BVLOS Trial in Unsegregated Airspace

NATS

Remotely Piloted Drone Flight Trial Documentation: Annex B: Engagement Document ACP-2024-001

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Change History

Issue	Month/Year	Changes this issue (most recent first)
V1.0	December 2024	Published on CAA airspace change portal (as engaged Oct-Nov 2024)

1. Introduction

- 1.1.1 NATS Services Ltd (NSL), the commercial arm of <u>NATS</u>, has partnered with the uncrewed aircraft (UA) operator <u>Flylogix</u> to conduct an integrated airspace flight trial over the North Sea. Flylogix is a well-established professional organisation operating Beyond Visual Line Of Sight (BVLOS) flights in the North Sea for over six years working closely and routinely with other North Sea airspace users.
- 1.1.2 Flylogix has undertaken numerous routine BVLOS operations in Temporary Danger Areas (TDA), approved by the CAA. Examples are ACP-2024-005 (link), and ACP-2023-083 (link).
- 1.1.3 The current TDA structure segregates not only the UA from all other air traffic, but it also prevents other traffic routinely flying inside, thus reducing airspace availability. Our intent is to establish a TRA, or Temporary Reserved Area, within which any cooperative aircraft could fly.
- 1.1.4 NATS Services Ltd have been successfully approved within the CAA CAP2616 BVLOS Integration sandbox trial. The aim of the sandbox is to support the CAA to develop national policies and regulation for the integration of uncrewed aircraft into the crewed aircraft environment through the application of real-life use cases. NATS Services Ltd has submitted its intent to generate a TRA in the North Sea that incorporates a Transponder Mandatory Zone (TMZ) and sub-sectors strategically designed to support this specific use case. The designated region encompasses the take-off and landing areas, assigned survey areas, and the necessary airspace to facilitate the trialling of crewed and uncrewed operations within unsegregated airspace.
- 1.1.5 The TRA will accommodate electronically cooperative aircraft in which an air traffic service by Aberdeen ATC is available to crewed aircraft.
- 1.1.6 The formal application for the trial airspace change will be in accordance with the CAA's guidance on airspace trials known as <u>CAP1616G</u>.
- 1.1.7 Our reference is ACP-2024-001 and this is the <u>link</u>.
- 1.2 When do we intend to conduct the trial and activate the TRA?
- 1.2.1 The trial is expected to commence March 2025 for a 6-month period, with the potential to extend to 12 months. Although this is our target timeframe, this may delay up to June 2025 as we consider your response and work through the airspace change process (CAP1616).
- 1.2.2 Flights will occur during daylight hours in fair weather on any day of the week.
- 1.2.3 On average we aim to fly four flights per week, per site though some weeks may be more, some weeks fewer.
- 1.3 From where will we fly, when, and how high?
- 1.3.1 This trial is for a BVLOS¹ remotely piloted aerial system (RPAS) fixed-wing aircraft to depart from airstrips in sparsely populated remote areas near the coast, and then fly for several hours over the North Sea undertaking survey missions.
- 1.3.2 The aircraft would fly from/to <u>Whinnyfold</u>, Aberdeenshire into the central North Sea, and from/to the disused <u>Scatsta airport</u>, Shetland into the northern North Sea.

¹ Beyond Visual Line of Sight. The purpose of the trial itself is to gather information on how a remotely piloted aircraft on such missions could be integrated into an unsegregated air traffic environment.

1.4 Whinnyfold

- 1.4.1 For central North Sea operations, **Whinnyfold** was selected due to the following characteristics:
 - Whinnyfold is clear of nearby existing Danger Areas and noise sensitive areas.
 - Whinnyfold is situated next to bodies of water, therefore the travel of the UA over land is minimal, reducing noise impacts and risk to those on the ground.
 - Whinnyfold is a private field with no crewed aviation.
 - Whinnyfold is free of significant ground-based obstacles such as power lines.
 - Whinnyfold is 20 nautical miles (nm) from the closest airfield (Aberdeen/Dyce) and therefore should pose little impact to existing operations.



Figure 1Whinnyfold Take-off/landing area, and its typical flightpath to/from the trial TRA

- 1.4.2 The aircraft's take-off and landing cycle typically involves flight at a height of c.400ft above ground level (AGL) in the take-off/landing area until established at its mission altitude of 800ft AMSL. It would get airborne, perform some checks, then cross the coast, complete its multi-hour mission and return to land.
- 1.4.3 We expect noise impacts to be minimal due to the small size of the aircraft, the takeoff/landing area being a large field in a rural area with coast on three sides. For more noise information see section 5.4.

1.5 Scatsta

- 1.5.1 For northern North Sea operations, **Scatsta** was selected due to the following characteristics:
 - Scatsta is clear of nearby existing Danger Areas and noise sensitive areas.
 - Scatsta is situated next to bodies of water and very sparsely populated rural areas, therefore the travel of the UA over land is minimal reducing risk to those on the ground.

- Scatsta is a disused airfield with no crewed aviation on site.
- Scatsta is free of significant ground-based obstacles such as power lines.
- Scatsta is 15nm from the closest airfield (Lerwick/ Tingwall) and therefore would cause negligible impact to existing operations.



Figure 2 Scatsta Take-off/landing area, and its typical flightpath to/from the trial TRA

- 1.5.2 The aircraft's take-off and landing cycle typically involves flight at a height of c.400ft above ground level (AGL) in the take-off/landing area until established at its mission altitude of 800ft AMSL. It would get airborne, perform some checks, then head east for approximately 6km crossing the coast, complete its multi-hour mission and return to land. Occasionally it may need to fly to the west of the airfield, expecting to remain well clear of the ferry terminal.
- 1.5.3 We expect noise impacts to be minimal due to the small size of the aircraft, the takeoff/landing area being a former airfield in a remote, sparsely populated rural area. For more noise information see section 5.4.
- 1.6 What does the uncrewed aircraft look like?
- 1.6.1 The Flylogix FX2 aircraft has a wingspan of 3.2m, weighs 50kg and is powered by a small petrol engine remaining airborne routinely for 6 hours per flight.



Figure 3 The Flylogix FX2 aircraft

- 1.6.2 Each mission involves a preparation and position validation flight over land within visual line of sight (VLOS) until it begins its multi-hour offshore BVLOS task, remotely flown by a fully qualified Remote Pilot. It then returns, and transitions to VLOS to land.
- 1.6.3 The aircraft will be operated under the command of a remote pilot, with a layered Detect and Avoid (DAA) argument constructed around the integration of the aircraft, crew, and Air Traffic Control (ATC). This DAA argument, along with the operational procedures, will require approval from the CAA. The operation of the aircraft will not commence without the CAA's formal approval of the DAA argument and the issuance of the necessary operational authority.

1.6.4 The UA is equipped with ADS-B IN and OUT, Mode-S to ensure it is visible to Air Traffic Controllers providing an Air Traffic Service to crewed aircraft, and to other cooperative electronically conspicuous aircraft.

2. What is the proposed airspace design?

- 2.1 Northern North Sea and Central North Sea sectors
- 2.1.1 Figure 4 provides our proposed TRA and sectorisation².
- 2.1.2 The rigs where methane measurement operations may be conducted are also shown in Figure 4. Additionally, the locations for take-off and landing, Whinnyfold and Scatsta, are also indicated. Additional rigs may be added within this proposed TRA.
- 2.1.3 The TRA would be established from 100ft to 1,500ft AMSL.
- 2.1.4 The TRA sectors will be activated by NOTAM at least 24hrs in advance of the BVLOS flight.
- 2.1.5 The TRA will be published in the Aeronautical Information Circular (AIC).



Figure 4 The planned trial airspace design, for your feedback

² Our earliest design concept had two larger sectors, one to the north served by the Scatsta take-off/landing area, and one to the south served by the Whinnyfold take-off/landing area. Pre-engagement discussions with the Ministry of Defence resulted in us splitting each larger sector into smaller sub-sectors.



Figure 5 Proposed TRA on AIP Chart, for your feedback

- 2.1.6 The planned TRA sectorisation is shown in Figure 4 and Figure 5 above.
- 2.1.7 In northern North Sea operations, **Sector A** will be activated for enabling connection to Sector B and Sector C. Based on the survey task, **Sector B** or **Sector C** or both will be activated. The UA would get airborne at Scatsta and fly east at 800ft AMSL BVLOS, over the peninsulas and islands until established offshore, en-route to its survey task in the northern North Sea. Occasionally at Scatsta the UA may need to head west before turning east. The return to land would be the equivalent reciprocal track.
- 2.1.8 In central North Sea, **Sector D** or **Sector E** or both will be activated based on the survey task. The UA would get airborne at Whinnyfold and fly east at 800ft AMSL BVLOS over the coast, establishing offshore enroute to its survey task in the central North Sea. The return to land would be the equivalent reciprocal track.
- 2.1.9 Our intent is to activate one sector (B, C, D or E) during the initial trial stages developing to multiple sector activations and deactivations depending on the trial progression. Sector A would be activated only if B or C are required.
- 2.1.10 Our proposed sectorisation approach is designed to minimise the potential impact on other airspace users while facilitating the use of unsegregated trial airspace and to support use-case task.

2.2 The TRA entry requirements and ruleset

2.2.1 Crewed Aircraft Electronic Conspicuity (EC) Requirements:

Any crewed aircraft that intend to enter the TRA must be equipped with a serviceable and actively radiating ADS-B OUT and active Mode-S. This is typical equipage for flights in this area.

2.2.2 Crewed Aircraft Communications Requirements:

The TRA is within the Aberdeen Offshore Safety Area (OSA) as described in the UK Aeronautical Information Publication (AIP)³. Any crewed aircraft that intend to enter the TRA must comply with the communications procedures described in UK AIP ENR 1.6 section 4.5.2.4.1 (an extract is provided in Section 8 Appendix on p.16, current at time of writing). This is standard practice for the vast majority of flights in this area.

2.2.3 Uncrewed Aircraft EC Requirements (including our partner Flylogix):

In addition to an Approved Operator Safety Case and Operational Approval, the UA must be equipped with a serviceable ADS-B IN and radiating ADS-B OUT and active Mode-S.

2.2.4 Uncrewed Aircraft Communications Requirements (including our partner Flylogix): Satisfactory two-way communication must be established between the Remote Pilot and Aberdeen ATC, and maintained. This may be via telephone or as agreed between Aberdeen ATC and the operator.

2.2.5 Aircraft of any type that cannot comply with EC Requirements but can comply with Communications Requirements:

Aircraft that intend to enter or transit the TRA which do **not** meet the EC requirements must contact Aberdeen ATC before entry who may, at their discretion, provide approval to transit the TRA.

2.3 General flight requirements

- 2.3.1 Flylogix or any other UA operator will provide flight intent notification through the NATS nonstandard flight <u>web portal</u>.
- 2.3.2 Flylogix's UA will be flown under VLOS at Whinnyfold, and 800ft above take-off/landing area at Scatsta until the identification and position validation activity is completed. This will enable the UA to start their BVLOS operation under BVLOS regulations.
- 2.3.3 Flylogix's UA (or any other UA) will maintain an altitude of 800ft AMSL in transit, unless directed otherwise by Aberdeen ATC.
- 2.3.4 Flylogix's UA (or any other UA) will be flown within the TRA adopting the "Rules of the Air" to avoid crewed traffic.
- 2.3.5 Aberdeen ATC will provide an ATS to crewed aircraft as usual.
- 2.3.6 Flylogix (or any other UA operator) will utilise a surveillance feed to enhance situational awareness and enable detection of all cooperative traffic.
- 2.3.7 In the later phases of the project, Flylogix may conduct multiple operations simultaneously, or an additional uncrewed aircraft operator may conduct operations concurrently with Flylogix. This will result in multiple uncrewed aircraft operations occurring at the same time. Since these operations will take place in unsegregated airspace, the goal is to generate evidence by accommodating uncrewed operations alongside regular crewed operations. With safety as our prime objective, all additional operators will have satisfied the CAA's rigorous Operational Safety requirements and be compliant with the rules of the TRA.

³ ENR 1.6 section 4.5.2. <u>Link to UK AIP</u>, please self-navigate using "Current AIP" button. The AIP website has dynamic links which mean the specific website URL changes at each AIRAC cycle. The extract in Section 8 Appendix on p.16 was current at time of writing.

2.4 Why is it designed like this?

- 2.4.1 Our design principle is to minimise the impacts on other airspace users. This is planned by minimising the overall active TRA volume through sectorisation, activating only those sectors relevant to the specific use-case task.
- 2.4.2 The generation of the TMZ and moreover a "recognised air environment" through Electronic Conspicuity reduces the requirement for crewed aircraft re-routing and increases the safety margins owing to the detection of all cooperative traffic by the UA, as well as overall situational awareness provided to the remote pilot.
- 2.4.3 We have designed the TRA ceiling to be lower than most routine air traffic movements in the region. We recognise that some air traffic movements operate below 1,500ft AMSL and would need to comply with the simple entry requirements for flights in the TRA.

3. What are the trial objectives/outcomes?

- 3.1 Safely integrate BVLOS traffic with crewed traffic
- 3.1.1 The airspace trial is to demonstrate the safe integration of uncrewed BVLOS operations in the unsegregated airspace environment.
- 3.2 Develop a solution for Integrated Traffic Management
- 3.2.1 Develop a solution that facilitates planning, strategic deconfliction and airspace management to support the UA/DAA ecosystem.
- 3.3 Develop situational awareness for airspace users in Class G
- 3.3.1 The provision of a "recognised air environment" increases the situational awareness of the of cooperative traffic enabling a safer operating environment development will be explored.
- 3.4 Inform future policy development
- 3.4.1 The data, information and experience gained in the live environment will inform the CAA in their development of new policies, standards, and procedures to reduce the impact of airspace segregation, with regard to BVLOS, surveillance and DAA.
- 3.4.2 This is the main justification for the trial, to help find ways to move away from disruptive TDAs into an environment in which both crewed and uncrewed can safely operate in an integrated manner.

4. What do we ask of you? What happens next?

- 4.1.1 We would like to invite your feedback on the design of the proposed airspace trial and any impacts it may have on you.
- 4.1.2 To provide any feedback, please look at Section 6 How to respond.
- 4.1.3 This will inform the development of the airspace trial area and how we would operate it this engagement document shows you our planned areas and participation requirements, but your feedback could change the design. All your feedback will be studied by us, and we will consider each point or emerging theme.

- 4.1.4 The formal application, including feedback information (and name-redacted copies of feedback received) will be published on the Civil Aviation Authority (CAA)'s airspace change public web portal, where all airspace changes are published.
- 4.1.5 Presuming a successful application, we intend to publish an Aeronautical Information Circular (AIC) which would be activated by NOTAM 24hrs before planned flying days.

5. Impact assessments

5.1 Typical North Sea air traffic: minimal

- 5.1.1 The trial is designed to have minimal impact on other air traffic operating in the North Sea. Flights above 1,500ft AMSL would be outside the planned TRA. Flights below 1,500ft AMSL would be automatically permitted enter the TRA provided they comply with the requirements in section 2.2 on p.8; no specific entry permission is required from Aberdeen ATC.
- 5.1.2 Our experience through Aberdeen ATC, the principal ANSP for the Central and Northern North Sea suggests the TRA impact to be minimal.

5.2 Military/maritime impacts: minimal

- 5.2.1 Military and maritime aircraft, by their nature, may be less conspicuous than commercial flights, and have different performance characteristics.
- 5.2.2 The ATS provided routinely by Aberdeen ATC enables the provision of traffic information and routine ATC procedures in this volume of airspace. We anticipate the impact to military operations to be minimal.
- 5.2.3 Recognising the Ministry of Defence as a key stakeholder, we have considered and incorporated early feedback from Defence Airspace & Air Traffic Management to further sectorise the TRA lateral volume (see Footnote 2 on p.6). We look forward to their formal response.

5.3 General aviation (GA) impacts: minimal

- 5.3.1 GA flights, for example private pilots flying small aircraft for sports and leisure, gliders, balloonists, microlights, hang/paragliders, and other similar airspace users, do not typically fly at significant distances offshore.
- 5.3.2 However, it is possible that such flights may transit the take-off and landing site, or the UA's flightpath to it.
- 5.3.3 The TRA activation and deactivation will be promulgated through the NOTAM service and Aeronautical Information Circular (AIC). We expect pilots wishing to transit through the TRA (below 1,500ft AMSL) to be compliant with the simple TRA ruleset in section 2.2 on p.8.
- 5.3.4 If they are unable to comply, they would need to avoid the TRA laterally, or vertically by flying above 1,500ft AMSL.
- 5.3.5 Where an aircraft intends to fly through the TRA (e.g. due to weather limitations or following the coastline near the take-off/landing stub) and is not fully compliant with the ruleset, Aberdeen ATC may approve a transit as described in paragraph 2.2.5 on p.8. Radio communications must be established.

5.4 Noise: minimal impact

5.4.1 As previously noted, the UA would fly mainly offshore, with the least possible flight over land. Typical cross-coastal flightpaths would be over very sparsely populated rural areas and there are no noise-sensitive sites in the vicinity of either take-off/landing site. Flights will occur during daylight hours in fair weather on any day of the week. On average we aim to fly four flights per week, per site – though some weeks may be more, some weeks fewer.

- 5.4.2 Specifically, the noise impacts of this UA would be \leq 45dB L_{ASmax} at 400ft AGL at a distance of 1km this is a low-noise UA.
- 5.4.3 As the UA will transit at 800ft AMSL this already-low noise impact would diminish further.
- 5.4.4 See sections 1.4 Figure 1 and 1.5 Figure 2 for operational diagrams illustrating the expected over-land flightpaths.
- 5.5 Biodiversity and tranquillity: minimal impact
- 5.5.1 The airspace change process requires us to identify certain types of potentially sensitive, designated environmental sites in the vicinity of each take-off and landing site. This is known as a Habitats Regulations Assessment screening. The types of site are:
 - Special Areas of Conservation (SAC) and possible SACs
 - Special Protection Areas (SPA) and potential SPAs
 - Ramsar sites (wetlands of international importance) and proposed Ramsar sites
 - Compensatory habitats
- 5.5.2 We have already engaged with NatureScot, the manager of such sites in Scotland. They have kindly provided feedback based on the following SAC/SPA information we supplied.
- 5.5.3 Via the Whinnyfold site, the flight would head east directly over the coast to the offshore task. It would return the same way. Overflight at 800ft is likely over:
 - Two SACs ("Buchan Ness to Collieston" ref UK0030101 and "Sands of Forvie" ref UK0013042)
 - Two SPAs ("Ythan Estuary, Sands of Forvie and Meikle Loch" ref UK9002221 and "Buchan Ness to Collieston Coast" ref UK9002491).
- 5.5.4 Via the Scatsta site, the flight would head east over sparsely populated land until crossing the coast/peninsulas/islands and finally offshore. It would return the same way. Occasionally it may be necessary to fly west before turning east. Overflight at 800ft is likely over:
 - Two SACs ("Yell Sound Coast" ref UK0012687 and "Sullom Voe" ref UK0030273)
 - One SPA ("East Mainland Coast Shetland" ref UK9020311)
- 5.5.5 For both sites, the overflight would be transitory as the aircraft crosses the coast to and from the offshore mission there are no plans for significant loitering over any of these areas, apart from the preparation and identification mentioned in paragraph 1.6.2 above.
- 5.5.6 NatureScot have already provided feedback regarding further assessment and mitigations against marine bird collision and disturbance at the "Buchan Ness to Collieston" SPA adjacent to Whinnyfold. This includes recommendations to climb the UA as high as possible as early as possible, while remaining away from the cliff edge habitat. These recommendations will be considered and we will invite further discussions with NatureScot during the early part of the engagement period.
- 5.6 Nearby airfields, airports, air navigation service providers (ANSPs): minimal impact
- 5.6.1 There are no airfields and airports very close to either Whinnyfold or Scatsta.
- 5.6.2 The nearest to Whinnyfold is Hatton, a small private strip 2 nautical miles (nm) northwest.



Figure 6 Hatton private strip - VFR map on left, Google Earth map on right

- 5.6.3 Buchan Aero Club at Peterhead Longside is 7nm north.
- 5.6.4 The nearest to Scatsta is Lerwick Tingwall, 15nm to the south.
- 5.6.5 Further south is Sumburgh, 33nm from Scatsta.
- 5.6.6 16nm northeast from Scatsta is Fetlar.
- 5.6.7 All these airfields are located outside of our proposed TRA. Therefore, minimal impact is anticipated.
- 5.6.8 15nm southwest of Whinnyfold is Aberdeen, the air traffic services of which are participating in this trial. Controlled airspace surrounds the airport, including the small airfield of Whiterashes, therefore all traffic within this region will be known to Aberdeen.
- 5.6.9 The TRA is planned to operate on the east side of the Scottish FIR boundary, within Norwegian airspace where air traffic services are delegated to the UK up to the Median Line⁴ (see Figure 5 on p.7).
- 5.6.10 Avinor and HIAL (including Sumburgh and Dundee Airports) are adjacent ANSPs and have been pre-engaged, with no objection received. We now seek formal feedback.

6. How to respond

- 6.1 Four weeks to respond, by 5th November 2024
- 6.1.1 The engagement period is from 8th of October to 5th of November, a period of four weeks.
- 6.1.2 Our justification for the 4-week period is that we have already pre-engaged several key stakeholders to ensure their awareness of this exercise, and the limited number of stakeholders overall, which we can manage directly.
- 6.1.3 Presuming a successful engagement and appropriate follow-up actions, the airspace change process timeline would allow us to start the trial from March 2025, maximising the opportunities for good flying weather in Spring and Summer.
- 6.1.4 We will email and, where necessary, telephone stakeholders to encourage responses from as many as possible.

⁴ The Median Line is the demarcation between UK mineral rights and Norwegian mineral rights from a continental shelf point of view.

- 6.2 The questions we ask you to consider please provide feedback
- 6.2.1 These questions are only guidance on what to consider while you formulate your response, please answer in any way you wish, short or long. If you have no comment and no objection to the trial as described here, we would be grateful for that feedback also.
 - 1. What do you think about the TRA's lateral dimensions and sectorisation?
 - 2. What do you think about the TRA's vertical dimensions?
 - 3. Bearing in mind the dimensions and the simple ruleset for entry, would the TRA impact your flight operations? How?
 - 4. Do you agree that environmental impacts (noise, biodiversity) would be minimal? What mitigations would you suggest?
 - 5. Is there anything else you'd like us to know?
- 6.2.2 We appreciate your time in considering our proposal and kindly request that you respond even if you have no comment and/or no objection.
- 6.2.3 Please respond via email <u>NAUACP@nats.co.uk</u>
- 6.2.4 If you prefer, use this email address to set up a call with us, and we can take your feedback directly.
- 6.2.5 Stakeholder engagement will close at the end of the day on Tuesday 5th November 2024.

7. Appendix: Stakeholder list and justification

- 7.1.1 The following list indicates the organisations with whom we are engaging, the group within which they fall, and the justification for inclusion.
- 7.1.2 This includes relevant members of the UK's National Air Traffic Management Advisory Committee (NATMAC) which is a non-statutory advisory body chaired by the CAA. The Committee is consulted for advice and views on any major matter concerned with airspace management and strategy matters.
- 7.1.3 However, NATMAC members not listed in Table 1 below were not considered relevant to the trial, either geographically irrelevant or their primary interest is very unlikely to be relevant. For example, the Isle of Man CAA is a NATMAC member but is geographically out of the TRA region, and NATMAC organisations representing airline interests would not be impacted by this trial.

Organisation	Stakeholder Group
Aberdeen Airport	Airport
NATS NERL's North Sea Helicopter Advisory Service	ANSP
HIAL (including Sumburgh and Dundee)	ANSP
Avinor	ANSP
СНС	Oil and gas helicopter operator in North Sea
NHV	Oil and gas helicopter operator in North Sea
Bristow	Oil and gas helicopter operator in North Sea
Offshore Helicopter Services UK Ltd	Oil and gas helicopter operator in North Sea
HeliOffShore	Association for the offshore helicopter industry
Air Task	Commercial operator flying over the North Sea
Gama Aviation	Commercial operator flying over the North Sea
2Excel Aviation	Commercial operator flying over the North Sea
PDG Helicopters	Commercial operator flying over the North Sea
Uni-fly	Commercial operator flying over the North Sea
Airspace4All	General Aviation
General Aviation Alliance (GAA)	General Aviation
Aircraft Owners and Pilots Association (AOPA)	General Aviation
Bristow Search And Rescue	Emergency Service/Search and Rescue
Joint Rescue Coordination Centre	Emergency Service/Search and Rescue
Scottish Ambulance Service – Special Task Desk	Emergency Service/Search And Rescue
Babcock Mission Critical Services Onshore	Helicopter operator
DAATM	MoD
Hatton airfield (vicinity of Whinnyfold)	GA airfield (private)
Buchan Aero Club (vicinity of Whinnyfold)	GA airfield
Fetlar Airstrip (vicinity of Scatsta)	GA airfield
NatureScot	Habitats and European registered biodiversity
Tingwall Airport (non-HIAL)	Airport with Flight Information Service Officers
Spaceport	Adjacent Spaceport
Airports UK (new name for Airport Operators' Association)	NATMAC member
Airfield Operators Group (AOG)	NATMAC member

Organisation	Stakeholder Group
Association of Remotely Piloted Aircraft Systems UK	NATMAC member
(ARPAS-UK)	
Aviation Environment Federation (AEF)	NATMAC member
BAe Systems	NATMAC member
British Balloon and Airship Club	NATMAC member
British Business and General Aviation Association (BBGA)	NATMAC member
British Gliding Association (BGA)	NATMAC member
British Helicopter Association (BHA)	NATMAC member
British Hang Gliding and Paragliding Association (BHPA)	NATMAC member
British Microlight Aircraft Association (BMAA)	NATMAC member
British Skydiving	NATMAC member
Drone Major	NATMAC member
Guild of Air Traffic Control Officers (GATCO)	NATMAC member
Honourable Company of Air Pilots (HCAP)	NATMAC member
Helicopter Club of Great Britain (HCGB)	NATMAC member
Light Aircraft Association (LAA)	NATMAC member

Table 1 Stakeholder list

Appendix: Aberdeen OSA extract from AIP 8.

4.5.2.4 Operating Procedures

4.5.2.4.1 General

4.5.2.4.1.1 Helicopter Procedures. Helicopter pilots wishing to use the service specified in paragraph 4.5.2.2 must file a flight plan. Pilots who have established two-way communication with the appropriate Sector and subsequently do not receive acknowledgement of a scheduled position report, should make every effort to relay the report via Ianother aircraft or agency. For flights within the same or adjacent field complexes, helicopter pilots should maintain RTF contact on the field, company or Traffic Area frequency. Position reports by civil helicopter pilots operating on HMRIs are to be based on distance from either Aberdeen or Sumburgh VORs, according to the departure or destination aerodrome. Position reports are only required if the flight is not receiving a radar service from the ATSU. In this instance, unless otherwise specified by the ATSU, an initial report is to be made on outbound HMRIs at 40 NM and then at 20 NM intervals, subject to the limitations of VHF cover. For inbound flights subsequent to the initial call, reports are to be made at the same 20 NM intervals according to the destination aerodrome. If the elapsed time between two reporting points exceeds 15 minutes, an additional report is to be made after 15 minutes elapsed time since the last report.

En-route position reports are to include the following information

- a. Callsign;
- b. Position (HMRI and range);
- c ALT or FL
- d. Position of next intended report.

On lifting from an installation or ship off-shore, the initial report is to include

- a. Callsign; b. Actual position and altitude:
- c. Requested HMRI and point of joining d. Requested altitude
- . Total persons on board.

4.5.2.4.1.2 Fixed-Wing Procedures. Pilots of civil and military fixed-wing aircraft intending to fly within the areas of responsibility of the above Sectors are strongly advised to make use of the services provided. Crews of wildlife and aerial survey aircraft should consider utilising notification procedures detailed at ENR 1.1.4 as well as contacting Aberdeen ATSU prior to commencing operations. Whenever possible civil aircraft should be flown above the Transition Altitude at the appropriate level. Pilots are advised that helicopters engaged on inter-platform flights within the same field complex normally operate at about 500 FT AMSL and frequently carry underslung loads which limit the pilots's ability to take sudden avoidance action.

Figure 7 Extract from UK AIP ENR 1.6 regarding Aberdeen Offshore Safety Area

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