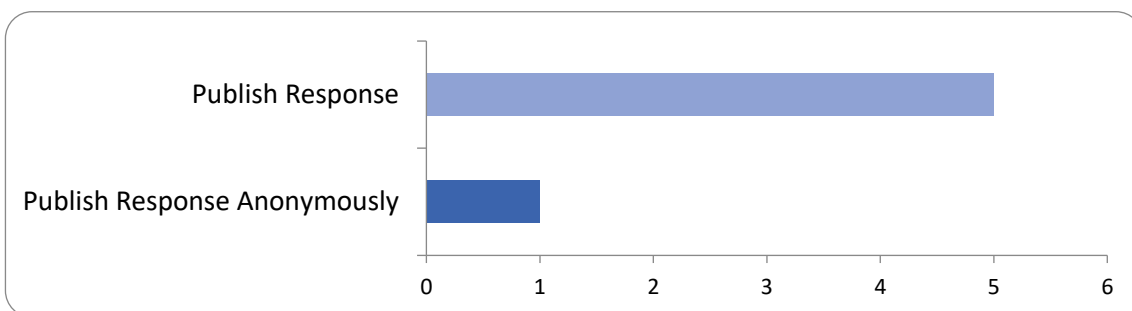
Considerations

There were 4 responses to this part of the question.

24: In accordance with CAP1616, Consultation responses will be published on Citizen Space via the CAA Airspace Change Portal. Responses will be subject to moderation by the CAA. Please indicate below if you would prefer for your response to be published anonymously (personal details will only be seen by the CAA).

Response

There were 6 responses to this part of the question.



Option	Total	Percent
Publish Response	5	83.33%

Publish Response Anonymously	1	16.67%
Not Answered	0	0.00%

Annex D – Dundee Airport Limited Consultation Meeting Record

From: Hammond, Thomas Sqn Ldr (Air-11Gp-A7 TrgEnablers1 SO2)

Sent: 24 April 2023 11:06

[REDACTED]

[REDACTED]

Subject: RE: 20230412 - Dundee ACP-2020-026 Consultation Meeting

[REDACTED], morning – really not an issue, completely understand how varied your shift pattern can be.

Great spot regards point 16, thanks for identifying (now amended under V1 of the attached).

Please let me know if you have stats that I can subsequently analyse regarding Dundee IFR arrivals/departures to inform the final submission.

Thanks again

TOM

Squadron Leader Tom Hammond | SO2 A7 Training Enablers | HQ11 Gp | Air Command | Hurricane Block | RAF High Wycombe | Walters Ash | Bucks | HP14 4UE | Mob 07980900669 | Skype +443001583835 | Email: thomas.hammond945@mod.gov.uk

From: [REDACTED]

Sent: 24 April 2023 10:41

To: Hammond, Thomas Sqn Ldr (Air-11Gp-A7 TrgEnablers1 SO2) <Thomas.Hammond945@mod.gov.uk>

[REDACTED]

Subject: RE: 20230412 - Dundee ACP-2020-026 Consultation Meeting

Hello, Tom

Apologies for the delay in replying.

Could I clarify the wording in point #16, please? I think the “Sponsor Response” should read “it was confirmed that a FBZ will **not** be introduced”

16	Safety is the main priority of the MOD and in order to successfully activate the preferred Danger Area it is envisaged that a Letter of Agreement will be required that includes all affected stakeholders, what items should be included in this agreement?	<i>FBZs will not be introduced for flight planning via P600 between EDONU and GLESK, or for N864</i>	<i>Following discussion with the Stakeholder it was confirmed that a FBZ will be introduced between EDONU and GLESK therefore alleviating this concern</i>
----	---	--	--

Best Regards

[REDACTED]

From: Hammond, Thomas Sqn Ldr (Air-11Gp-A7 TrgEnablers1 SO2) <Thomas.Hammond945@mod.gov.uk>

Sent: 12 April 2023 07:11

[REDACTED]
[REDACTED]
[REDACTED]
Subject: 20230412 - Dundee ACP-2020-026 Consultation Meeting

CAUTION: This email originated from outside of the organisation. Do not click links or open attachments unless you recognise the sender and know the content is safe.

[REDACTED]
Good morning.

Please see attached a record of our meeting from last week at Dundee (please let me know if I have misinterpreted any points and I will happily change).

In addition to the record of discussion, I've also compiled some IFR movement statistics (using ADS-B Exchange) which I have compared to the Aug/Sep 2022 activations of TDA597 (which is comparable to the dimensions of the Preferred Design Option)(tile 2).

Tile 3 is purely a record of the comments that you provided to Citizen Space.

I'm keen to develop our relationship with Dundee so that we can reach a mutually beneficial operational position longer term.

Thank you again for hosting me last week.

Regards

TOM

Squadron Leader Tom Hammond | SO2 A7 Training Enablers | HQ11 Gp | Air Command | Hurricane Block | RAF High Wycombe | Walters Ash | Bucks | HP14 4UE | [REDACTED] | Skype +443001583835 | Email: thomas.hammond945@mod.gov.uk



Ministry
of Defence

Squadron Leader Thomas Hammond
SO2 A7 Training Enablers
11Gp | Air Command
Hurricane Block
RAF High Wycombe
HP14 4UE
Telephone MOD +44 (0)300
E-mail: Air-airspacetrail@mod.gov.uk
4 April 2023

██████████
SATCO

Dundee Airport Limited
Riverside Drive
Dundee
Angus
DD2 1UH

Dear ██████████, thank you for hosting me at Dundee Airport on 4 April 2023 in order to consult on ACP-2020-026, *Future Combat Airspace*. The aim of our meeting was to further develop the comments that were provided by Dundee Airport on Citizen Space associated with ACP-2020-026.

References:

1. *Citizen Space Dundee Airport Responses 6 March 2023*
2. *ADS-B Exchange* <https://globe.adsbexchange.com/?r>

Please find below a record of our meeting – attended by SATCO ██████████, DSATCO ██████████, Squadron Leader ██████████ (DAATM) and Squadron Leader ██████████ (ACP Sponsor).

The hosts provided the Sponsor with an update to the airport, its operations, scheduled services, usual intensity from general aviation/business jet traffic, the appeal of the location and the local events that drive increases in aviation traffic levels.

The Sponsor confirmed that the meeting was to consult over ACP-2020-026, *Future Combat Airspace* and that prior access to the supporting documentation had been achieved. The Sponsor further reaffirmed the Statement of Need for the Airspace Change Proposal and advised that this forum was designed to provide Stakeholders with the ability to comment on the preferred design option and associated proposed activation protocols.

The below table summarises the key points drawn from the Citizen Space responses that were further developed during the consultation meeting on 4 April 2023.

In summary the consultation meeting at Dundee allowed the Sponsor to witness first-hand the associated operational impacts that accompany the preferred design option for Future Combat Airspace.

It is hoped that through the development of this Stakeholder to Sponsor relationship and timely information sharing that a mutually agreeable operational position can be achieved to minimise commercial disruption to Dundee yet allow the MOD to successfully reach its training and interoperability objectives.

Further supporting documentation is requested in order to fully inform Stage 4 of the CAP 1616 Airspace Change Process.

Response ID Ref	Summary Question	Dundee provided feedback	Sponsor response	Action
9	<i>If you do not agree with the selection of the preferred design option, please provide any suggestions you feel would improve the airspace design</i>	<i>The Preferred Design Option does not take into account IFR departures off Dundee Runway 09. This will result in aircraft being restricted to “not above FL80” which is below the level of P600 between EDONU and GLESK, and below the level of N864 between ASNUD and PIPAR. Moving the Western boundary of the planned PDO airspace 10nm to the East would mitigate this issue. Adjusting the Preferred Design Option to continue the straight-line NNE from 56N, instead of dog-legging the airspace to follow the boundary of the Scottish TMA and N864 would mitigate the issue. Ensuring entry/exit points are published for Dundee departures would also mitigate the issue</i>	<p><i>The Sponsor is keen to understand the percentage of departures from RW09 at Dundee</i></p> <p><i>In order to understand the level of impact the Sponsor has modelled Dundee activity using ADS-B Exchange, the statistics are included below for reference (and in the absence of any current statistical data from Dundee which is expected to follow shortly)</i></p> <p><i>The Sponsor advised that the lateral dimensions of the preferred design option cannot be reduced by 10nm due to the airspace requirements of the exercise participants. Shrinking this specific area would reduce the marshalling airspace for the 'Red Air' and tanker traffic</i></p>	<p><i>Dundee have advised that statistics are currently being compiled that will allow for a more accurate understanding of the frequency of RW09 departures</i></p> <p><i>ADS-B Exchange data compiled against activations of preferred airspace design in Aug and Sep 2022</i></p> <p><i>No further action achievable</i></p>
9		<i>The Preferred Design Option increases the risk of TCAS events for departures off Dundee Runway 09. Moving the Western boundary of the planned PDO airspace 10nm to the East would mitigate this issue. Adjusting the</i>	<i>The Sponsor was keen to understand if there have been any reported TCAS events from RW09 against exercise traffic during activations of TDA597 in order to better inform the preferred</i>	<i>Any TCAS event/MOR from RW09 when TDA597 is active to be shared with the airspace Sponsor</i>

		<i>Preferred Design Option to continue the straight-line NNE from 56N, instead of dog-legging the airspace to follow the boundary of the Scottish TMA and N864 would also mitigate the issue. The response of "Any TCAS events should be reported" in STEP 2a(i) Options Development Version 2 does not mitigate the issue</i>	<i>design option. Dundee advised that departures are sometimes transferred to Leuchars or directly to Scottish Control, however Dundee did not definitively state whether any TCAS events had occurred when the PDO was active</i>	<i>The Sponsor advised that the lateral dimensions of the preferred design option cannot be reduced by 10nm due to the airspace requirements of the exercise participants. Shrinking this specific area would reduce the marshalling airspace for the 'Red Air' and tanker traffic</i>
9		<i>The IAFs OSVIB and IBVIM for RNP runway 27 lie directly beneath the Preferred Design Option. This could affect the descent profile of aircraft inbound to OSVIB and IBVIM. Moving the Western boundary of the planned PDO airspace 10nm to the East would mitigate this issue. Adjusting the Preferred Design Option to continue the straight-line NNE from 56N, instead of dog-legging the airspace to follow the boundary of the Scottish TMA and N864 would mitigate the issue. Ensuring entry/exit points are published for Dundee inbounds would also mitigate the issue</i>	<i>The Sponsor is keen to understand the percentage of instrument arrivals (RNP) to RW27 at Dundee The Sponsor is keen to understand the percentage of arrivals to RNP RW27 that would normally route direct through the airspace associated with the preferred design option</i>	<i>ADS-B Exchange data compiled against activations of preferred airspace design in Aug and Sep 2022</i>
10	Co-ordination meetings occur well in advance of planned activations, in order to ensure deconfliction with your requirements do you require an invite to these forums	Yes		<i>Sponsor to ensure that Dundee are included in any planning forum (include in Stage 3D)</i>
11	How much notice regarding activations of	1 month		<i>Sponsor to ensure that this timeframe is met and articulated</i>

	Future Combat Airspace would you require?			accordingly as the submission progresses (include in Stage 3D)
12	Which activation periods will cause the greatest impact for your operations?	Summer	The Sponsor is keen to understand the dates of any significant local activity that is likely to cause a vast increase in traffic levels to Dundee Airport	Dundee to provide the Sponsor with dates of key sporting events
13	Is there a particular time of the day that create a lesser impact on your business?	Between 2100 - 0630	The Sponsor notes from the AIP that Dundee opening hours are 0645 – 2115 (0545 – 2015) and is keen to understand whether Dundee would consider any other time periods	Dundee requested to consider any period of quieter movements that may allow for activation of Future Combat Airspace during Dundee operational hours
15	Subjective assessments indicate that there will be no impact to civil operations below 7000 feet caused by the activation of Future Combat Airspace, if you disagree please explain why?	The Preferred Design Option does not take into account IFR departures off Dundee Runway 09. This will result in aircraft being restricted to “not above FL80” which is below the level of P600 between EDONU and GLESK, and below the level of N864 between ASNUD and PIPAR	It was confirmed that Dundee do not publish SIDs and that any departure is either transferred to Leuchars or Scottish Control usually on passing 3000 feet – it is not clear whether departures from Dundee RW09 are required to stop their climb when transferred to the next control agency	Dundee have advised that statistics are currently being compiled that will allow for a more accurate understanding of the frequency of RW09 departures ADS-B Exchange data compiled against activations of preferred airspace design in Aug and Sep 2022
15		The IAFs OSVIB and IBVIM for RNP runway 27 lie directly beneath the Preferred Design Option. This could affect the descent profile of aircraft inbound to OSVIB and IBVIM	It was discussed that given the relatively high base level of the preferred design option it is hoped that a constant rate of descent can be achieved by any aircraft routing to the RNP for RW27 at Dundee. It was agreed that this assumption is difficult to determine given the lack of radar at	ADS-B Exchange data compiled against activations of preferred airspace design in Aug and Sep 2022

			<i>Dundee and therefore the ability to prove/disprove.</i>	
15		<i>The current subjective assessments appear to have included only the VFR Significant Area of Interest for Dundee</i>	<i>The Sponsor explained that it was difficult to model IFR procedures at Dundee given the lack of SIDs and the varied transfer of aircraft to the next controlling agency</i>	<i>Dundee have advised that statistics are currently being compiled that will allow for a more accurate understanding of the frequency of RW09 departures</i>
16	<i>Safety is the main priority of the MOD and in order to successfully activate the preferred Danger Area it is envisaged that a Letter of Agreement will be required that includes all affected stakeholders, what items should be included in this agreement?</i>	<i>FBZs will not be introduced for flight planning via P600 between EDONU and GLESK, or for N864</i>	<i>Following discussion with the Stakeholder it was confirmed that a FBZ will not be introduced between EDONU and GLESK therefore alleviating this concern</i>	<i>No further action</i>
16		<i>If the airspace is not revised to mitigate the increased risk of TCAS events for departures off Dundee Runway 09, the proposed Letter of Agreement (LoA) between Dundee and the MOD must include the wording "Any TCAS events will be reported"</i>		<i>This request will be considered for any Letter of Agreement that is produced (include in Stage 3D)</i>
16		<i>The proposed LoA, between Dundee and the MOD, must ensure entry/exit points are published for Dundee departures and arrivals</i>		<i>This request will be considered for any Letter of Agreement that is produced</i>

				<i>(include in Stage 3D)</i>
16		<i>The LoA between Dundee Airport and Leuchars Station must be revised to ensure Leuchars LARS provision during Special Use Airspace activation. Leuchars LARS is currently not 24 hours provision</i>	<i>The majority of activations of the preferred design are likely to occur during published LARS hours for Leuchars thereby mitigating this concern. For any proposed activations outside of this timeframe Leuchars will be approached to understand if a LARS can be provided</i>	<i>This request will be considered for any Letter of Agreement that is produced (include in Stage 3D)</i>

Reference 2. ADS-B Exchange <https://globe.adsbexchange.com/?r>

ADS-B Exchange Data for Dundee International Airport

Sample period, 10 independent activations of TDA597(9 Aug – 15 Sep 2022). Acknowledged that modelling has occurred against ACP-2021-048 TDA EGD597, it is assumed that these activations will provide an accurate indication against Dundee traffic for ACP-2020-026.

9 Aug 2022 (2000 – 2315 UTC), 11 Aug 2022 (2000 – 2315 UTC), 18 Aug 2022 (0800 – 1115 UTC), 23 Aug 2022 (0800 – 1115 UTC), 25 Aug 2022 (0800 – 1115 UTC), 5 Sep 2022 (0900 – 1300 UTC), 7 Sep 2022 (0900 – 1300 UTC), 9 Sep 2022 (0900 – 1300 UTC), 13 Sep 2022 (0900 – 1300 UTC), 15 Sep 2022 (0900 – 1300 UTC).

Sample obtained using ADS-B and MLAT

Traffic, total 23 Dundee IFR movements (both arrivals/departures during sample period)(based on the approximate profile flown the Sponsor has determined that some IFR movements conducted a visual approach).

Average of 2.3 movements per activation (combination of both arrivals and departures).

Average of 0.3 departures from RW09 during TDA597 activation periods

Average of 0.7 arrivals to RW27 during TDA597 activation periods

VFR traffic not included (captured under previous ADS-B study)

**Note, Dundee advised that traffic levels are increasing to historic norms (supporting statistical data from Dundee would be beneficial for the Sponsor).*

Annex E – Newcastle International Airport Limited Consultation Meeting Record

From: Hammond, Thomas Sqn Ldr (Air-11Gp-A7 TrgEnablers1 SO2)

Sent: 21 April 2023 16:54

Subject: RE: Stage 3C - Consultation, Newcastle International

█ good afternoon.

Thanks again for meeting via MS Teams as part of the Stage 3C Consultation for ACP-2020-026.

Please see attached meeting record and do not hesitate to let me know of any factual inaccuracies so that I can amend.

If you require a further opportunity to consult please let me know so that we can schedule before COP 8 May 23.

Regards

Tom

Squadron Leader Tom Hammond | SO2 A7 Training Enablers | HQ11 Gp | Air Command | Hurricane Block | RAF High Wycombe | Walters Ash | Bucks | HP14 4UE | █ | Skype +443001583835 | Email: thomas.hammond945@mod.gov.uk

-----Original Appointment-----

From: Hammond, Thomas Sqn Ldr (Air-11Gp-A7 TrgEnablers1 SO2)

Sent: 12 April 2023 10:35

Subject: Stage 3C - Consultation, Newcastle International

When: 12 April 2023 13:00-14:30 (UTC+00:00) Dublin, Edinburgh, Lisbon, London.

Where: Microsoft Teams Meeting

Agenda for Stage 3C – Consultation, Newcastle International Airport meeting 1300hrs, 12 Apr 2023

Serial	Topic
1	Confirm discussion of ACP-2020-026 (permanent change proposal)
2	Attendee Introductions
3	Recap/Summary of Stage 3 Consultation documentation
4	Citizen Space Questionnaire
5	Newcastle Analytics
6	Discussion Points (as required by Newcastle)
7	Questions to close

■, afternoon.

As briefly discussed an opportunity to discuss the Stage 3C Consultation Documents and my proposal as Sponsor for Future Combat Airspace.

Please extend the invite as required.

Regards

Microsoft Teams meeting

Join on your computer, mobile app or room device

[Click here to join the meeting](#)

Meeting ID: 324 476 595 192

Passcode: hR7jqZ

[Download Teams](#) | [Join on the web](#)

Or call in (audio only)

[+44 20 3443 8728,,267849190#](#) United Kingdom, London

Phone Conference ID: 267 849 190#

[Find a local number](#) | [Reset PIN](#)

[Learn More](#) | [Meeting options](#)



Ministry of Defence

Squadron Leader Thomas Hammond
SO2 A7 Training Enablers
11Gp | Air Command
Hurricane Block
RAF High Wycombe
HP14 4UE
Telephone MOD +44 (0)300
E-mail: Air-airspacetril@mod.gov.uk
20 April 2023

██████████

Head of Air Traffic Services
Newcastle International Airport
Woolsington
Newcastle upon Tyne
NE13 8BZ

Dear ██████, thank you for meeting via MS Teams on 12 April 2023 at 1300hrs to Consult on ACP-2020-026, *Future Combat Airspace*. The aim of our meeting was to discuss in depth the documentation submitted as part of Stage 3C Consultation of the CAP1616 process with Newcastle International Airport as a Primary Stakeholder.

References:

1. [Future Combat Airspace, ACP-2020-026 - The Civil Aviation Authority and Airspace Change sponsors - Citizen Space](#)
2. Intelligent Customer/Projects/Airspace data – activations of EG D597 during Sep 2022
3. Intelligent Customer/Projects/Airspace data – activations of EG D597 during Mar 2023

Please find below a record of our meeting – attended by yourself (Head of Air Traffic Services), Wing Commander ██████████ (SO1 Training Enablers), Squadron Leader ██████████ (Defence Airspace and Air Traffic Management) and Squadron Leader ██████████ (ACP Sponsor).

Serial	Agenda Item
1	Confirm discussion of ACP-2020-026 (permanent change proposal)
2	Attendee Introductions
3	Recap/Summary of Stage 3 Consultation documentation
4	Citizen Space Questionnaire
5	Newcastle Analytics
6	Discussion Points (as required by Newcastle)

The Sponsor confirmed that the meeting was to Consult over ACP-2020-026, *Future Combat Airspace* – but acknowledged that the process would likely be informed by ACP-2021-048. As part of the meeting the Sponsor provided a summary of the Consultation Documents submitted as part of the Stage 3C Consultation.

The Sponsor further reaffirmed the Statement of Need for the Airspace Change Proposal and advised that this forum was designed to provide Stakeholders with the ability to comment on the Preferred Design Option and associated proposed activation protocols as published in the documentation.

Supporting evidence is requested from Newcastle International to fully inform Stage 4 of the CAP 1616 Airspace Change Process as part of ACP-2020-026.

Question ID	Newcastle Question	Sponsor response	Action
1	<p><i>The Stakeholder questioned as to why the Preferred Design Option had been positioned in such a way and why the Sponsor had not considered an expansion of other Danger Areas or the selection of a location off the North Coast of Scotland</i></p>	<p><i>The Sponsor referred to the Design Principles associated with the ACP and specifically the requirements to be within efficient reach of RAF and USAFE operating bases</i></p>	<p><i>No further action – question referred to a Stage 2 ACP consideration</i></p>
2	<p><i>The Stakeholder made reference to the use of the Preferred Design Option for 5th Generation Platforms and questioned as to why such significant lateral dimensions were required</i></p>	<p><i>The Sponsor reaffirmed the Statement of Need and explained that the Preferred Design Option would be used to facilitate Large Force Exercises and not purely 5th Generation platforms. The dimensions of the Preferred Design Option allow for greater numbers of aircraft to participate simultaneously, some of which have very different capabilities. The Statement of Need submitted to the CAA on 9 Dec 2020 does not refer to 5th Generation platforms.</i></p>	<p><i>No further action – question referred to a Stage 2 ACP consideration</i></p>
3	<p><i>The Stakeholder was keen to understand if the current exercise tempo would continue longer term – noting that deconfliction with the most recent activations under ACP-2021-048 had been largely successful</i></p>	<p><i>The Sponsor referred to the Consultation Document which outlined the number of exercises associated with the activation of the preferred design option but identified that given current circumstances it was likely that there would be an aspirational increase in the number of activations (however providing an exact number would not be possible). Irrespective, given the large-scale nature of the exercises ample notification could be provided to the Stakeholder regarding proposed activations. A minimum of 3 months has been provided for activations under ACP-2021-048</i></p>	<p><i>The Stakeholder is requested to confirm that peak operational commercial timings for Newcastle are 0600, 1400 and 2400 UTC and that this is likely to continue for the next 12 – 18 months. This will allow the Sponsor to engage with Exercise Planners to provide an element of deconfliction against commercial activity</i></p>

4	<p>The Stakeholder was keen to understand the validity of the data associated with the Oct 2021 STATFOR and NATS Forecast to 2033 which had been used to inform the Environmental Data and associated tangible impact upon Newcastle operations – advising that NATS ‘had not taken into account the commercial aspirations of the operator’</p>	<p>The Sponsor advised that this statistical information had met scrutiny associated with the Stage 3 Gateway and in the absence of any other data would be considered the most up-to date, credible and clearly referenced with modelling carried out in line with relevant best practice</p>	<p>The Stakeholder is requested to provide an operational forecast to 2033 which better reflects the commercial aspirations of the airport</p>
5	<p>The Stakeholder stressed that Derogated Services had not been provided by 78 Sqn during the most recent activations (March 23) associated with ACP-2021-048 and referred to the requirement under the Letter of Agreement (dated 18 July 2022) and the necessity for service provision by 78 Sqn for aircraft routing via TOWTE</p>	<p>The Sponsor identified that the CAA Operational Assessment (dated 15 Jun 22) ruled that ‘issues generated as a result of a lack of derogated services exist irrespective of the activation of the Preferred Design Option. Arrangements are already in place to provide network connectivity when derogated services are not available.’</p>	<p>DAATM provided advice to the Stakeholder to approach the CAA in order to discuss issues with current Derogated Services as they remain out of scope of this ACP</p> <p>Sponsor investigated Service provision by 78 Sqn to Newcastle traffic during activations of EGD597 under ACP-2021-048 to determine number of Newcastle commercial aircraft that complied with the Letter of Agreement. Analysis can be found below at references 1 and 2</p> <p>The Letter of Agreement defining operating procedures for those aircraft inbound/outbound from Newcastle can be found under section A.3 of the above hyperlink.</p>
6	<p>The Stakeholder expressed concerns that the MOD are perceived to be seeking primacy over large pieces of airspace within congested areas of the United Kingdom</p>	<p>The Sponsor stated that the CAP1616 process was being followed in an open, honest and transparent way to ensure that preferential treatment was not being provided. The Sponsor also identified that a condition of activation of the Preferred Design Option was the subsequent suppression of neighbouring Danger Areas which allowed alternate use of the route network. It was also stated that through modelling it was forecast that a net carbon benefit</p>	<p>The Stakeholder is requested to provide the Sponsor with a Commercial Operator Forecast out to 2033 in order to inform the analytical study</p>

		<p>would be achieved through activation of the Preferred Design Option and therefore the Sponsor was keen to understand how Newcastle would be tangibly impacted by the activation of Preferred Design Option. The modelling conducted by NATS Analytics indicates a maximum of 5 Newcastle aircraft being affected by each proposed activation, with this figure growing to approximately 6 by the year 2033 (based on the NATS Forecast)</p>	
7	<p>The Stakeholder expressed concerns regarding the recent use of Newcastle Controlled airspace by rotary aircraft operating to and from Albemarle Barracks as part of Exercise Cobra Warrior. The Stakeholder requested that Exercise Planners consider alternate operational bases that are outside of Newcastle controlled airspace</p>	<p>The Sponsor expressed that this requirement was outside the scope of ACP-2020-026 but would discuss the matter further with Exercise Planners for future iterations of the exercises</p>	<p>The Sponsor has discussed rotary activity with Exercise Planners and the Regional Liaison Officer North of England agreed (14 April 23) to engage with Newcastle International Airport regarding any future use of Albermarle Barracks</p>

Reference 2. Intelligent Customer/Projects/Airspace data – activations of EGD597 during Sep 2022

The below aircraft were those Newcastle commercial inbounds/outbounds controlled by Swanwick Military (78 Sqn) during the Sep 2022 activations of EG D597 under ACP-2021-048. It is envisaged that the same operating procedures will be used to inform the permanent design solution.

Modelling of this service provision from Swanwick Military (78 Sqn) against <https://globe.adsbexchange.com/?r> the Sponsor was able to determine that out of the 21 commercial tracks controlled by Swanwick Military only 3 (highlighted yellow below) of these aircraft were provided a service in accordance with the Letter of Agreement (dated 18 Jul 2022) – *approximately 15% of the overall traffic*. The other Newcastle movements took advantage of the Derogated Services provided by Swanwick under Letters of Agreement:

1. 78 Sqn – GAT Routing via M79 LoA (1 December 2022)
2. 78 Sqn North 07 LoA (EG D597, 18 July 2022)
3. 78 Sqn General 17 LoA between NATS/78Sqn/Newcastle/Teesside (24 February 2023)

It has been determined through the CAA Operational Assessment (dated 15 Jun 22) ruled that 'issues generated as a result of a lack of derogated services exist irrespective of the activation of the Preferred Design Option. Arrangements are already in place to provide network connectivity when derogated services are not available.'

Those aircraft at Figures 15, 20 and 21 either routed outbound from Newcastle via TOWTE – ANMAZ – BAZNA via UL975 or routed inbound via the opposite direction and the Copenhagen Boundary.

Figure Ref	YYYYMMDD	TimeOn	TimeOff	Callsign	AircraftType	DepartureAirfield	ArrivalAirfield
1	20220905	0900	0905	KLM36T	E295	EGNT	EHAM
2	20220905	1031	1043	EWG1FR	A319	EDDL	EGNT
3	20220905	1038	1300	ASR291	BE20	ZZZZ	EGNT
4	20220905	1123	1136	KLM959	E190	EHAM	EGNT
5	20220905	1139	1150	RYR934J	B738	EPGD	EGNT
6	20220905	1202	1434	ASR291A	BE20	ZZZZ	EGNT
7	20220905	1233	1237	KLM27U	E190	EGNT	EHAM
8	20220909	0753	0803	KLM47W	E295	EHAM	EGNT
9	20220909	0912	0916	RYR452	B738	EGNT	EVRA
10	20220909	0920	0924	KLM36T	E295	EGNT	EHAM
11	20220909	1308	1315	TOM5NL	B738	LBBG	EGNT
12	20220909	1311	1319	TOM18J	B738	LGKR	EGNT
13	20220909	1327	1336	TOM37V	B38M	LGZA	EGNT
14	20220909	1355	1404	EWG1FR	A320	ZZZZ	EGNT
15	20220913	1046	1051	EUW9076	C25B	EGNT	ESGG
16	20220913	1127	1134	KLM959	E190	EHAM	EGNT
17	20220913	1243	1246	KLM27U	E190	EGNT	EHAM
18	20220915	0746	0800	KLM47W	E295	EHAM	EGNT
19	20220915	1252	1255	KLM27U	E75L	EGNT	EHAM
20	20220923	1040	1052	RYR453	B738	EVRA	EGNT
21	20220923	1102	1115	ATL1D	C56X	ESSA	EGNT

Figure 1 – KLM 36T, provided with air traffic service outside the Letter of Agreement

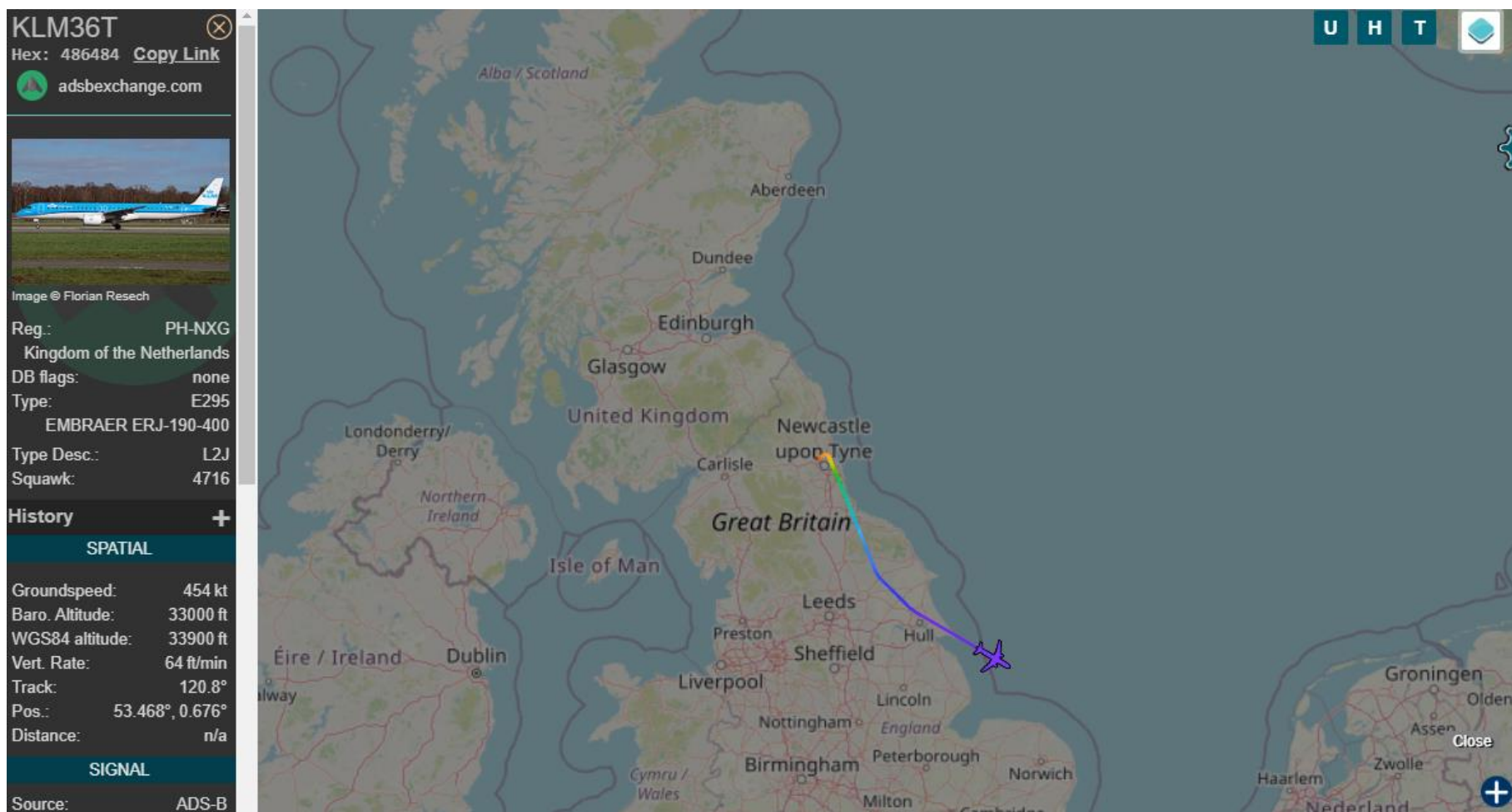


Figure 3 – ASR 291, provided with air traffic service outside the Letter of Agreement

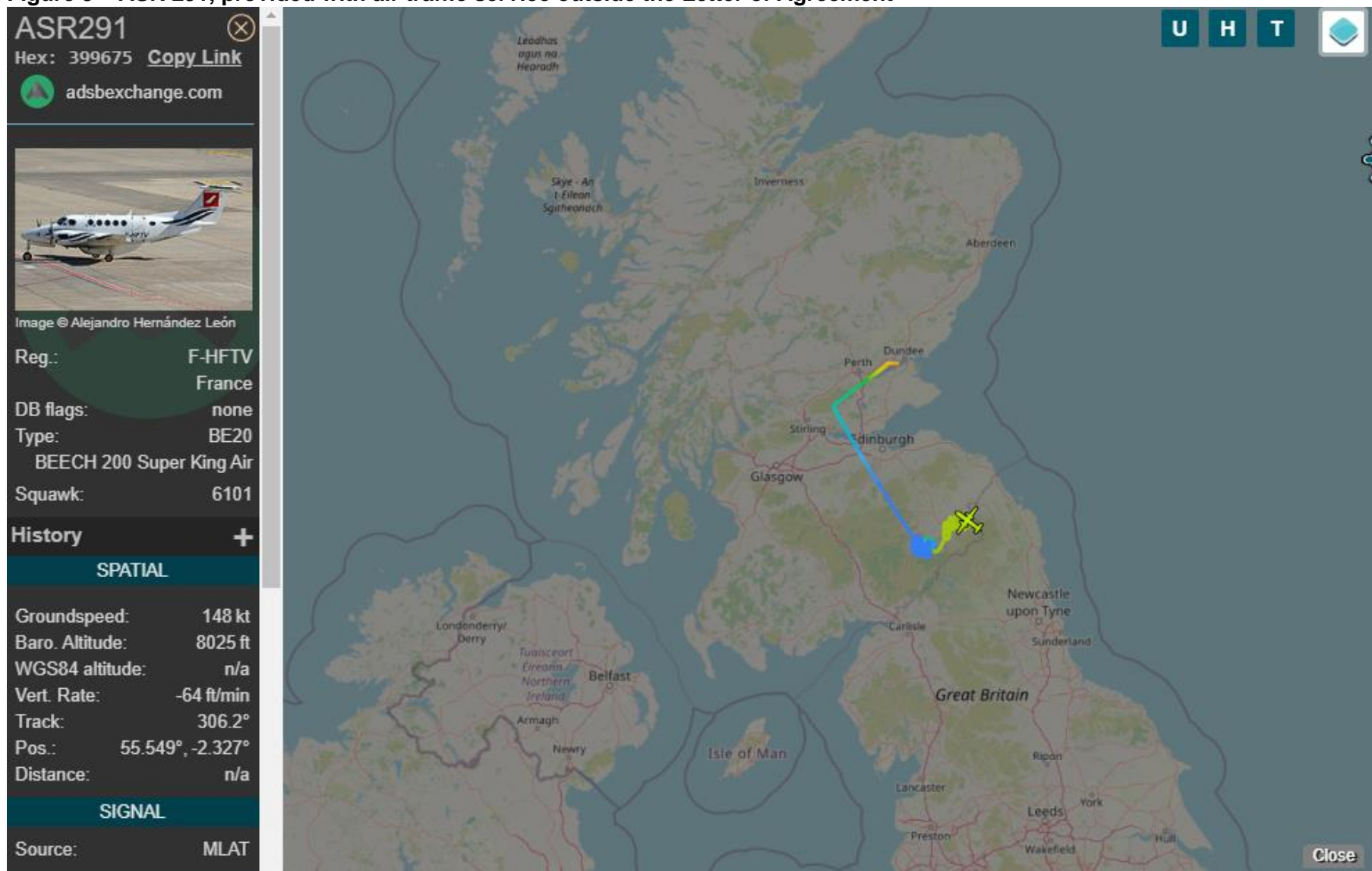


Figure 4 – KLM 959, provided with air traffic service outside the Letter of Agreement

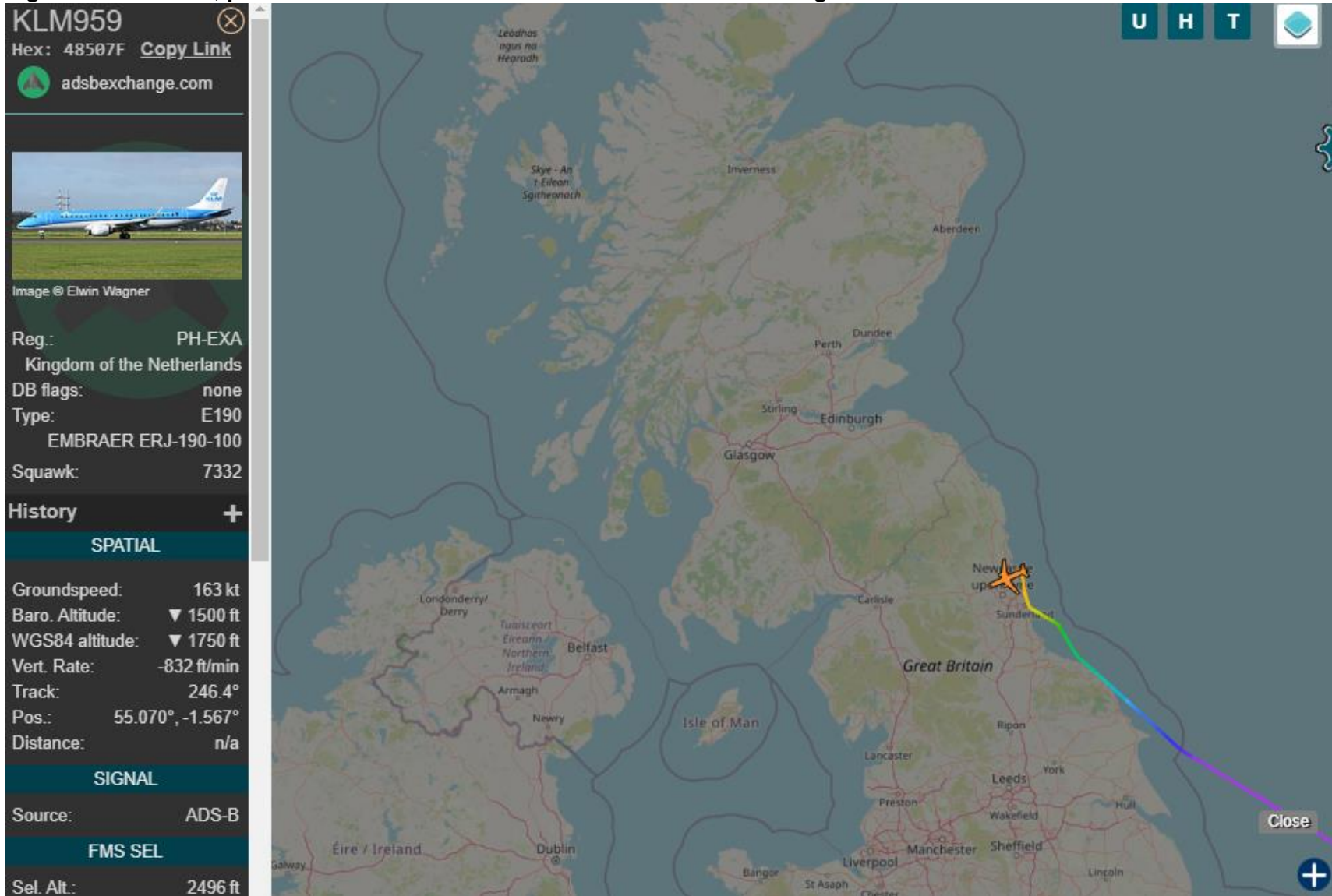


Figure 5 – RYR934J, provided with air traffic service outside the Letter of Agreement

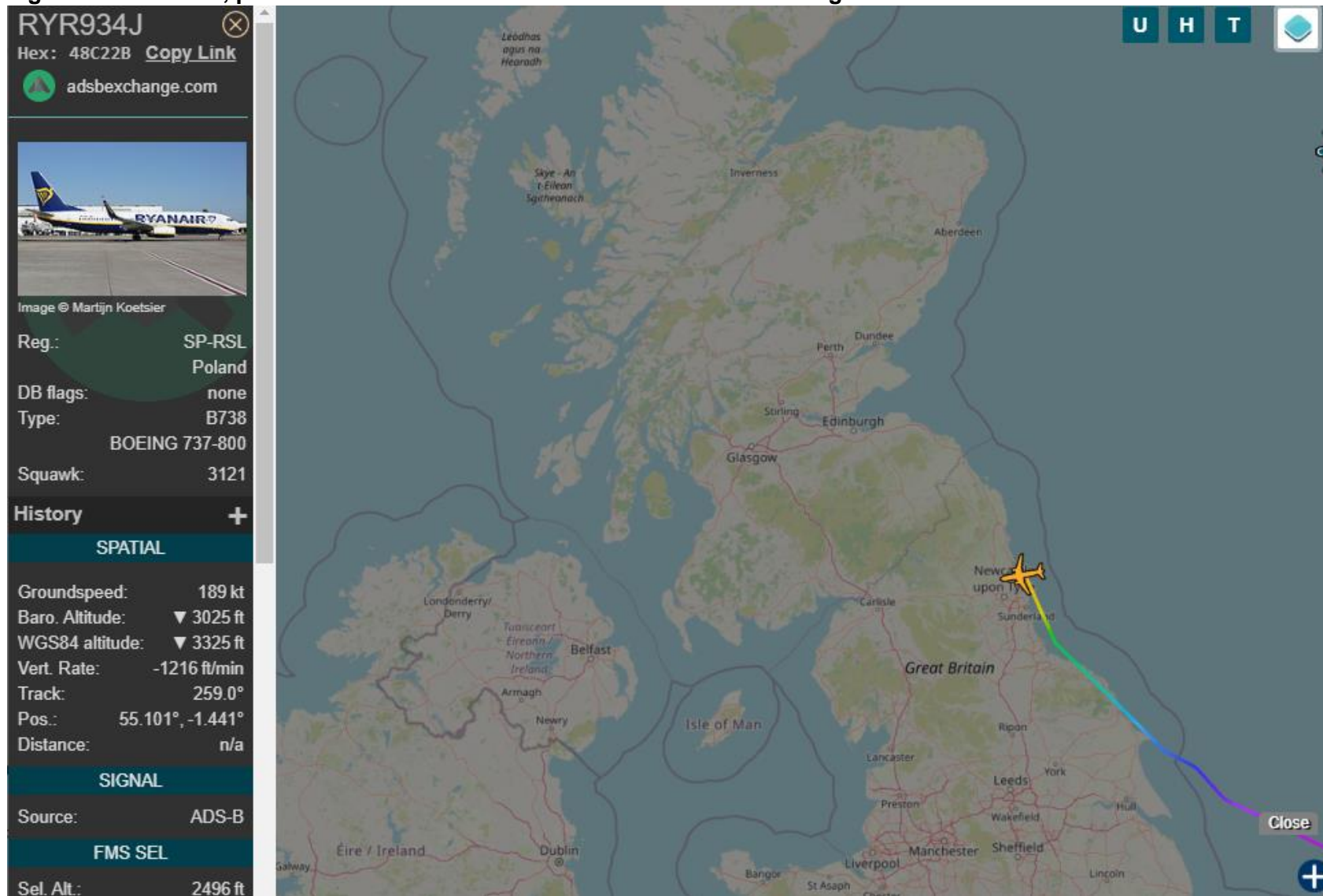


Figure 6 – ASR 291, provided with air traffic service outside the Letter of Agreement

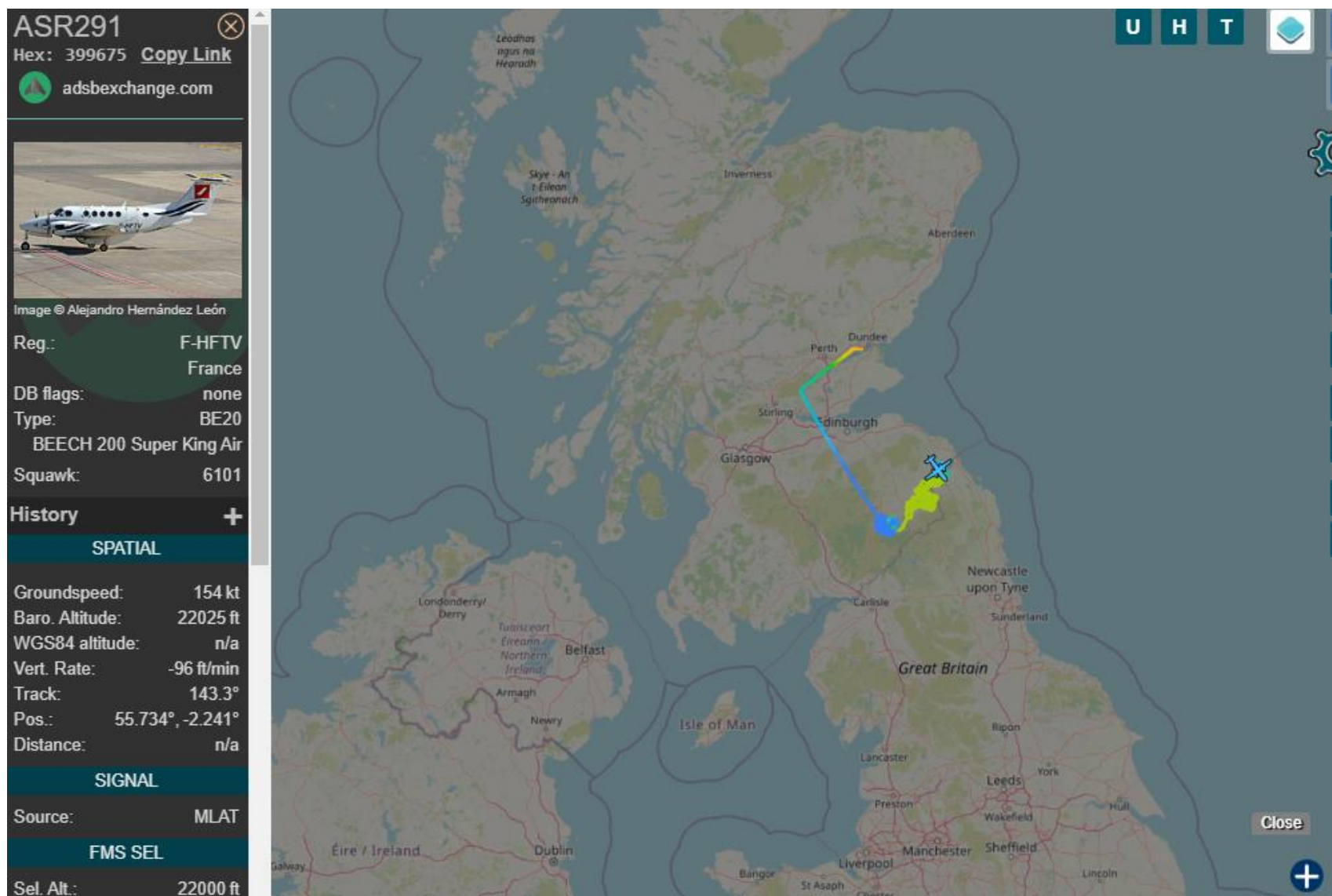


Figure 7 – KLM 27U, provided with air traffic service outside the Letter of Agreement

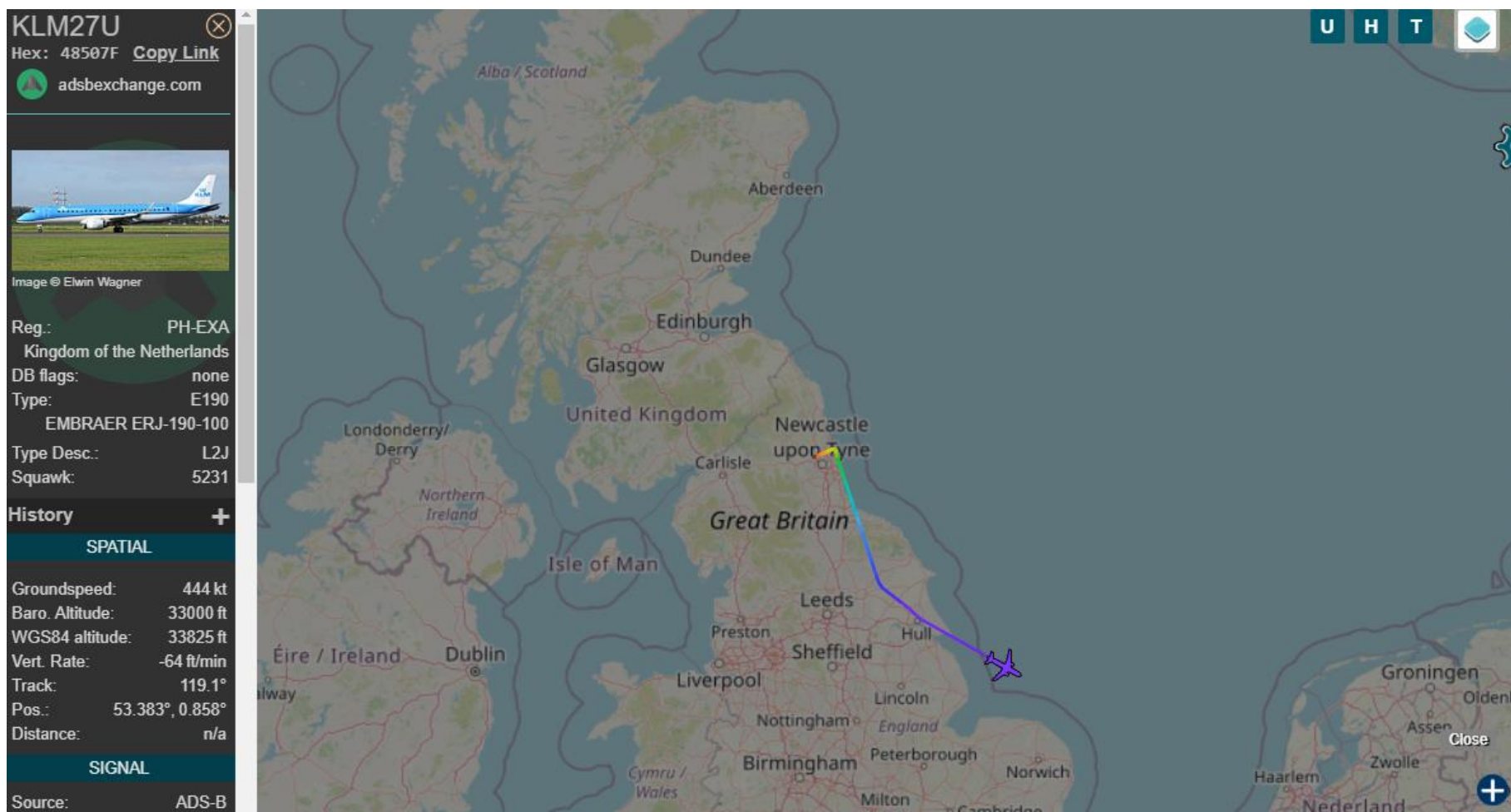


Figure 8 – KLM 47W, provided with air traffic service outside the Letter of Agreement

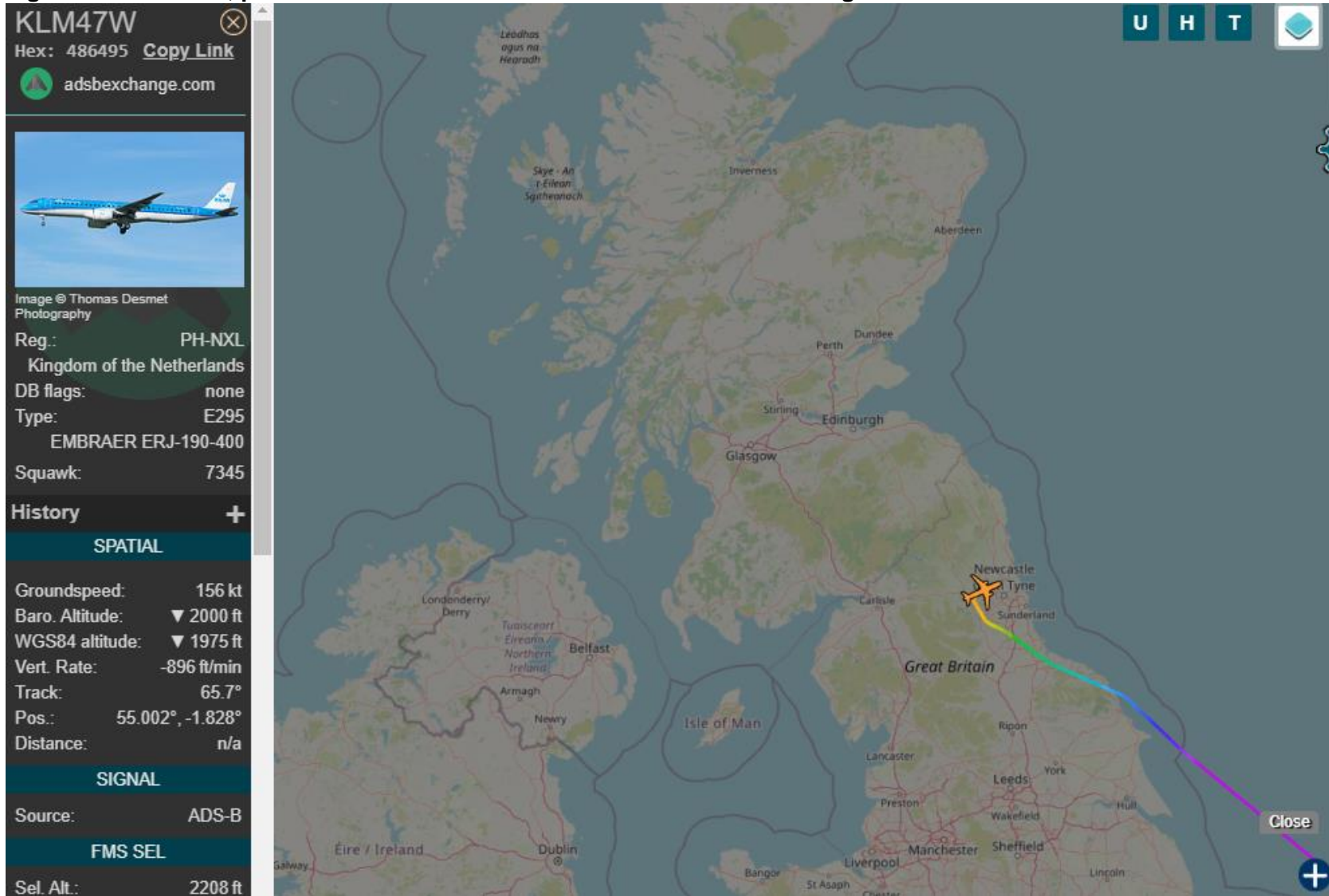


Figure 9 – RYR452, provided with air traffic service outside the Letter of Agreement

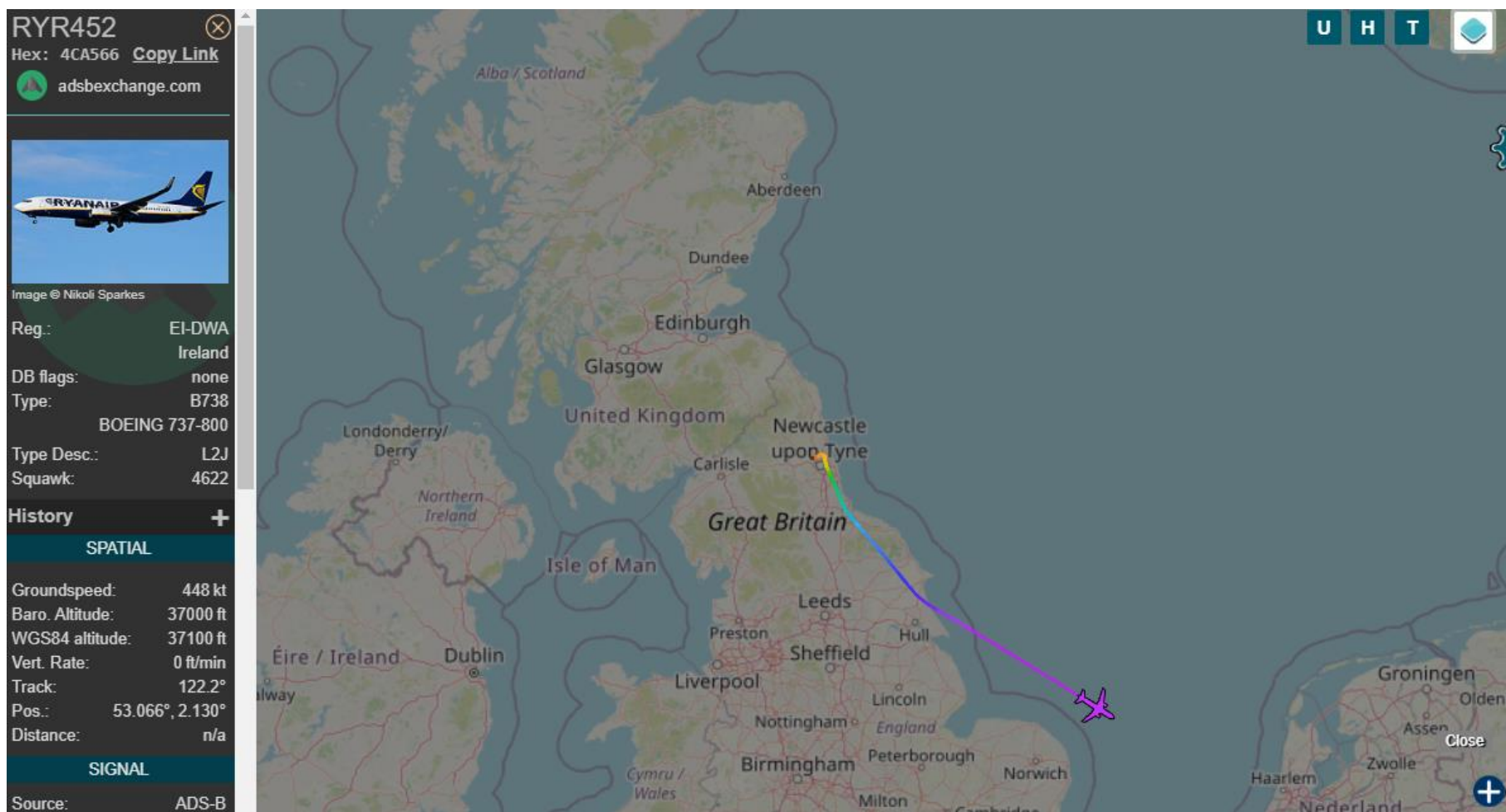


Figure 10 – KLM 36T, provided with air traffic service outside the Letter of Agreement

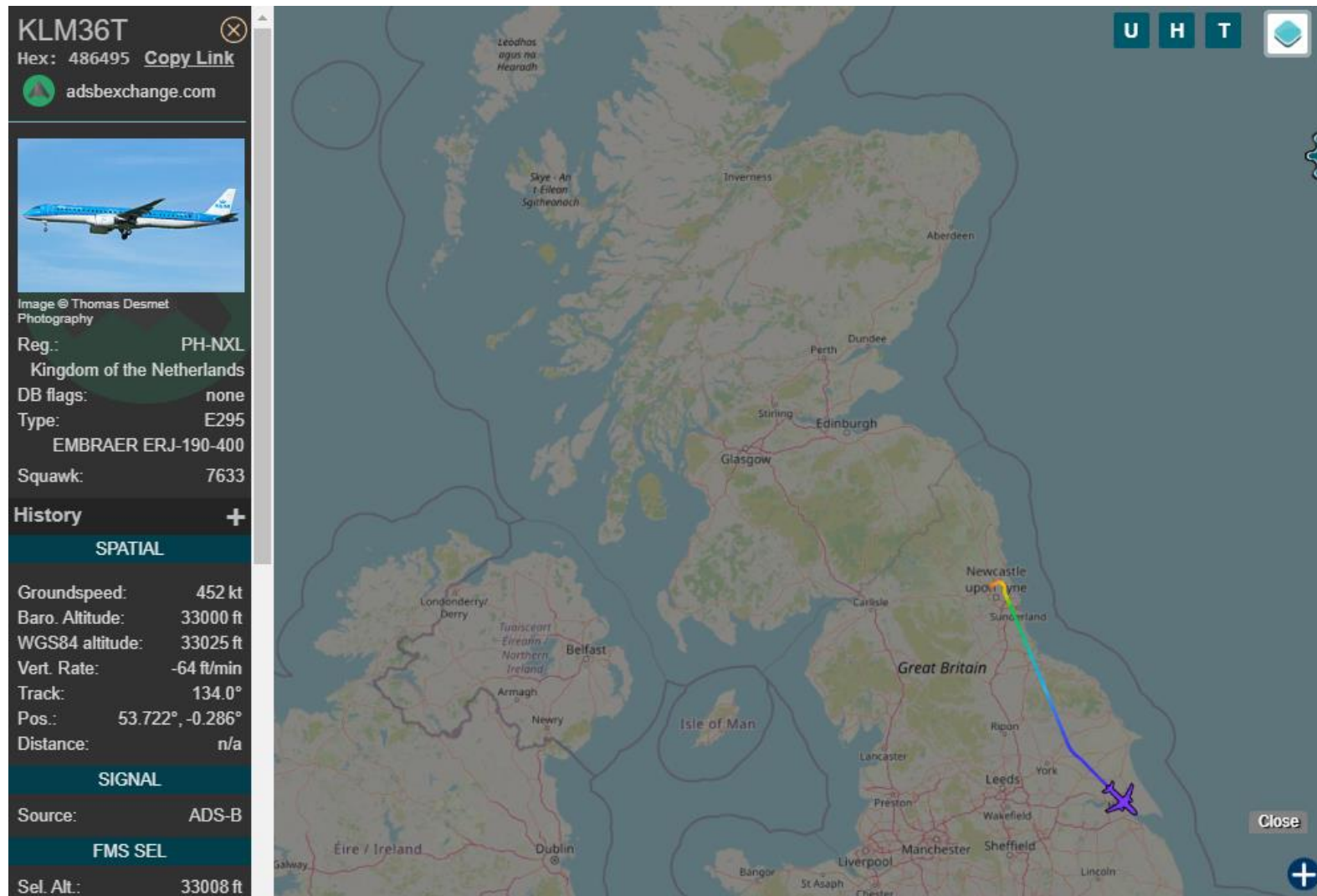


Figure 11 – TOM 5NL, provided with air traffic service outside the Letter of Agreement

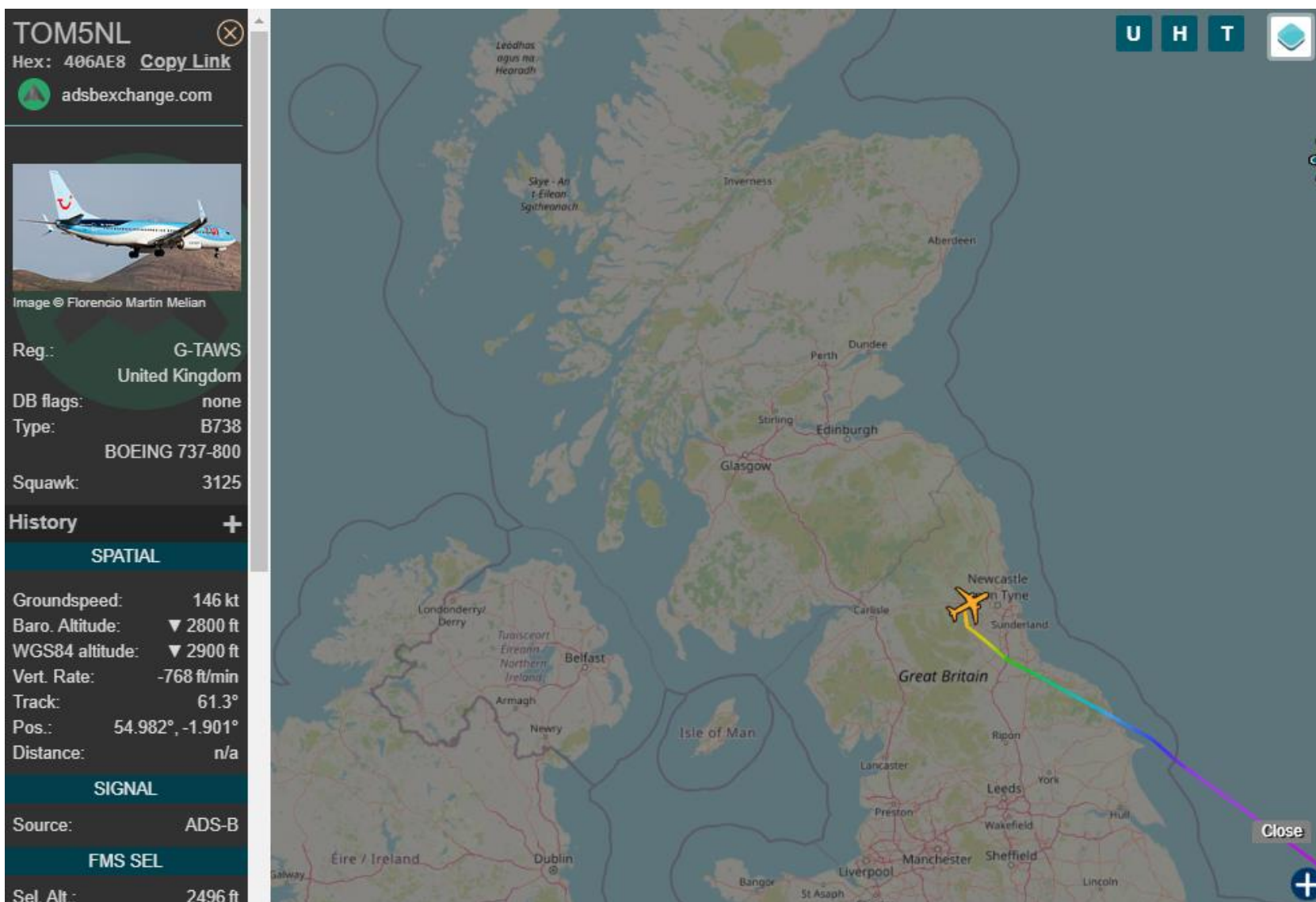


Figure 12 – TOM 18J, provided with air traffic service outside the Letter of Agreement

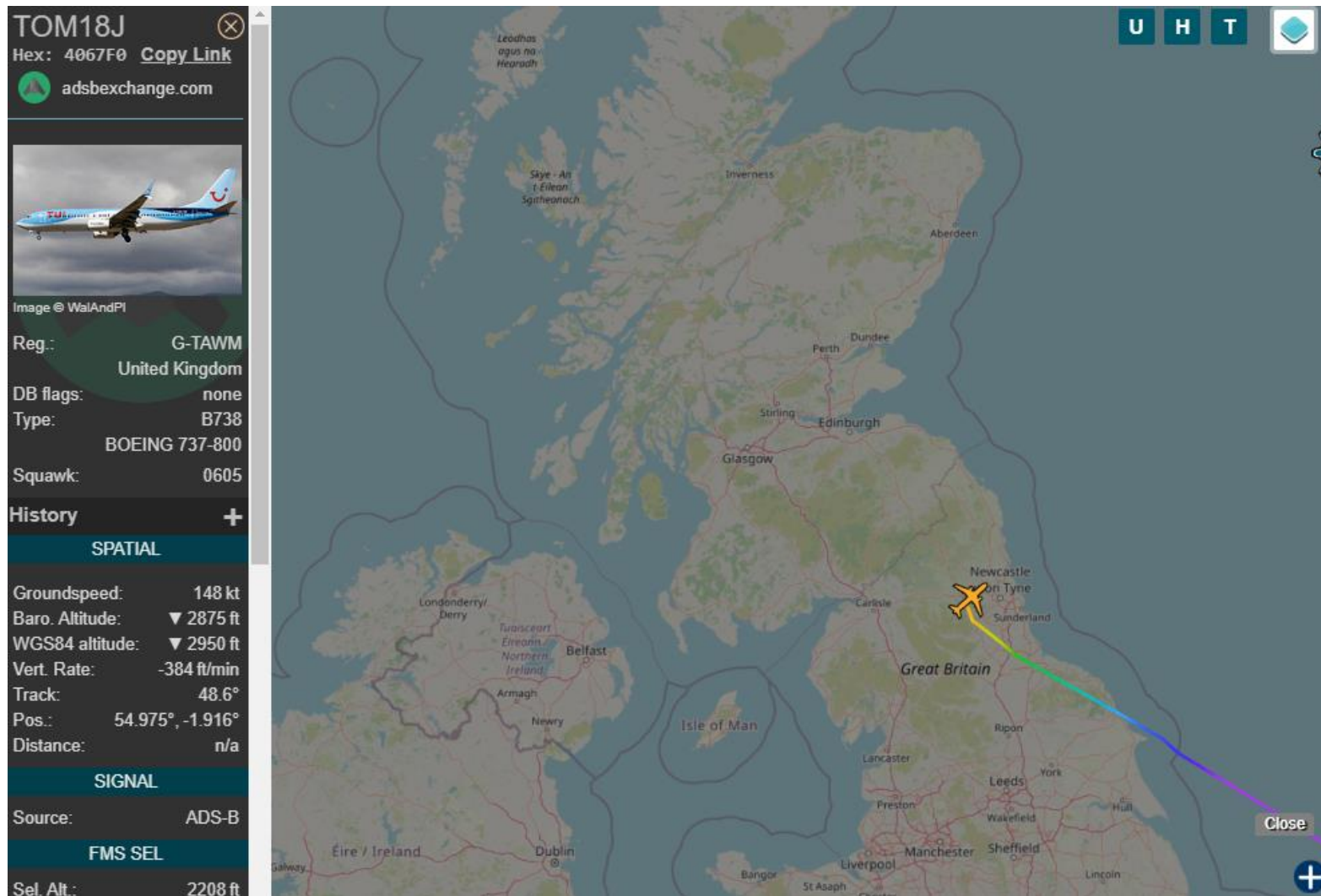


Figure 13 – TOM 37V, provided with air traffic service outside the Letter of Agreement

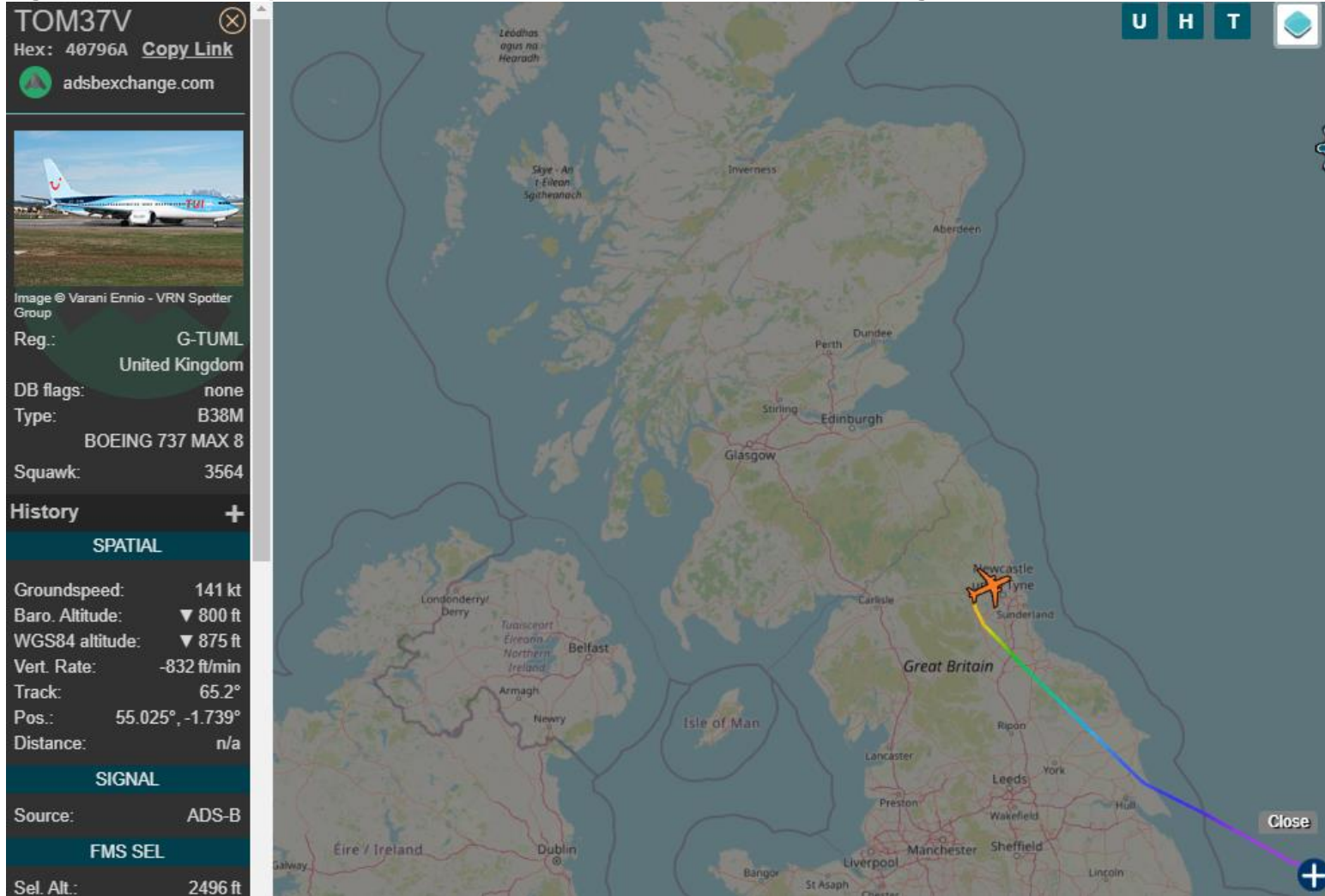


Figure 14 – EWG 1FR, provided with air traffic service outside the Letter of Agreement

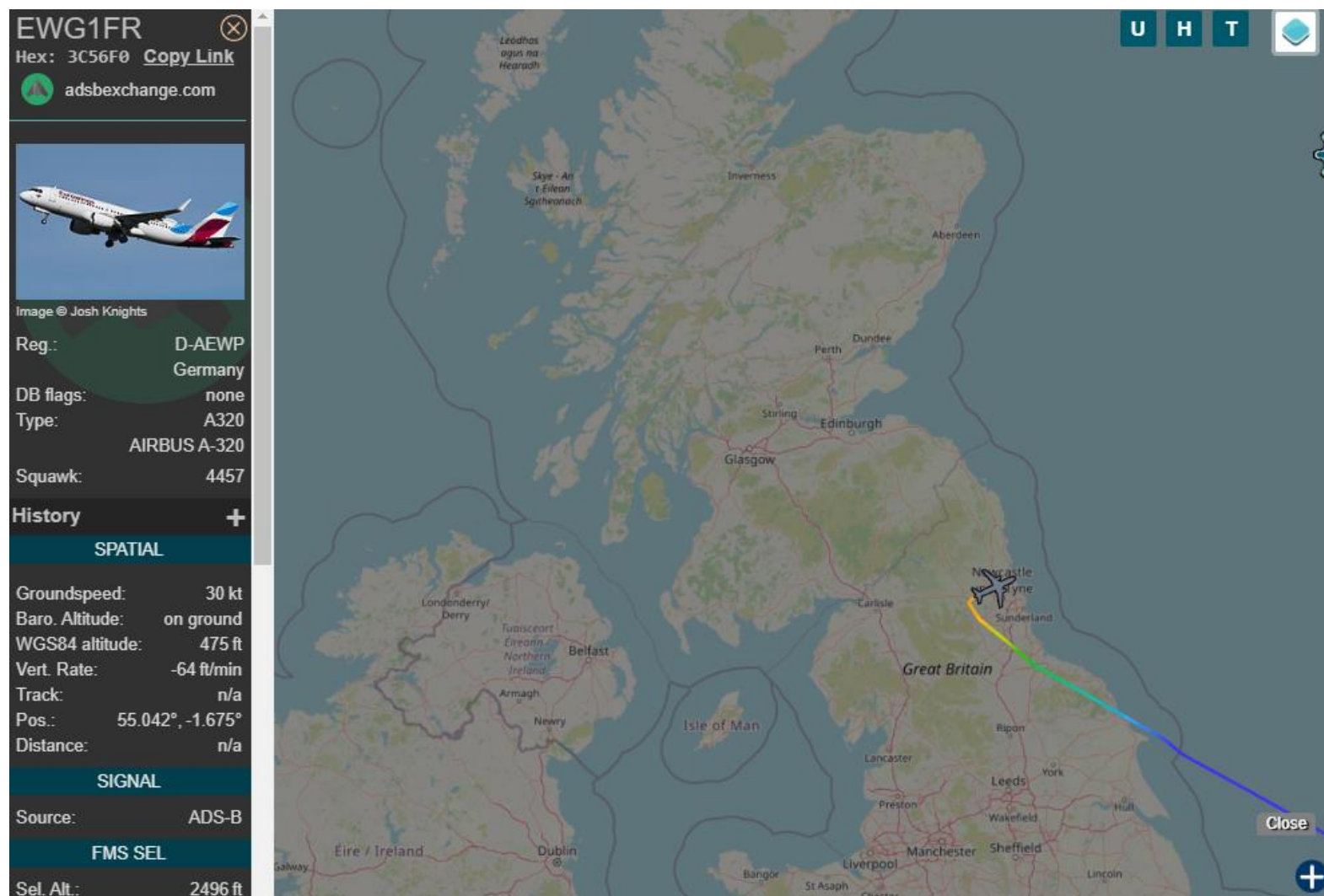


Figure 15 – EUW 9076, provided with a service under the Letter of Agreement

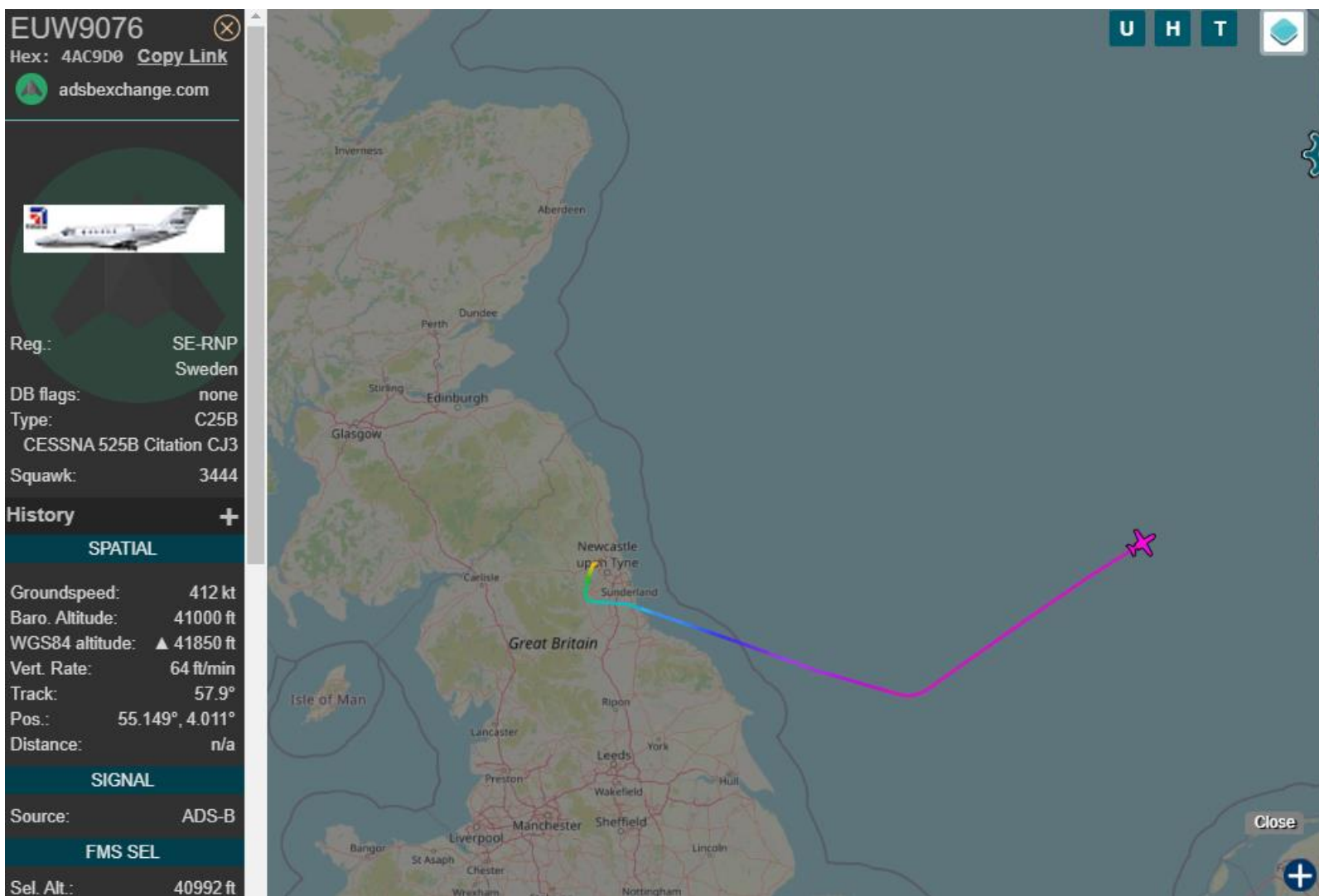


Figure 16 – KLM 959, provided with air traffic service outside the Letter of Agreement

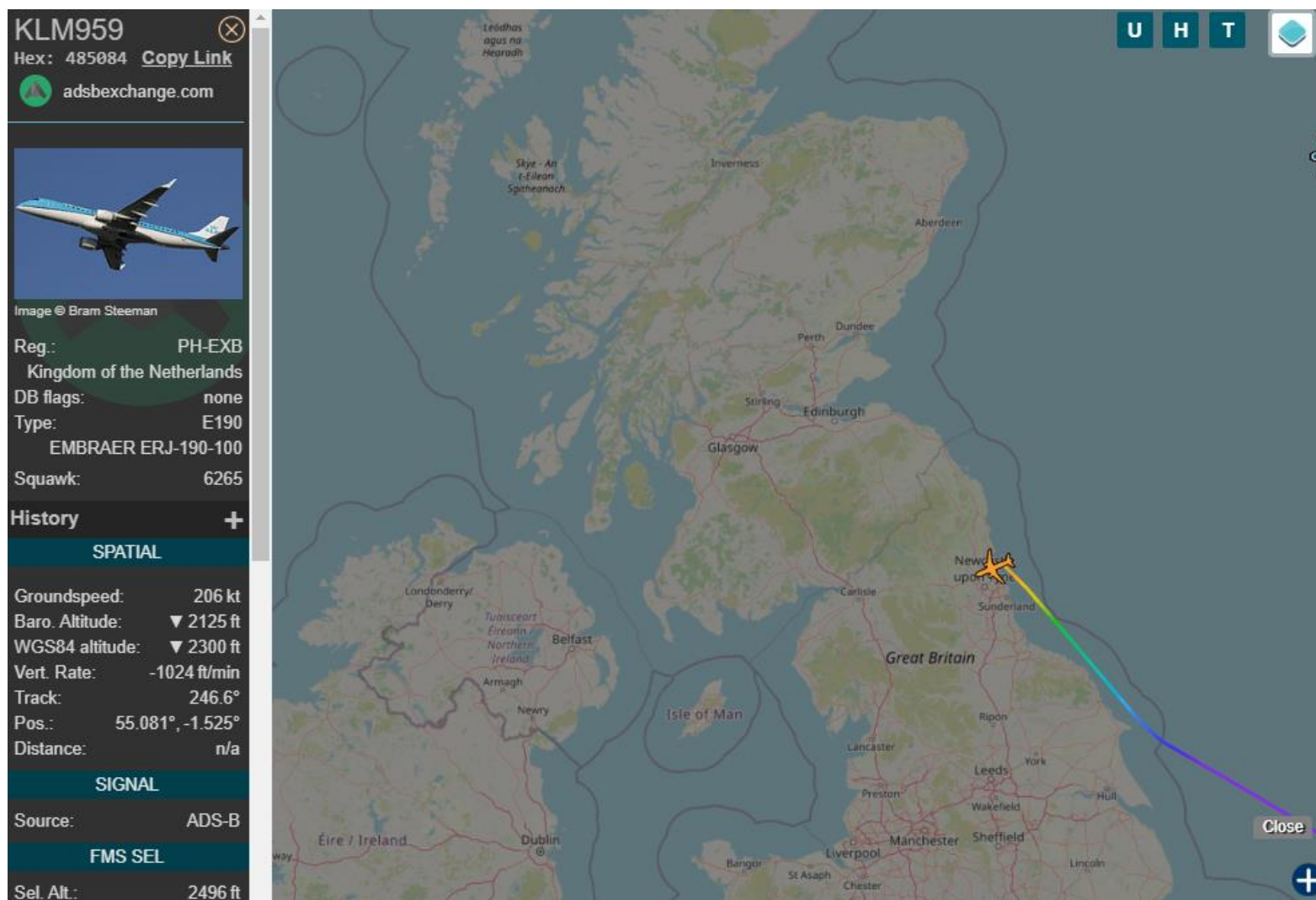


Figure 17 – KLM 27U, provided with air traffic service outside the Letter of Agreement

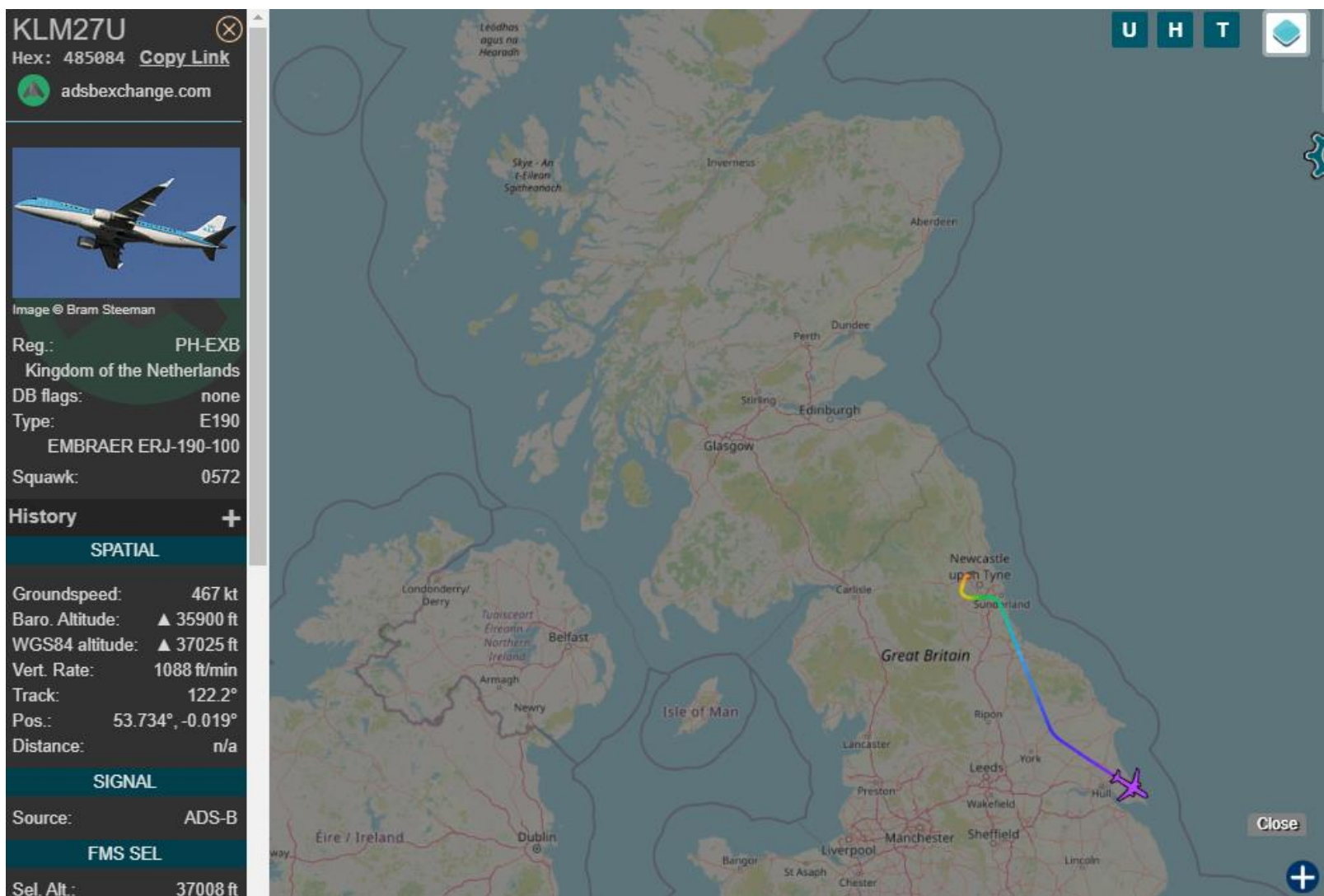


Figure 18 – KLM 47W, provided with air traffic service outside the Letter of Agreement

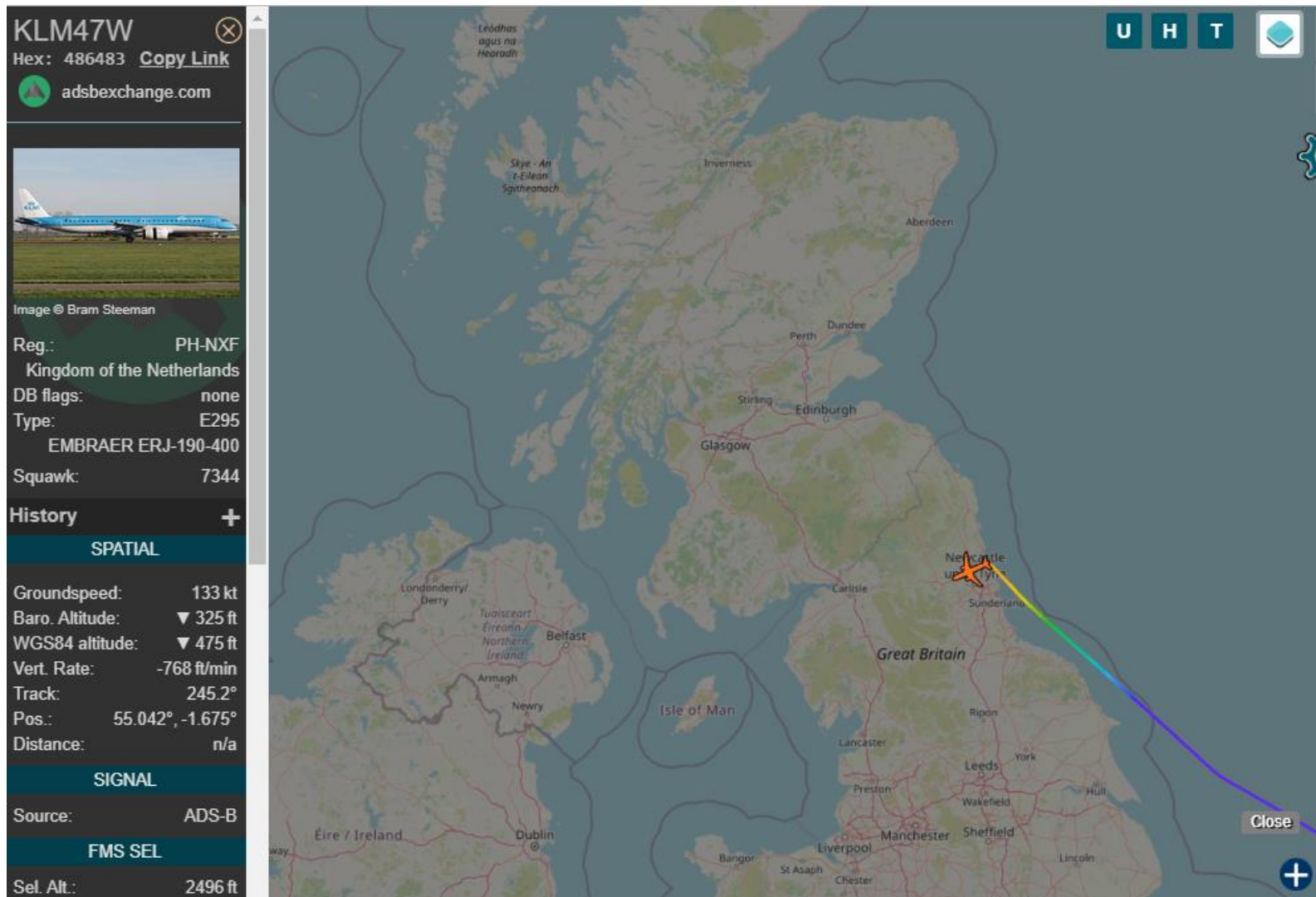


Figure 19 – KLM 27U, provided with air traffic service outside the Letter of Agreement

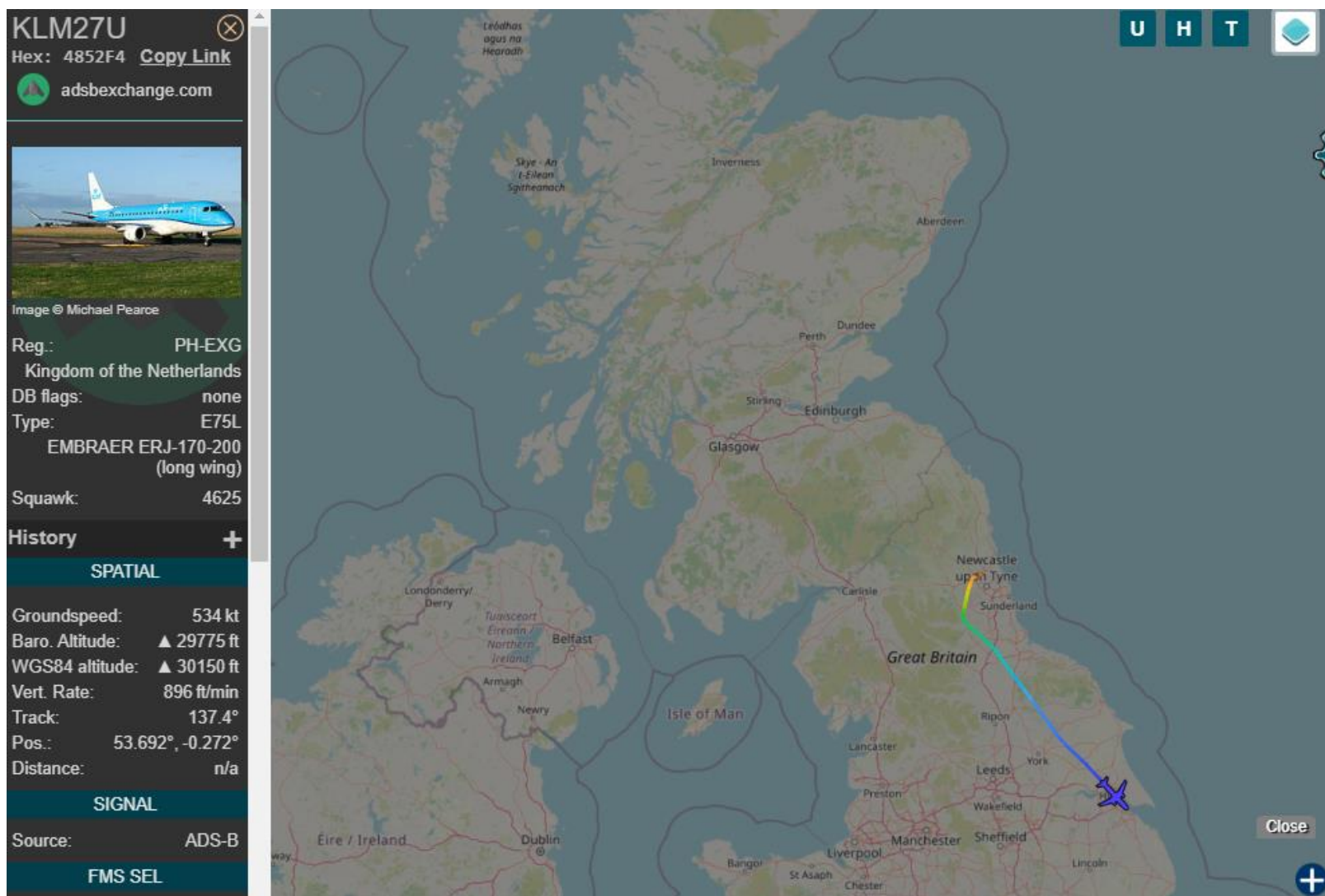


Figure 20 – RYR453, provided with a service under the Letter of Agreement

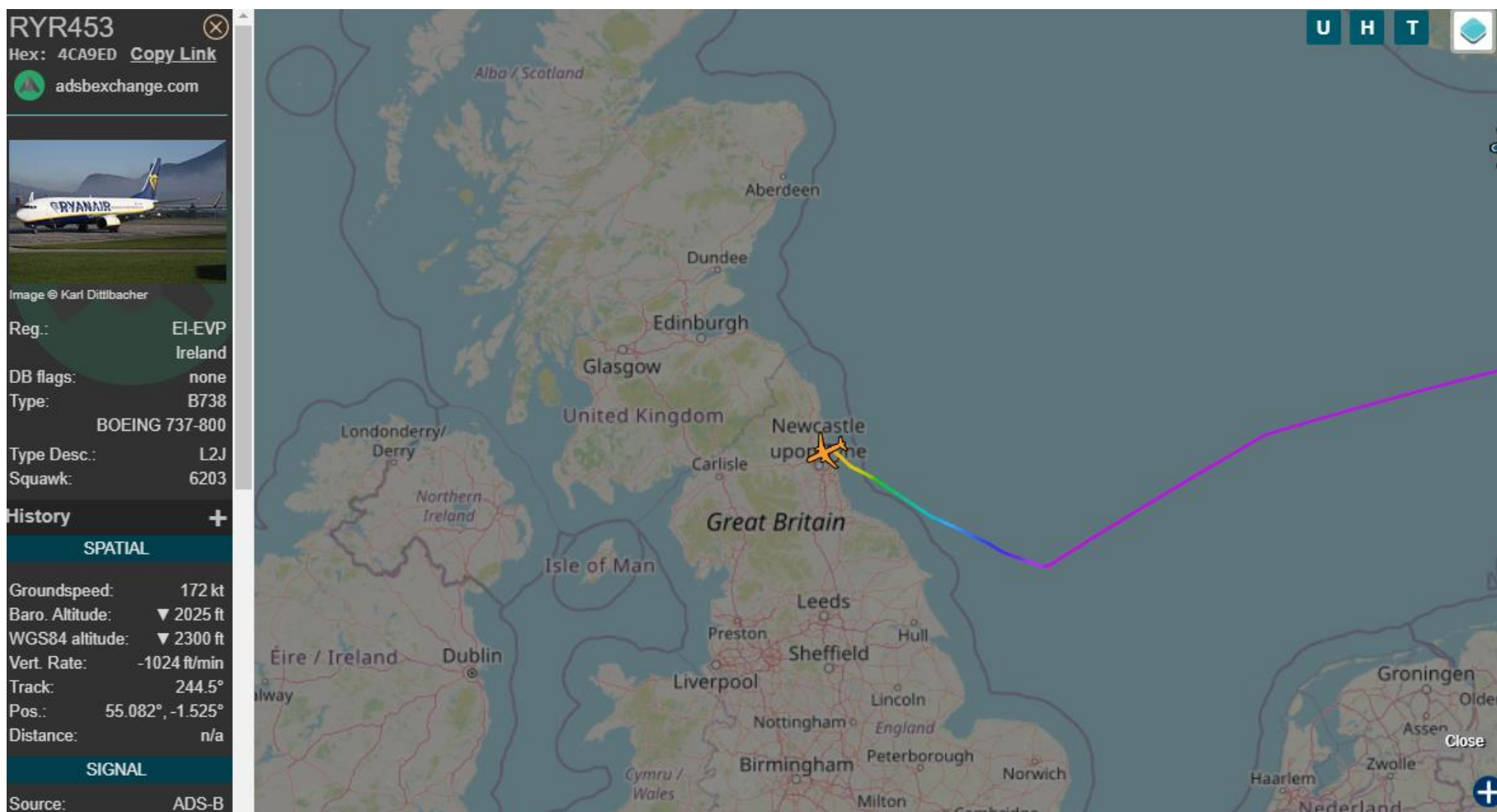
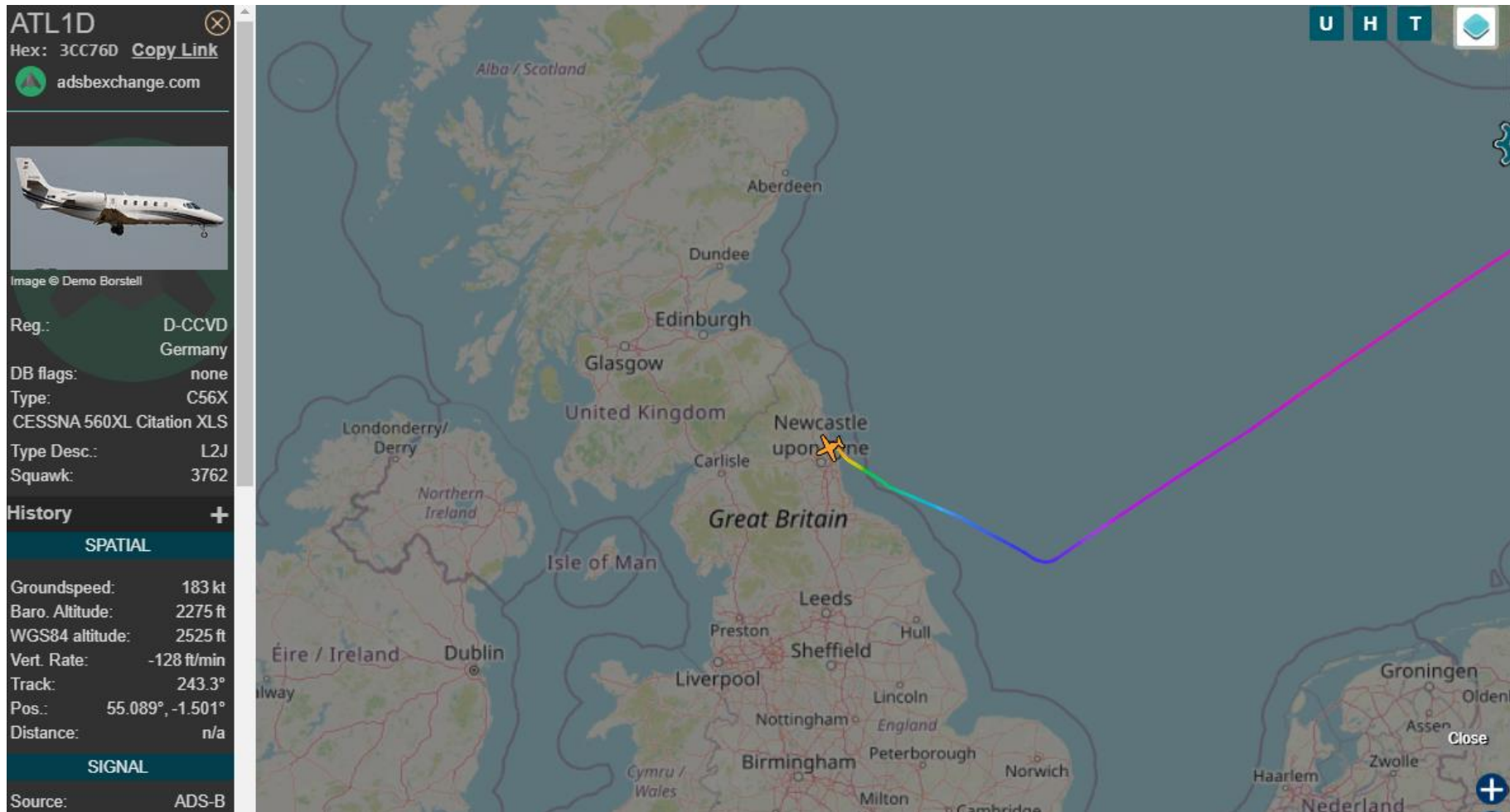


Figure 21 – ATL 1D, provided with a service under the Letter of Agreement



Reference 3. Intelligent Customer/Projects/Airspace data – activations of TDA EGD597 during Mar 2023

The below aircraft were those Newcastle commercial inbounds/outbounds controlled by Swanwick Military (78 Sqn) during the Mar 2023 activations of EG D597 under ACP-2021-048. It is envisaged that the same operating procedures will be used to inform the permanent design solution.

Modelling of this service provision from Swanwick Military (78 Sqn) against <https://globe.adsbexchange.com/?r> the Sponsor was able to determine that out of the 4 commercial tracks controlled by Swanwick Military only 1 (highlighted yellow below) of these aircraft were provided a service in accordance with the Letter of Agreement (dated 18 Jul 2022) – *25% of the overall traffic*. The other Newcastle movements took advantage of the Derogated Services provided by Swanwick.

It has been determined through the CAA Operational Assessment (dated 15 Jun 22) ruled that 'issues generated as a result of a lack of derogated services exist irrespective of the activation of the Preferred Design Option. Arrangements are already in place to provide network connectivity when derogated services are not available.'

Figure Ref	YYYYMMDD	TimeOn	TimeOff	Callsign	AircraftType	DepartureAirfield	ArrivalAirfield
22	20230310	0953	1009	EWG1FR	A319	EDDL	EGNT
23	20230310	1100	1226	UAE35	B77W	OMDB	EGNT
24	20230310	1334	1340	UAE9C	B77W	EGNT	OMDB
25	20230316	1242	1257	RYR453	B738	EVRA	EGNT

The aircraft at Figure 25 routed towards Newcastle from the Copenhagen Boundary.

Figure 22 – EWG1FR, provided with air traffic service outside Letter of Agreement

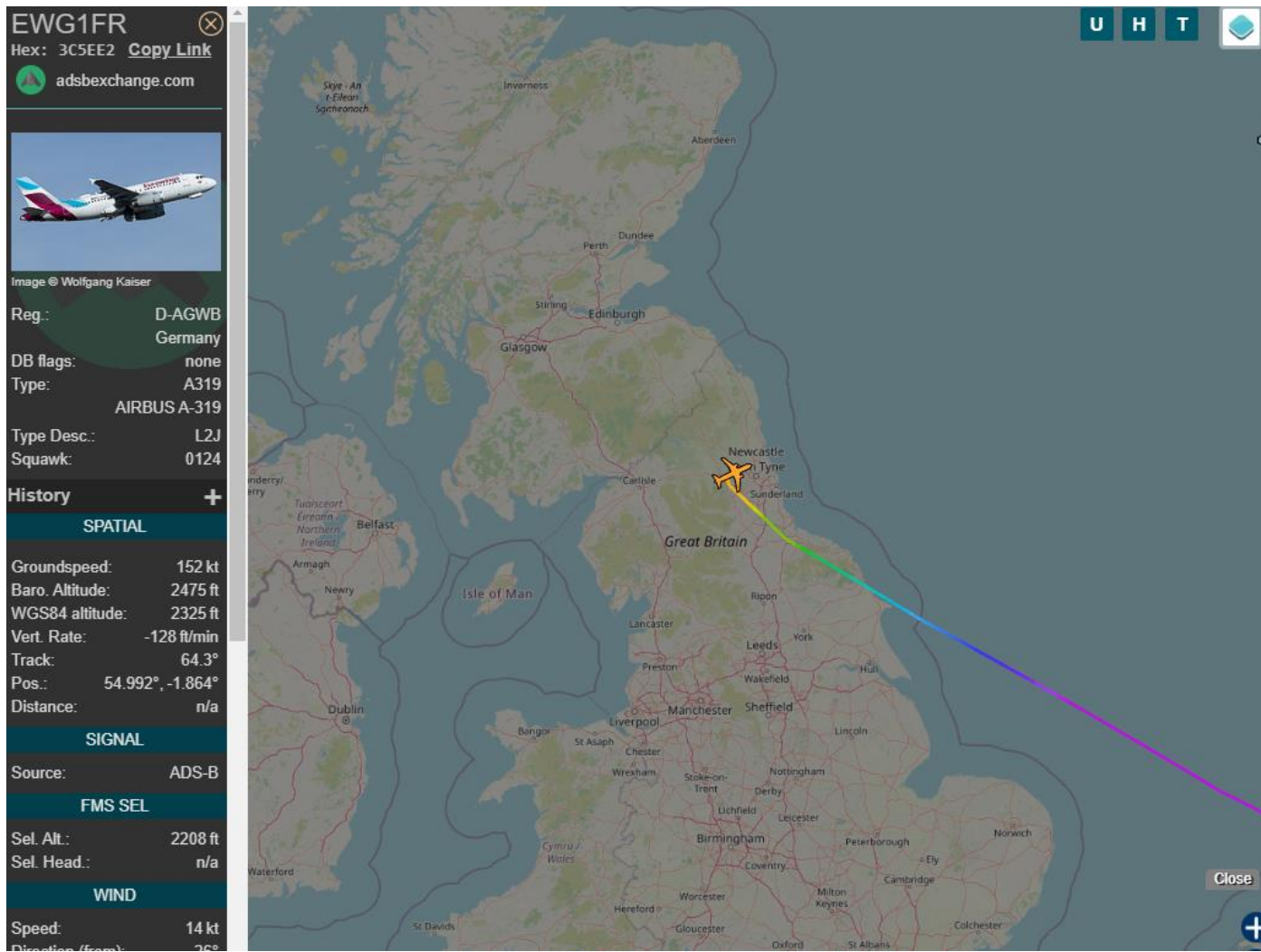


Figure 23 – UAE35, provided with air traffic service outside the Letter of Agreement

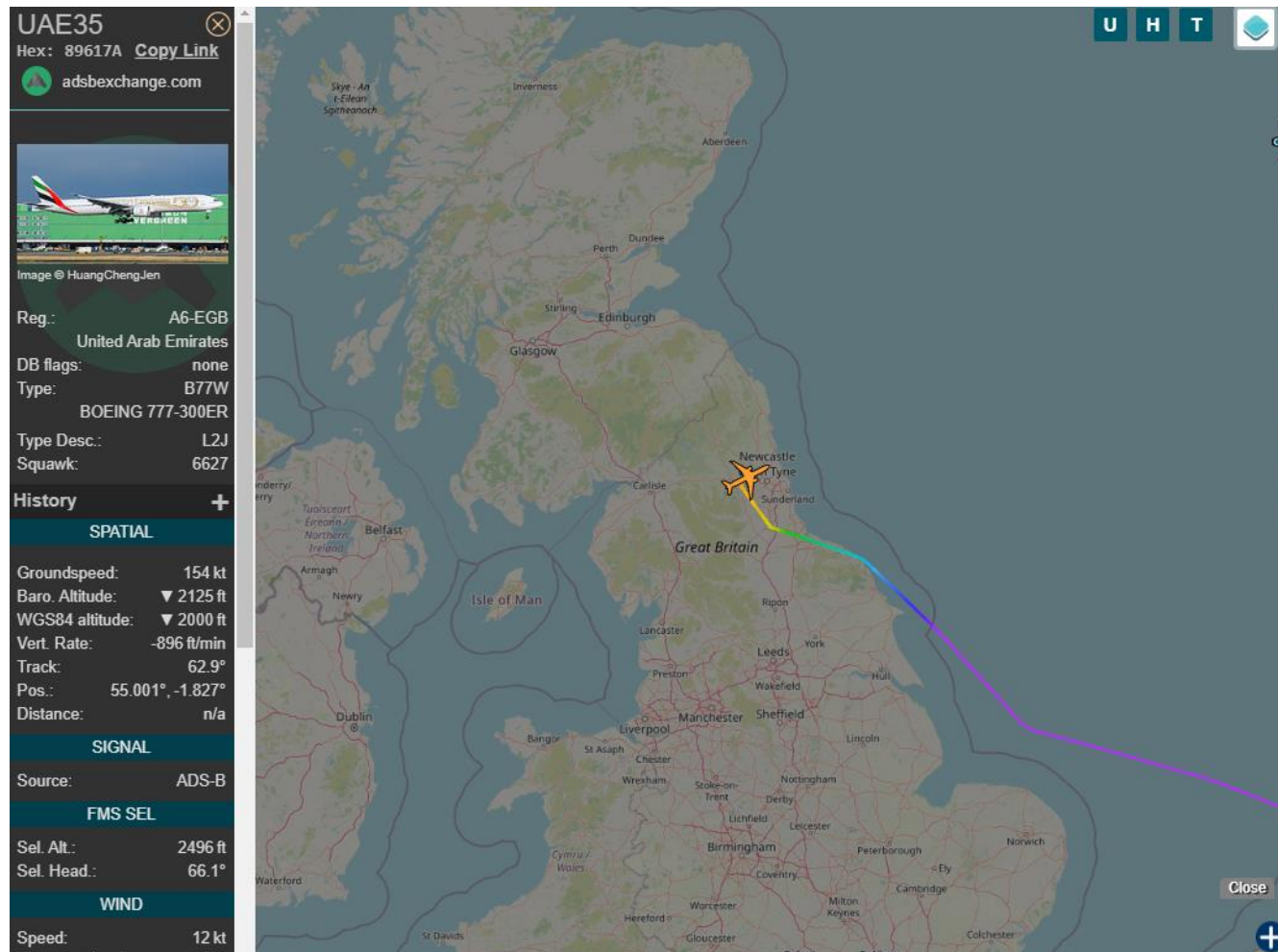


Figure 24 – UAE9C, provided with air traffic service outside Letter of Agreement

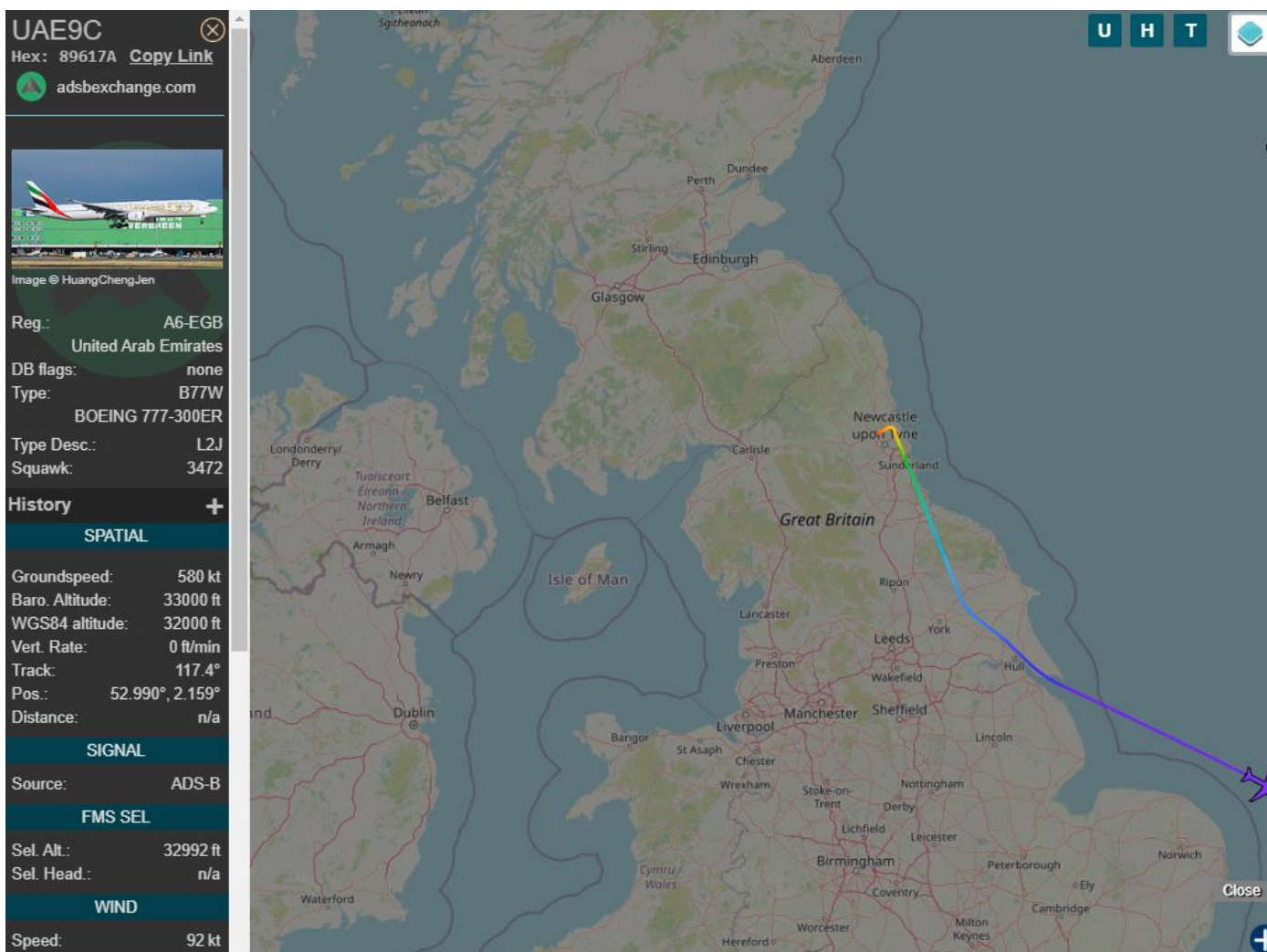
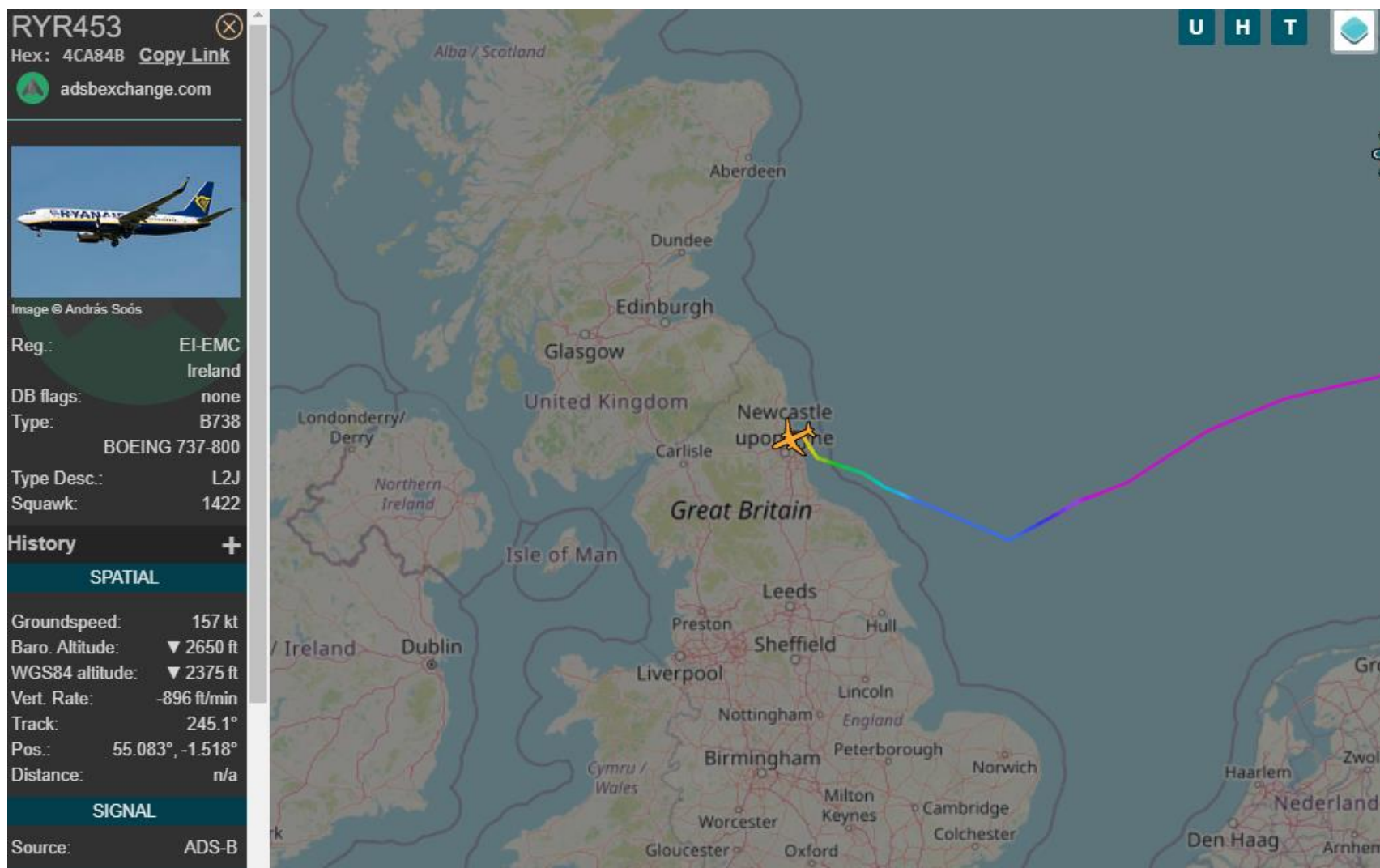


Figure 25 – RYR453, provided with air traffic service under the Letter of Agreement



Annex F – DAATM Future Combat Airspace Stage 3 Feedback

From: Hammond, Thomas Sqn Ldr (Air-11Gp-A7 TrgEnablers1 SO2)

<Thomas.Hammond945@mod.gov.uk>

Sent: 06 February 2023 12:32

To: [REDACTED]

Subject: 20230206 - ACP-2020-026 Future Combat Airspace Stage 3C - Consultation

[REDACTED] for distro to MAUWG members please.

Ma'ams/Sirs, all,

The MoD has identified a requirement for a suitable portion of Special Use Airspace in the form of a Danger Area in which to conduct Tier 2/2+ Collective Training, allowing modern military aircraft to train to their full capabilities in a joint operating environment. Under [CAP1616](#), an airspace change proposal (ACP), **ACP-2020-026** has therefore been submitted.

As part of this process, consultation of all stakeholders must take place in order to provide relevant feedback for the proposal, allowing us to understand and consider how it may affect your operations and minimise impacts where possible.

The relevant documents for this Airspace Change Proposal can be located on the CAA's ACP Portal [Airspace change portal \(caa.co.uk\)](#). *The Consultation Strategy, Consultation Document, Full Options Appraisal and Consultation Feedback Form are attached to this document for quick reference.*

In order to meet the submission deadline to the Civil Aviation Authority (CAA) for the ACP, I request submission of your feedback (through tile 4) **no later than 8 May 2023**. Any issues or suggestions highlighted by your feedback will be considered before proceeding to the next stage of the Airspace Change Process.

It is requested that all completed *Consultation Feedback Forms* are staffed through DAATM-AirspaceConsultation@mod.gov.uk

If you require any clarification on the points discussed within this email or documents provided, please do not hesitate to contact me.

Thank you

Tom

Squadron Leader Tom Hammond | SO2 A7 Training Enablers | HQ11 Gp | Air Command | Hurricane Block | RAF High Wycombe | Walters Ash | Bucks | HP14 4UE | Mob [REDACTED] | Skype +443001583835 | Email: thomas.hammond945@mod.gov.uk

From: [REDACTED]

Sent: 11 May 2023 14:24

To: Hammond, Thomas Sqn Ldr (Air-11Gp-A7 TrgEnablers1 SO2)
<Thomas.Hammond945@mod.gov.uk>

Subject: 20230206 - ACP-2020-026 Future Combat Airspace Stage 3C-Consultation_MOD Response-DAATM

Hi [REDACTED]

As promised, below is a summary of MOD feedback received by DAATM.

The Military Airspace Users Working Group (MAUWG) and other selected MOD stakeholders were informed of this ACP by the Sponsor through DAATM. DAATM have collated all responses into this email which is the official MOD response to the ACP in the subject line.

No major concerns were reported, and all MOD responses support the ACP. A number of relevant points have been summarised below:

- Warton have responded with observations that can be seen in the attachment.
- 78 Sqn reiterated that the provision of an ATS to Newcastle arrivals and departures to and from the Copenhagen boundary during the activations of the airspace, is an entirely separate matter from the derogated service 'Pennine Radar' task. They are aware of the requirement to prioritise an ATS to the Copenhagen crossers during exercise periods in order to reduce the impact on Newcastle. Any 'turning off' of the Pennine Radar traffic is in relation to the spare capacity that 78 Sqn would not have as a result of the exercise and other military activity taking place at the time, as per extant orders, agreements and any procedures already in place with the relevant impacted stakeholders.

Please contact me if you require any further information.

Regards

[REDACTED]

[REDACTED] | Sqn Ldr | SO2 Airspace Operations | Defence Airspace and Air Traffic Management |

[REDACTED]

[Deputy Chair RAF Orienteering Association](#)





Ministry
of Defence

Squadron Leader Thomas Hammond

SO2 A7 Training Enablers

11Gp | Air Command

Hurricane Block

RAF High Wycombe

HP14 4UE

Telephone MOD +44 (0)30

E-mail: Air-airspacetrail@mod.gov.uk

Consultation Feedback Form

The following is the print copy of the online Consultation Feedback Form that will be distributed to stakeholders upon request

1. What is your name?

2. What is your email address?

3. Please enter your postcode

4. Are you responding as an individual or do you represent an organisation?

5. If you are responding on behalf of an organisation, what is the name of the organisation?

6. If you are responding on behalf of an organisation what is your position/title?

7. What best describes your association with this airspace change?

Aviation Stakeholder

~~NATMAC Organisation~~

~~Other~~

Please state in the box below

Aviation Stakeholder

8. Do you support the preferred airspace design associated with ACP-2020-026?

Yes

9. Do you agree with the reasoning behind the selection of the Preferred Design Option?

~~Yes~~ ~~No~~ ~~Unsure~~

10. If you do not agree with the selection of the Preferred Design Option, please provide any suggestions you feel would improve the airspace design

11. Co-ordination meetings occur well in advance of activations, in order to ensure deconfliction with your requirements do you require an invite to these forums?

~~Yes~~ ~~No~~

12. How much notice regarding activations of the Future Combat Airspace would you require?

~~1 Day~~ ~~4 Week~~ ~~1 Month~~ ~~3 Months~~ ~~6 Months~~

13. Which activation periods will cause greatest impact for your operations?

~~Spring~~ ~~Summer~~ ~~Autumn~~ ~~Winter~~

14. Is there a particular time of the day that would create a lesser impact on your business?

~~Yes~~ ~~No~~

15. If so, what would be the ideal time for the activation of the Danger Area in order to minimise impact on your business (please annotate below)?

16. Subjective assessments indicate that there will be no impact to civil operations below 7000ft caused by the activation of Future Combat Airspace, if you disagree, please explain why below.

17. Safety is the main priority of the MOD and in order to successfully activate the Danger Area it is envisaged that a Letter of Agreement will be required that includes all affected Stakeholders, what items should be included in this agreement? Examples could include Flight Plan Buffer Zones (FBZs)/reporting points/guarantee of service provision

18. If this airspace change was permanently introduced, would there be an increased training or infrastructure burden upon your operation? (please circle below)

Yes

19. If possible, please briefly explain why and if possible, please provide an estimate of the likely cost

Limited training requirement for those controllers authorised to provide ATC services adjacent to the proposed Danger Area. Costs not available.

20. Do you agree that the preferred design option for the identified airspace is suitably future proofed and will allow airlines to fully take advantage of Free Route Airspace and therefore minimising fuel burn?

~~Yes~~

No

21. If you answered 'no' to the previous question, please briefly explain why?

With the onset of emerging technologies, in respect of platforms and weapons systems, it is impossible at this stage to comment on whether the proposed airspace is suitably future proofed. However, it is recognised that competing demands for airspace between civil and military organisations require compromise and this would appear to have been met. With regard to airlines being able to take full advantage of FRA, we would say that the establishment of any airspace of such a size would preclude full use of FRA protocols, particularly when other airspace restrictions also impact on such protocols.

22. If you oppose this proposal, please explain why

23. The MOD is keen to reduce the impact of its operations on other airspace users. Can you suggest any mitigations that would resolve any concerns that you have?

24. Are there any other general considerations that you would like the MOD to consider in relation to this Airspace Change Proposal?

It is not clear from the proposal whether any activation of the proposed airspace will result in other military assets having to migrate to airspace over the Irish Sea where BAE Systems Warton test and development activity takes place.

Further to our observation that GAT might not be able to make full use of FRA, we would be interested to understand how the establishment of such airspace influences the flow of GAT from Europe and its subsequent routing over UK airspace to their Oceanic entry points; might this push traffic which would ordinarily take a northerly flow to route instead over the Irish Sea?

In order to safeguard flying activity, BAE Systems proposes to establish Special Use Airspace (SUA) over the Irish Sea; this is very much at the embryonic stage.

25. In accordance with CAP1616, consultation responses will be published on Citizen Space via the CAA Airspace Change Portal. Responses will be subject to moderation by the CAA. Please indicate below if you would prefer for your response to be published anonymously (personal details will only be seen by the CAA).

Publish Response

~~Publish Response Anonymously~~

Annex G – NATS Operational Policy Response

From: Hammond, Thomas Sqn Ldr (Air-11Gp-A7 TrgEnablers1 SO2)

Sent: 22 May 2023 15:11

[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

Subject: RE: 20230206-ACP-2020-026, Future Combat Airspace Stage 3C - Consultation

[REDACTED]

Afternoon.

Thanks again for the NATS feedback to ACP-2020-026.

Please find attached a number of Sponsor responses to the questions that you have posed based upon the Stage 3C Consultation material.

Kind regards

Tom

Squadron Leader Tom Hammond | SO2 A7 Training Enablers | HQ11 Gp | Air Command | Hurricane Block | RAF High Wycombe | Walters Ash | Bucks | HP14 4UE | Mob [REDACTED] | Skype +443001583835 | Email: thomas.hammond945@mod.gov.uk

From: [REDACTED]

Sent: 12 May 2023 10:00

To: Hammond, Thomas Sqn Ldr (Air-11Gp-A7 TrgEnablers1 SO2)

<Thomas.Hammond945@mod.gov.uk>

[REDACTED]
[REDACTED]

Subject: RE: 20230206-ACP-2020-026, Future Combat Airspace Stage 3C - Consultation

[REDACTED]

Please find attached the final NATS response to ACP-2020-026, Future Combat Airspace Stage 3C.

Regards

[REDACTED]

NATS

[REDACTED]

Manager NATS Operational Policy

[REDACTED]

[REDACTED]



Ministry
of Defence

Squadron Leader Thomas Hammond

SO2 A7 Training Enablers

11Gp | Air Command

Hurricane Block

RAF High Wycombe

HP14 4UE

Telephone MOD +44 (0)30

E-mail: Air-airspacetrail@mod.gov.uk

Consultation Feedback Form

The following is the print copy of the online Consultation Feedback Form that will be distributed to stakeholders upon request

1. What is your name?

2. What is your email address?

3. Please enter your postcode

4. Are you responding as an individual or do you represent an organisation?

5. If you are responding on behalf of an organisation, what is the name of the organisation?

6. If you are responding on behalf of an organisation what is your position/title?

7. What best describes your association with this airspace change?

~~Aviation Stakeholder~~

NATMAC Organisation

~~Other~~

Please state in the box below

8. Do you support the preferred airspace design associated with ACP-2020-026?

Yes

9. Do you agree with the reasoning behind the selection of the Preferred Design Option?

Yes

~~No~~

~~Unsure~~

10. If you do not agree with the selection of the Preferred Design Option, please provide any suggestions you feel would improve the airspace design

11. Co-ordination meetings occur well in advance of activations, in order to ensure deconfliction with your requirements do you require an invite to these forums?

Yes

~~No~~

12. How much notice regarding activations of the Future Combat Airspace would you require?

~~1 Day~~

~~1 Week~~

~~1 Month~~

~~3 Months~~

6 Months

13. Which activation periods will cause greatest impact for your operations?

Spring

Summer

~~Autumn~~

~~Winter~~

14. Is there a particular time of the day that would create a lesser impact on your business?

Yes

~~No~~

15. If so, what would be the ideal time for the activation of the Danger Area in order to minimise impact on your business (please annotate below)?

Agreements should be in place to minimise on traffic flows and patterns, in particular North Atlantic Tracks, which should be managed through extant procedures

16. Subjective assessments indicate that there will be no impact to civil operations below 7000ft caused by the activation of Future Combat Airspace, if you disagree, please explain why below.

17. Safety is the main priority of the MOD and in order to successfully activate the Danger Area it is envisaged that a Letter of Agreement will be required that includes all affected Stakeholders, what items should be included in this agreement? Examples could include Flight Plan Buffer Zones (FBZs)/reporting points/guarantee of service provision

It would be useful to include more analysis on FBZ options within the ACP. There is no detail or analysis on FBZ options within the consultation. Agreements should be in place to minimise impact on traffic flows through extant agreements. Agreement on Airspace management e.g. if this area is active, the cumulative effect of other activated areas within the FIR. NATS would expect that the reporting points used within the UK AIP Sup for previous trial activations to be included within the UK AIP ENR 4.4 on a permanent basis as part of the MODs ACP, in order to facilitate re-routings associated to activations.

18. If this airspace change was permanently introduced, would there be an increased training or infrastructure burden upon your operation? (please circle below)

Yes

No

19. If possible, please briefly explain why and if possible, please provide an estimate of the likely cost

The AMC would be managing additional airspace and applying additional ASM protocols. Minor training and workload increase. Updates to systems and documentation, operational training and currency. Costs can be provided once the Impact Assessment has been completed.

20. Do you agree that the preferred design option for the identified airspace is suitably future proofed and will allow airlines to fully take advantage of Free Route Airspace and therefore minimising fuel burn?

Yes

No

21. If you answered 'no' to the previous question, please briefly explain why?

To make the Airspace more efficient, we should be seeking to segment the airspace structure and therefore not activate the whole area when it is not required.

22. If you oppose this proposal, please explain why

23. The MOD is keen to reduce the impact of its operations on other airspace users. Can you suggest any mitigations that would resolve any concerns that you have?

A Flight plan Buffer Zone is required. The addition of reporting points (as per Q17 above).

24. Are there any other general considerations that you would like the MOD to consider in relation to this Airspace Change Proposal?

The analysis does not show the impact of TDA597 on the network when D323 & D613s are not active. The analysis assumes that they will always be active, but this is not always the case. It would be useful to include a scenario where no SUA is active to more accurately reflect the impact of this proposal. This is likely to be relevant if LFE are conducted during periods when the MDAs are unavailable for booking, most notably during weekends. If the intent is not to activate TDA597 on the weekends this should be stated in the document. NATS would request that any name change to the Danger Area designator i.e. Temporary Danger Area EGD597 to EGD??? is provided in sufficient time to update both NATS internal systems and the EUROCONTROL flight planning system in line with the AIRAC process prior to implementation. NATS welcomes the inclusion of the LOA associated to

the trial activations within the ACP material and notes the MODs commitment to use this as a benchmark upon which future arrangements would be based. Such agreements mitigate as far as practicable, the impact associated to activation of the proposed area whilst also assuring ATS provision to affected commercial aviation primarily operating to/from Newcastle and Teesside airports. Standard ASM process requires the airspace reservation request by 0900 D-1. We would request as much notice of any exercises as possible (6 months plus) in order to support our long-term operational planning (activation notification as standard at D-1).

25. In accordance with CAP1616, consultation responses will be published on Citizen Space via the CAA Airspace Change Portal. Responses will be subject to moderation by the CAA. Please indicate below if you would prefer for your response to be published anonymously (personal details will only be seen by the CAA).

Publish Response

~~Publish Response Anonymously~~

Response ID Ref	Summary Question	NATS provided feedback	Sponsor response	Action
6	<p>How much notice regarding activations of Future Combat Airspace would you require</p>	6 months	6 months' notice is achievable for the planned exercise period, with the exact activation day/time provided in the leadup to the exercise.	<p><i>Sponsor to add aspirational 6 month notice period to Final Submission, but with the caveat that operational importance may reduce this timeframe</i></p>
13/14	<p>Is there a particular time of the day that would create a lesser impact on your business?</p> <p>If so, what would be the ideal time for the activation of the Danger Area in order to minimise impact on your business?</p>	<p>Yes</p> <p>Agreements should be in place to minimise the impact on traffic flows and patterns, in particular North Atlantic Tracks, which should be managed through extant procedures.</p>	<p>The Sponsor would like to better understand the timings associated with peak traffic flows, with a particular focus on North Atlantic Tracks – <i>it is understood that activations of the preferred design option should be avoided before 0800 and ideally not between 1400 – 1630UTC.</i></p> <p>Extant procedures will include the activation of the Danger Area by the UK AMC via the publication of the Airspace Utilisation Plan in addition to NOTAM action.</p>	<p><i>NATS to provide the Sponsor with information regarding peak traffic flow timings with a focus on North Atlantic Tracks (timings in column 4 provided based on an informal exchange)</i></p>

16	<p>Safety is the main priority of the MOD and in order to successfully activate the preferred Danger Area it is envisaged that a Letter of Agreement will be required that includes all affected stakeholders, what items should be included in this agreement? Examples could include Flight Plan Buffer Zones/Reporting Points/guarantee of service provision</p>	<p>It would be useful to include more analysis on FBZ options within the ACP. There is no detail or analysis on FBZ options within the consultation. Agreements should be in place to minimise impact on traffic flows through extant agreements. Agreement on Airspace management e.g. if this area is active, the cumulative effect of other activated areas within the FIR.</p> <p>NATS would expect that the reporting points used within the UK AIP Sup for previous trial activations to be included within the UK AIP ENR 4.4 on a permanent basis as part of the MODs ACP, in order to facilitate re-routings associated to activations.</p>	<p>The size of the FBZ was agreed in consultation with NATS during the design and development of the Temporary Danger Area (TDA EG D597). The Danger Area design associated with ACP-2020-026 is a direct replica of ACP-2021-048 and is therefore used to inform Future Combat Airspace. The FBZ was agreed at 5nm in order to provide the stipulated lateral distance from High Energy Manoeuvres. Given that a 5nm FBZ around the proposed design option does not limit or restrict existing route availability, analysis regarding lateral FBZ dimensions was not considered.</p> <p>ACP-2021-048 is used to inform ACP-2020-026 and therefore a direct reference to the reporting points previously utilised will be included in UK AIP ENR 4.4 for the preferred design option.</p>	<p>ADQ (aeronautical data) to be informed by ACP-2021-048 submission. Naming convention for the design option and descriptive suffix is required for ENR 5.1 entry</p> <p>Sponsor will ensure that UK AIP ENR 4.4 is updated with the relevant reporting points</p>
18	<p>If possible, please briefly explain why and if possible, please provide an estimate of the likely cost</p>	<p>The AMC would be managing additional airspace and applying additional ASM protocols. Minor training and workload increase. Updates to systems and documentation, operational training and currency. Costs can be provided once the Impact Assessment has been completed.</p>	<p>The Sponsor requests an approximate indication of the likely cost associated with the implementation of the preferred design option in order to order inform the Options Appraisal (Final).</p>	<p>Sponsor to include any provided costs with Options Appraisal (Final)</p>
19/20	<p>Do you agree that the preferred design option for the identified</p>	<p>No</p>		

	<p>airspace is suitably 'future proofed' and will allow airlines to fully take advantage of Free Route Airspace and therefore minimise fuel burn?</p> <p>If you answered 'no' to the previous question, please briefly explain why</p>	<p>To make the Airspace more efficient, we should be seeking to segment the airspace structure and therefore not activate the whole area when it is not required.</p>	<p>In order to provide a sufficient area in which to conduct Large Force Exercises the entirety of the preferred design option is required, segmenting the preferred design option and thereby reducing the size is currently considered unsafe and will diminish the training benefit for operators.</p>	<p>N/A</p>
<p>23</p>	<p><i>Are there any other general considerations that you would like the MOD to consider in relation to this Airspace Change Proposal?</i></p>	<p>The analysis does not show the impact of TDA597 on the network when D323 & D613s are not active. The analysis assumes that they will always be active, but this is not always the case. It would be useful to include a scenario where no SUA is active to more accurately reflect the impact of this proposal. This is likely to be relevant if LFE are conducted during periods when the MDAs are unavailable for booking, most notably during weekends. If the intent is not to activate TDA597 on the weekends this should be stated in the document.</p> <p>NATS would request that any name change to the Danger Area designator i.e. Temporary Danger Area EGD597 to EGD??? is provided in sufficient time to update both NATS internal systems and</p>	<p>Given the scale and complexity associated with Large Force Exercises the preferred design option will only be activated during the working week (outside of Bank Holidays and other notified holiday periods). Data obtained from the AMC indicates that either D323 or D613 was active every weekday (outside the above caveats). Therefore the environmental analysis conducted for ACP-2020-026 on the network is accurate.</p>	<p><i>Sponsor to include that activations will only occur during the working week (outside Bank Holidays and other notified holiday periods)</i></p> <p><i>Sponsor will endeavour to provide requested details in sufficient time, engagement is currently underway with the CAA – any possibly early granting of the designator will not</i></p>

		<p>the EUROCONTROL flight planning system in line with the AIRAC process prior to implementation.</p> <p>NATS welcomes the inclusion of the LOA associated to the trial activations within the ACP material and notes the MODs commitment to use this as a benchmark upon which future arrangements would be based. Such agreements mitigate as far as practicable, the impact associated to activation of the proposed area whilst also assuring ATS provision to affected commercial aviation primarily operating to/from Newcastle and Teesside airports.</p> <p>ASM process requires the airspace reservation request by 0900 D-1. We would request as much notice of any exercises as possible (6 months plus) in order to support our long-term operational planning (activation notification as standard at D-1).</p>	<p>Given the planning cycles associated with Large Force Exercises the Sponsor believes that providing this amount of notice is achievable but advises due to operational requirements this may not always be possible.</p>	<p><i>predetermine the outcome of the decide gateway.</i></p> <p><i>The Sponsor has engaged with the author of the LOA and determined that sufficient lead time is available to generate a LOA for the permanent implementation of the Danger Area – informed by the LOA for ACP-2021-048 based upon the expected CAA decision date of 17 Nov 23 for subsequent activations in Mar 24</i></p> <p><i>As per response ID Ref 6</i></p>
--	--	--	---	---

From: [REDACTED]

Sent: 19 June 2023 16:50

[REDACTED]; Hammond, Thomas Sqn Ldr (Air-11Gp-A7 TrgEnablers1 SO2) <Thomas.Hammond945@mod.gov.uk>

[REDACTED]

[REDACTED]

Subject: RE: 20230206-ACP-2020-026, Future Combat Airspace Stage 3C - Consultation

[REDACTED]

Having liaised further ([REDACTED]) we'd like to add some further clarification:

Whilst peak traffic flows are usually between 1000-1400, the protocols for managing the airspace (TDA597) have proven, over time, to be entirely appropriate to minimise the impact on the network and is supported by an LoA. The current agreement between NATS and MOD for suppression and activation of airspace should remain in place and be reviewed and managed periodically as well as via the current collaborative decision-making processes for ASM that are aligned to the CAP740 ASM Policy.

Regards

[REDACTED]

NATS

[REDACTED]
ATM Development

Military Interface Lead

Airspace & Future Operations

[REDACTED]
[REDACTED]

4000 Parkway, Whiteley,
Fareham, Hants PO15 7FL
www.nats.co.uk

NATS Internal

[REDACTED]
Sent: 09 June 2023 08:19

To: Hammond, Thomas Sqn Ldr (Air-11Gp-A7 TrgEnablers1 SO2)
<Thomas.Hammond945@mod.gov.uk>

[REDACTED]
[REDACTED]
Subject: RE: 20230206-ACP-2020-026, Future Combat Airspace Stage 3C - Consultation

[REDACTED]
I believe that you requested further information in your attached response.

- NATS to provide the Sponsor with information regarding peak traffic flow timings with a focus on North Atlantic Tracks (timings in column 4 provided based on an informal exchange)

The time band NATS discussed with the MOD and CAA previously on Lightning and CACA (TDA597) was between 1000-1400 for westbound traffic. Therefore, NATS' request is that you minimise activities between these times for ACP-2020-026.

Let me know if you require any further information from us.

Regards

[REDACTED]
Advance Notice of AL: 14-23 June

NATS

[REDACTED]
Manager NATS Operational Policy
[REDACTED]
[REDACTED]