Summary of Stakeholder Engagement

ACP-2020-28

16th July 2020

1. INTRODUCTION

Flylogix are completing up to 10 Unmanned Aircraft (UA) flights from Longside Airfield near Peterhead as part of a project supported by the CAA Innovation Sandbox. The operations will be conducted in September and October 2020 and will be wholly within a Temporary Danger Area (TDA). Flylogix have submitted an airspace change request (ACP-2020-28) to establish this TDA.

The flights will mainly be conducted over the sea. Longside airfield is three miles from the coast and the UA will transit to and from the coast via a route that does not overfly any buildings.

2. OJECTIVES OF THIS DOCUMENT

In line with the ACP process Flylogix have engaged with aviation stakeholders (airspace users, air navigation service providers and aerodromes) on the safety and operational viability of the proposed change.

This document summaries how the engagement was conducted and the results of the process.

3. PREVIOUS ENGAGEMENT

Flylogix completed BVLOS UAS flights, within a TDA, from Longside in 2019. This, in addition to planning for the flights in September 2020, meant that some engagement had been completed prior to the ACP process. Specifically

- Buchan Aero Club who operate Longside airfield were consulted to obtain permission to operate from the airfield. Additionally a set of procedures were agreed in 2019 to allow Flylogix to operate at the airfield with minimum disruption to others.

- NATS are a partner in the project. The NATS Aberdeen team have been involved in developing the concept of operations and the test programme. They agreed in advance of the ACP to provide a Danger Area Crossing Service (DACS), which they did in 2019, and have done for Flylogix operations in Shetland

- CHC helicopters are involved in the project as they are the helicopter operator for Total, who are a partner in the project. CHC are providing a helicopter for the test flights to test electronic conspicuity between the UA and a helicopter

- Through other similar flights Flylogix have developed procedures with Aeronautical Rescue Coordination Centre (ARCC) to cover a Search and Rescue (SAR) aircraft needing to enter the TDA

4. AUDIENCE

An exercise conducted to identify stakeholders who should be engaged in the proposed TDA design. This was done by considering four groups (Other air users, Aerodromes, ANSPs and Other) and using research and Flylogix's knowledge from 2019 to identify stakeholders. The list was also shared with NATS Aberdeen for comment.

4.1 Other air users

- **Helicopter operators.** There are four helicopter companies that fly from Aberdeen servicing the North Sea Oil and Gas industry (Bristow, CHC, NHV and Babcock). They all operate from Aberdeen flying out to the rigs typically at an altitude of 3,000ft or lower. We have engaged with all four operators.

- **Fishery protection and environmental monitoring.** Airtask operate a Fishery Protection aircraft and environmental monitoring aircraft that on occasion need to operate at low altitudes over the North Sea. We have engaged with Airtask directly.

- **General aviation.** Once out over the North Sea there is relatively little GA, particularly at low altitude. The section of the proposed TDA over land is relatively small (4 miles by 12) and from surface to 1,000ft. This section included Longside Airfield. Therefore, the decision was taken to engage with GA through Buchan Aero Club who operate Longside airfield as any GA impacted by the TDA will likely be coming out of or into Longside.

- **SAR** – There is a SAR helicopter based at Aberdeen operated by Bristow. In the event of a shout the SAR helicopter will need to access the airspace quickly. The helicopter is tasked by the ARCC and we engaged with them to get SAR input

- **MOD** aircraft may be operating in the area. Particularly offshore where there are military danger areas at higher altitudes. We have engaged with DAATM to get MOD feedback.

4.2 Aerodromes

- **Longside** is a former WW2 airfield where a small section of the runway is used by Buchan Aero Club for GA flying. We have engaged with Buchan Aero Club to get their feedback on the TDA. There are no other aerodromes within 10 miles of the proposed TDA

- **Aberdeen airport** is 20 miles to the South. We engaged with NATS Aberdeen who operate the tower to understand if there is any impact on the operations there.

4.3 ANSP

- **NATS Aberdeen** are the ANSP for the airspace the operations will be conducted within. They provide a service for all oil and gas helicopters in the area and have procedures in place to work with military aircraft operating nearby.

4.4 Others

- **Residents around Longside.** The airfield is surrounded by farmland with scattered houses. The residents of these houses are used to GA aircraft operating from Longside. The UA is relatively quiet with a measured sound level of 70dBA under the flight path, when the UA is flying at 800ft. This is the same level as a normal conversation. A flight plan has been developed that avoids overflight of any buildings. This will be followed in all flights and has been presented to the CAA in the OSC and included in Appendix 1. As the UA will not be overflying any buildings, is relatively quiet, the number of flights is small and the local residents are used to GA activity the decision has been taken to not engage directly with residents before the flights. We will monitor and record any feedback from residents. This process is described in Section 8.4.

- **Residents of Peterhead.** Longside is 2 miles inland of Peterhead. The UA will always fly to the North of Peterhead following the route in Appendix 1. The only potential impact on the residents of Peterhead is therefore if the flight paths of other air users under 7,000ft are impacted. We have specifically asked other air users if the TDA impacts their flight path over populated areas.

5. ENGAGEMENT APPROACH AND MATERIALS

There are a relatively small group of stakeholders, most of whom are companies and organisations, who may be impacted by the proposed TDA. The approach was therefore to engage directly with individuals at the organisations – initially by email and then following up as required.

Along with the initial email we sent a Briefing Sheet to each Stakeholder giving details of the proposed TDA. These are included in **Error! Reference source not found.** as links. In these B riefing Sheets we asked for feedback, specifically in four areas

- Does the proposed TDA impact the safety of your operations in any way?
- If so is there a change in the TDA that would remove or minimise this impact?
- Does the proposed TDA change alter traffic patterns under 7,000ft over inhabited areas?
- Are there any additional notifications or procedures that you require beyond the NOTAM and Danger Area Crossing Service?

6. LIST OF STAKEHOLDERS CONTACTED

Organisation	Name and role	Reason for engagement
Buchan Aero Club	[redacted]	Club Secretary at Longside Airfield
DAATM	[redacted]	Co-ordinate MoD response

ARCC	[redacted]	Task SAR helicopter
Airtask	[redacted]	Operate Fishery protection aircraft and NCAS Research aircraft
NATS Aberdeen	[redacted]	ANSP for area and are providing Danger Area Crossing Service
Bristow	[redacted]	Operate helicopters from Aberdeen to offshore oil and gas facilities
CHC	[redacted]	Operate helicopters from Aberdeen to offshore oil and gas facilities
NHV	[redacted]	Operate helicopters from Aberdeen to offshore oil and gas facilities
Babcock	[redacted]	Operate helicopters from Aberdeen to offshore oil and gas facilities

7. SUMMARY OF FEEDBACK

7.1 Buchan Aero Club

Proposed changes to TDA design	Notification of flight required, or additional procedures requested	Other feedback
None	Liaise with airfield before activating TDA – in particular flying school	Complete operations by 1200 if possible at weekends Would prefer weekdays if possible

Flylogix flew from Longside airfield for previous operations within a TDA.

The Club Secretary is the main point of contact for Flylogix. He had no feedback on the design of the TDA.

He asked that we liaise with him before activating the TDA by NOTAM. Additionally they would prefer operations during the week – but understand why it needs to be weekends with oil and gas helicopters. They would like operations to be completed by 1200 local on weekends

The full correspondence has been presented to the CAA.

7.2 DAATM

Proposed changes to TDA design	Notification of flight required, or additional procedures requested	Other feedback
None	None	Clarified that aircraft will be able to contact Aberdeen ATC for DACS

DAATM collated feedback from across the MOD. They had no comments on the design of the TDA itself.

They require no additional notification beyond the NOTAM. They confirmed that aircraft would be able to contact Aberdeen ATC for a Danger Area Crossing Service if required and highlighted that the area is used by oil and gas helicopters so the military are used to avoiding it.

The full correspondence has been presented to the CAA.

7.3 ARCC

Proposed changes to TDA design	Notification of flight required, or additional procedures requested	Other feedback
None	TOI being agreed	None

In line with other UA operations within TDAs, ARCC asked Temporary Operating Instructions (TOI) were developed to cover the situation where a SAR aircraft needed to enter the TDA when it was active. These TOIs are being worked up by Flylogix and ARCC based TOIs used for previous BVLOS flights.

The full correspondence has been presented to the CAA.

7.4 Airtask

Proposed changes to TDA design	Notification of flight required, or additional procedures requested	Other feedback
Yes – suggested increasing ceiling of TDA to 1,300ft to allow 500ft of separation to UA operating at 800ft	Yes. Agreed procedures to liaise with NCAS research aircraft and fishery protection to avoid impacting their operations	Weekends more quiet for them. Need a way of accessing the airspace quickly if required.

Airtask provided feedback on the TDA and suggested that the ceiling of the TDA be raised to 1,300ft. to give 500ft of separation between the UA operating at a maximum of 800ft and other aircraft.

Increasing the distance between the maximum altitude of the unmanned aircraft and the ceiling of the TDA would increase the volume of airspace in the TDA – risking restricting other air users. Flylogix's safety case is built around remaining within the TDA and we have put in place mitigations including a geofence to ensure this. The TDA is within Class G airspace, which has no fixed separation and other air users are able to select their own separation.

Flylogix therefore have decided to keep the ceiling of the proposed TDA at 1,000ft to minimise the utilisation of airspace

The NCAS atmospheric research aircraft and Fisheries Protection aircraft may be operating in the area. We have therefore agreed with Airtask to contact these teams by email before activating the TDA by NOTAM to ensure we are not impacting their operations.

In the event of the Fisheries Protection aircraft needing to enter the airspace while the TDA is active we have agreed to suspend our operations if required. Airtask have direct contact details for our team and Aberdeen ATC to facilitate this.

The full correspondence has been presented to the CAA.

7.5 NATS Aberdeen

Proposed changes to TDA design	Notification of flight required, or additional procedures requested	Other feedback
None	Procedures agreed in advance of Engagement and included in OSC Temporary Operating Instructions for controllers will be developed as part of the project	Confirmed weekends were preferred due to helicopter traffic and decision to fly in the week would need to be taken tactically

NATS Aberdeen, are a partner in the project and have been involved in designing the test programme and TDA.

There was no feedback on the proposed TDA design. Procedures will be agreed in advance for both the DACS and test that are being conducted.

NATS highlighted that there is lower helicopter traffic at the weekends and the flights should be conducted then if possible. If weather forces the UAS flights to the week then the situation will need to be managed tactically. Each evening NATS receive flight plans for the next day from all North Sea helicopters, so they will be able to determine and minimise the impact on helicopter traffic.

The full correspondence has been presented to the CAA.

7.6 Bristow

Proposed changes to TDA design	Notification of flight required, or additional procedures requested	Other feedback
None	Email notification requested when TDA activated	None

Bristow had no feedback on the TDA design. They highlighted that there are fewer flights at the weekend. They confirmed that the TDA would not impact flight paths over built up areas. They asked that they are notified by email of the activation so they can put information on their crew room noticeboard.

The full correspondence has been presented to the CAA.

7.7 CHC

Proposed changes to TDA design	Notification of flight required, or additional procedures requested	Other feedback
None	Not required	None

CHC operate helicopter for oil and gas operators from Aberdeen. They had no comments or feedback on the proposed TDA

The full correspondence has been presented to the CAA.

7.8 NHV

Proposed changes to TDA design	Notification of flight required, or additional procedures requested	Other feedback
None	Not required	None

NHV operate helicopters from Aberdeen. They confirmed that with a DACS the TDA would have no impact of the safety of their operations.

The full correspondence has been presented to the CAA.

7.9 Babcock

Proposed changes to TDA design	Notification of flight required, or additional procedures requested	Other feedback
None	Not required	None

Babcock had no objections or feedback to the proposal. They highlighted that with a DACS and telephone number for the flight team they would be able to safely manage the situation.

The full correspondence has been presented to the CAA.

8. CONCLUSION AND ACTIONS

8.1 TDA design

There was one comment on the TDA design – suggesting that the ceiling of the TDA in Segment A and C be increased to 1,300ft to allow 500ft separation between the ceiling and unmanned aircraft.

Flylogix have decided to keep the proposed ceiling in these segments at 1,000ft in line with previous TDAs and to minimise the amount of airspace within the TDA.

8.2 Flight path over urban areas at under 7,000ft

None of the stakeholders suggested that the proposed TDA would have any impact on flight paths over populated areas.

8.3 Notification and procedures

Some air users asked for notification, in addition to the NOTAM, or formal procedures to allow access to the airspace if required.

Actions to consult on timing of flights

- Airtask- Flylogix will email Airtask to ensure that there is no conflict with planned operations by NCAS or Fisheries Protection before activating the TDA through NOTAM
- Aberdeen ATC – NATS are part of the project and will be involved in the planning of flights and activation of the TDA. They will ensure the TDA is not activated at times when there is a significant number of helicopter flights planned and will provide a DACS for the TDA.
- Buchan Aero Club – Flylogix will work with Buchan Aero Club who fly at Longside to ensure minimal impact on their members flying – and crucially that all members are aware of the timing of operations.

Actions to notify the TDA is active

- Bristow – Flylogix will email Bristow to notify them of the activation of the TDA

Actions for setting up procedures to allow an aircraft to access the active TDA if required

- ARCC – Flylogix will finalise a TOI so that ARCC task a SAR helicopter into the airspace if required

8.4 Feedback and complaints received once TDA is in place

It shall be the responsibility of Ed Clay, as Flylogix Operations Director, to gather all feedback and complaints received when the TDA is in place and record them in a single log. All stakeholders in this document shall be notified of the contact details and there will be contact details for Flylogix in the AIC notifying the TDA and on the NOTAM.

APPENDIX 1 FLIGHT PATH OVER LAND

To minimise risk a specific flight path has been created within the inshore TDA which does not directly overfly buildings and avoids proximity to St Fergus Gas Venting Station. This flight path will be used to guide the UAS from the airfield to the offshore TDA segment and vice versa flown at an altitude of 800ft. A graphical representation of the flight path is shown below.

Over Land Flight Path Waypoints

Waypoint	Coordinates
Longside Airfield	57°30'56"N 1°51'39"W
Intermediate point 1	57°31'43"N 1°50'22"W
Intermediate point 2	57°32'37"N 1°49'44"W
Offshore TDA	57°34'33"N 1°42'39"W

Inshore TDA with White Flight Path Over Land