

## Appendix 1

## ATZ ESTABLISHMENT REQUEST

SUBMISSION DATE: 19<sup>th</sup> January 2024

## ATZ Sponsor Details:

	ACP Sponsor	Airport Operator/Licensee
Unit Name	HeliOperations Limited	Portland Heliport
Contact details	[REDACTED]	[REDACTED]
Phone:	[REDACTED]	[REDACTED]
E mail:	[REDACTED]@helioperations.co.uk	[REDACTED]@helioperations.co.uk
	<b>Consultancy conducting the ACP application on behalf of the Change Sponsor (See above)</b>	
Consultancy:	Osprey CSL	
Name	[REDACTED] (Senior Consultant)	
Phone:	[REDACTED]	
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**Submission versioning / updates**

This document is an updated and reissued submission of the Portland ATZ/FRZ airspace change proposal (ACP 2022-050). To denote amendments in this version of the submission (Issue2), all editorial additions and modifications are presented in green text. Content deletions will be denoted by an arrow in the margins ←.

Issue	Date	Details of Change
2	1 <sup>st</sup> March 2024	1. Updated Section 2 - Consideration of Other Factors, 2. Inserted Annex A & B - Volume of Traffic Study (GA).
1	19 <sup>th</sup> January 2024	Initial Issue

## 1. Stage 1

### 1.1 Statement of Need

**Insert statement of need details from submitted DAP 1916.**

#### **Establishment of the Portland Heliport Air Traffic Zone (ATZ).**

Portland Heliport is located within Class G Airspace near Portland Harbour, Dorset, and currently comes under the broad jurisdiction of the Military Aviation Authority (MAA). The Heliport is an ex-military establishment and has been operated by HeliOperations Ltd since 2017 and their current focus is to deliver flying training of Search and Rescue Pilots to the Federal German Navy in Sea King Mark 5 aircraft.

The Heliport is utilised 5 days a week, with occasional weekend activity, for flying training and supports the UK MOD including the Royal Navy and Joint Helicopter Force whilst they conduct operations, including those within the Portland Danger Area complex, which can often be at short notice, or out of hours. At present, a workstream is underway to transition Portland Heliport from MAA to the CAA regulatory oversight and includes the provision of upgrading the existing Air-Ground Service to Aerodrome Flight Information Service (AFIS).

Due to the nature of the flying training operations at the Heliport, and to improve safety during the critical stages of flight for aircraft with significant wake vortex, HeliOperations Ltd wish to establish an Aerodrome Traffic Zone (ATZ) to assist in protecting the aerodrome traffic on the maneuvering area and air traffic in the immediate vicinity of the Heliport during landing/take-off. In addition, the establishment of an associated Flight Restriction Zone (FRZ) of the same dimensions as the proposed ATZ would also enhance safety for other airspace users within the vicinity of the aerodrome and further protect users of the aerodrome during the critical stages of flight.

Both the ATZ and FRZ coupled with an AFIS would reduce the potential for an incident in the vicinity of the aerodrome as pilots and operators would be able to obtain information from Portland Heliport to enable their flights to be conducted safely within the Zone. Furthermore, there would be an increase in situational awareness of known traffic in close proximity to the heliport by those transiting by maintaining a listening watch.

It is understood that the establishment of an ATZ will be progressed as a Level 2C airspace change in accordance with CAP 1616 Airspace Design and it is assumed that this proposal would be considered in accordance with the CAA SARG ATZ Policy dated December 2019.

### 1.2 **Date of assessment meeting/teleconference or e-mail confirmation from the CAA confirming that the proposal falls within the Airspace Change Process and informing the sponsor that Appendix 1 should be submitted: 05 Oct 2022**

## 2. Stage 2

### 2.1 Options Appraisal.

#### Options:

##### Options proposed and why.

HeliOperations Ltd, the operator of Portland Heliport, have identified that the 'Loss of Safe Separation with other airspace users' is one of their top six significant risks that represents a potential hazard to the heliport operation. To address this risk, HeliOperations Ltd have instigated an airspace change proposal that aims to address the requirement to protect air users, particularly during the critical stages of flight when aircraft are departing and arriving at Portland Heliport.

During consideration of mitigation options for the identified risks, the following potential solutions were considered:

- a. **Option A - Do Nothing.** This would not address any of the communication, control and safety concerns that led to this ACP.
- b. **Option B - Propose an ATZ.** An ATZ is defined as a cylindrical volume of airspace around a licensed civilian aerodrome. An ATZ is established to provide protection to aircraft during the critical stages of flight when departing, arriving, and flying in the vicinity of an aerodrome. As the 'Do Minimum' option, an ATZ would provide access to airspace in accordance with Rule 11 and this solution would address some of the communication and safety concerns and reduce the risk.
- c. **Option C - Propose an ATZ, with a collocated FRZ.** The addition of an FRZ which is defined as a cylindrical volume of airspace which mirrors the dimensions of an aerodrome ATZ. The establishment of an FRZ<sup>1</sup> would further protect the heliport from unauthorised drones and UAVs operating without permission within the ATZ and within the vicinity of the Portland Heliport.

##### Option selected and why.

Due to location of Portland, the nature of the flying training operations at the Heliport, and to improve safety during the critical stages of flight for aircraft with significant wake vortex, HeliOperations Ltd have elected to progress with Option c and seek to establish an **ATZ with a co-located FRZ**. Option c was elected as the collocated ATZ and FRZ will provide the safety mechanisms necessary for both heliport operations and for air users operating in the vicinity.

The establishment of an ATZ and a co-located FRZ will provide the following specific benefits:

- Improved positive two-way communication between Portland, military and GA users.
- Increased situational awareness due to the provision of published heliport and traffic information during ATZ opening hours.
- Enhanced mitigation to reduce the likelihood of loss of separation and reduce the likelihood of a possible Airprox and/or Mid-Air Collision.

##### Initial Options discounted and why.

- **Option A.** This option was discounted as 'no action' would not address the existing safety concerns.
- **Option B.** The establishment of an ATZ, without an FRZ, would partially improve safe separation of air users at the heliport. However, it would not fully mitigate the safety concerns associated with drone activity in the vicinity of the heliport.

## Options (Continued):

### Development of Option C

During the engagement phase of this ACP the correspondence and feedback from the MOD Stakeholder DAATM generated a further development of Option C into two distinct subset options:

- **Option C(i).** The establishment of a standard 2nm ATZ, and collocated FRZ (based on the Portland Heliport Aerodrome Reporting Point (ARP)). This option would include an active ATZ overlap area of EG D014 but would cede primacy of the overlapped area to the DA Controlling Authority during its activation times. This option would require an agreement (MOU or LOA) to determine controlling authority periods between the proposed ATZ and EG D014 (Portland).
- **Option C(ii).** The establishment of a nonstandard 2nm ATZ, and collocated FRZ (based on the Portland Heliport ARP). The lateral limits of the nonstandard ATZ /FRZ will contour the boundary of EG D014.

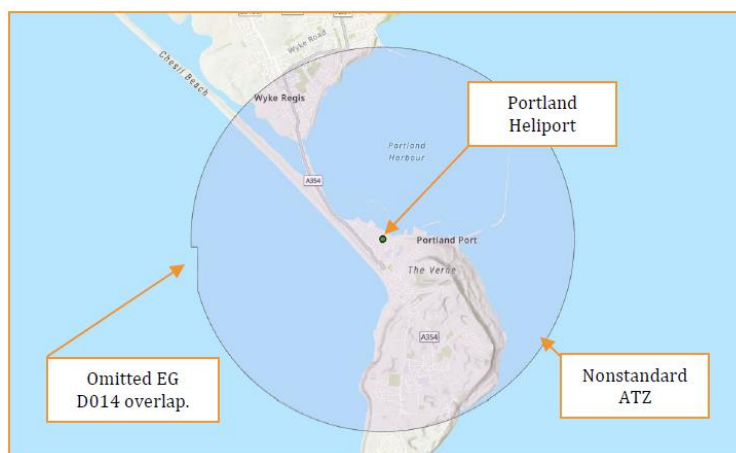
### ← Option discounted and why

- **Option C(i).** This option retains the standard 2nm dimensions of a standard ATZ/FRZ. However, any boundary overlaps between EG D014 and the proposed ATZ adds complexity associated with divided controlling authorities. DAATM (MOD) have stated that during the operational timings of the danger area the ATZ overlap area would be ceded to the danger areas controlling authority. However, during non-activation timings of the danger area, the Danger Areas Crossing Service (DACS) stipulates, in the Civil AIP, a continual controlling authority to Swanwick Mil via London Information frequency. This option would require a formal Letter of Agreement (LOA) or Memorandum of Understanding (MOU) between both parties to be agreed prior to ATZ/ FRZ activation. This option has been discounted for the following reasons:
  - The overlapping airspace could cause confusion for airspace users.
  - The election of Option cii will ensure non-overlapping airspace will minimise misunderstandings and support the original ACP safety objective (Safe Separation).
  - Option cii is DAATM's (MOD) preferred choice of the two options.

### Option taken Forward.

The following option has been taken forward for consideration:

- **Option C(ii).** The establishment of a non-standard 2nm ATZ and collocated FRZ (based on the Portland Heliport ARP). The lateral limits of the non-standard ATZ/ FRZ will contour the boundary of EG D014.



**Other Factors of Consideration**

Throughout the varying stages of this ACP process the following factors were evaluated to understand any other potential effects on the proposed design options. Each were investigated and considered to have no impact on the airspace options included in this submission.

**a. Wide Street Helicopter Landing Site:**

The NATs Visual Flight Rules (VFR) chart (Figure 1) depicts a Helicopter Landing site symbol due south of the Portland Heliport. An open-source investigation by the CS found that the Portland Engineering Company at one point in its history used this location to operate an HLS, along with a windsock. Today, both an online search of GoogleEarth and an Internet search found only commentary evidence of this HLS in 2010. The CS has deemed the site inactive and thus did not include the HLS operator as a stakeholder during the ENGAGE Phase of the ACP (See Collate & Review – Annex 1 for a list of Key Stakeholders)

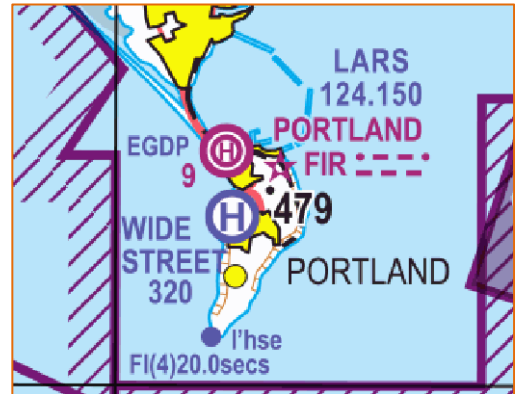


Figure 1 – Portland Peninsula (NATS VFR Chart - March 2023))

**b. HM Prison Flight Restriction Zones:**



Figure 2 - Location of the HM Prison FRZ on Portland.

The CS is aware that UAS FRZs over prisons will be established and implemented in 2024. The new measures have been put in place to improve security at HM Prisons in accordance with the Air Traffic and Unmanned Aircraft Act 2021 (ATUMA) and the Prison Act 1952. The new FRZ's are a dedicated security area that restrict drone operations within 400m of an HM Prison; this aims to stop contraband (drugs & weapons) entering prisons. The Portland airspace change proposal includes a FRZ which will encompass both HM Prison FRZ's on the Portland peninsula (Figure 2) up to 2000ft ALT, compared against the HMP FRZs published upper limit (Figure 3). Stakeholder feedback from the HM Governor expressed his support of the Portland Heliport FRZ as it would further 'improve security' around the vicinity of his prison.

The HMP FRZ and the Portland FRZ have been deemed by the CS to be two distinct mechanisms; 1) The Portland FRZ is seeking to improve aviation safety against UAS activity, and 2) the HMP FRZs are established to improve security (a government policy). When considering UAS access to the FRZs, the UAS operator should contact Portland Heliport for access. If access is granted, the UAS operator will only be permitted to operate outside HMP FRZs for security reasons. Should the UAS operator require entry within the HMP FRZs, then they should contact the delegated authority (Table 1 – column 3) to discuss their UAS FRZ access. The CS believes that no responsibility or facilitating role should be placed on the Portland Heliport operator to manage access to the HM Prison FRZs.

EGRU026 HMP PORTLAND 503323N 0022549W - 503325N 0022513W - 503306N 0022455W - 503247N 0022444W - 503243N 0022529W - 503306N 0022556W - 503323N 0022549W	Upper limit: 800 FT ALT Lower limit: SFC	HMP Restricted airspace active H24. Unmanned aircraft flight not permitted unless permission has been granted by HMPPS. HMPPS email: drone.RFZapplication@justice.gov.uk SI 2023/1101 Site elevation: 382 FT AMSL
EGRU027 HMP THE VERNE 503359N 0022615W - 503358N 0022546W - 503333N 0022528W - 503320N 0022612W - 503326N 0022617W - 503327N 0022640W - 503351N 0022636W - 503359N 0022615W	Upper limit: 900 FT ALT Lower limit: SFC	HMP Restricted airspace active H24. Unmanned aircraft flight not permitted unless permission has been granted by HMPPS. HMPPS email: drone.RFZapplication@justice.gov.uk SI 2023/1101 Site elevation: 476 FT AMSL

Table 1 – Portland HMP FRZs extracts from UK Civil AIP (22 Feb 2024)

### 3. Stage 3

#### 3.1 Engagement and Sponsor Confirmation Statement

The Sponsor is to ensure engagement material and copies of all responses are submitted with this application.

As sponsor we confirm that:	
<ul style="list-style-type: none"> <li>following engagement with the organisations listed, no objections to the establishment of an ATZ and FRZ have been received.</li> </ul>	
Sponsor: HeliOperations Limited	Aerodrome: Portland Heliport (Operated by HeliOperations Ltd)
Name: [REDACTED] (Osprey CSL Consultant working on behalf of Change Sponsor)	Name: [REDACTED] (Osprey CSL Consultant working on behalf of Portland Heliport)
Date: 01/02/24	Date: 01/02/24

### 4. Stage 4

#### 4.1 ATZ Submission Details

Requirements	Detail to Be Submitted by Sponsor
ATZ Datum	<b>(Non-standard ATZ)</b> 50 34 0.0N 2° 30' 6.18W - 50 34 0.0N 2 30 0.0W - 50 33 33.32N 2° 30 0.0W thence anti-clockwise by the arc of a circle radius 2 NM centred on 50 34 04N 002 26 58W to 50 34 0.0N 2 30 6.18W. Upper Limit: 2000ft AGL. Lower Limit: SFC. Class: G. Elev: 160ft.
FRZ Co-ordinates	<b>(Non-standard FRZ)</b> 50 34 0.0N 2° 30' 6.18W - 50 34 0.0N 2 30 0.0W - 50 33 33.32N 2° 30 0.0W thence anti-clockwise by the arc of a circle radius 2 NM centred on 50 34 04N 002 26 58W to 50 34 0.0N 2 30 6.18W. Upper Limit: 2000ft AGL. Lower Limit: SFC. Class: G. Elev: 160ft.
Length of Longest Runway	FATO (02/20) 201 Metres.
Airfield Status: MOD / EASA certified / National Licensed / Unlicensed	National Licensed Heliport (since Oct 2023)
Hours of Operation of the ATC, FIS or AGC facility	Monday - Thursday 0900-1600 (0800-1500Z) and Fri 0900-1200 (0800-1100Z). Outside Hours by NOTAM.
Detail of adjacent / overlapping airspace and IFR/VFR traffic patterns	A standard 2nm ATZ based on Portland Heliport ARP, would overlap EG D014 (Portland) by approx. 63,000 Sq. Metres (See Figure 3). To improve safety and mitigate any air user confusion regarding the controlling authority between Portland's proposed ATZ /FRZ and EG D014, during their operational hours, a non-standard ATZ /FRZ option is preferred. The non-standard ATZ will be based on a 2nm ATZ with any volume of airspace overlapping ED D014 omitted from the proposed ATZ/ FRZ's lateral limits. There are no adjacent/ overlapping IFR/ VFR traffic patterns in the vicinity.

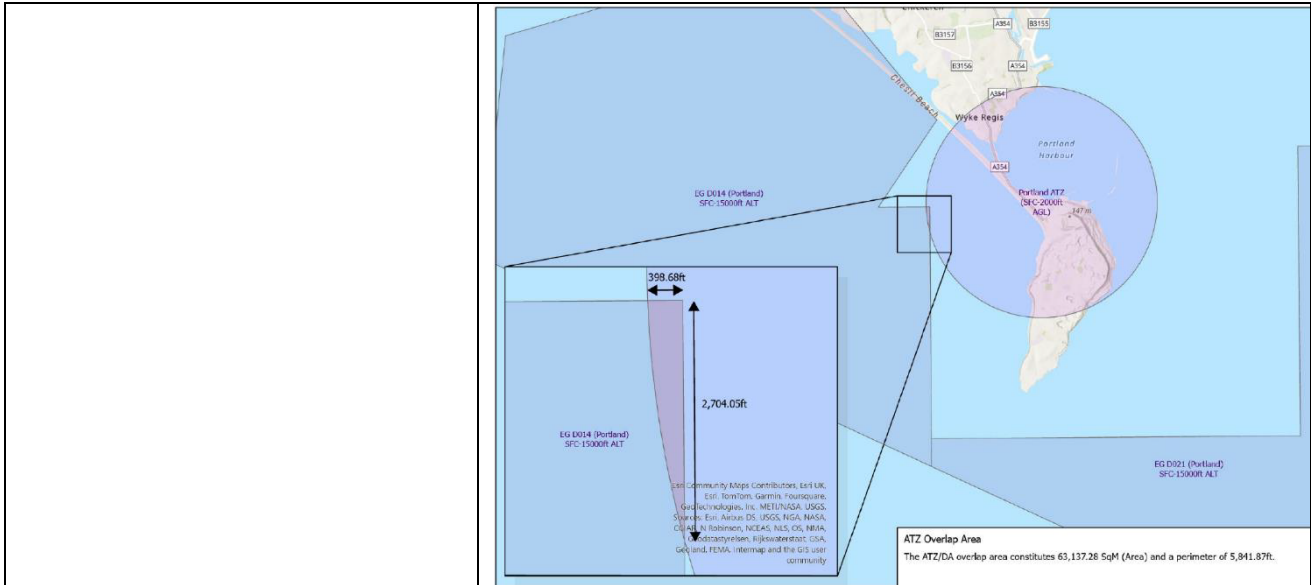


Figure 3 - Proposed Portland Heliport ATZ overlap of EGD 014.

Detail of other aviation activity within vicinity of proposed ATZ

- a. Recreational Air User Activity - Paragliding Activity regularly operates on the Northern and Southern coast of the Portland peninsula, SE of Portland Heliport.
- b. Military Activity – UK Military & NATO rotary air systems regularly utilize Portland for refueling and/ or flying training activities.
- c. General Aviation (GA) Activity – a study was conducted to ascertain the volume of transponding and tracked air users in the vicinity of Portland Heliport below 3000ft out to a distance of 26nm from Portland’s ARP. See Annex A for a summary of the study report.

Unit based movements data

The following Portland Heliport air movements cover the period of 01/01/23 to 12/12/23.

- (a) Total Inbound and Outbound Flights:**560**
  - (b) Total Inbound - Private & Emergency Services aircraft: **39** (30x Fueling, 4x Touch & Go activity, 1x Landing, and 4x none specified)
  - (c) Total Inbound - Military aircraft: **241** (205x Fueling, 31x Touch & Go activity, and 5x none specified)
- Cancelled inbound activity:
- (d) Total military cancelled inbound air movements: **116** (106x Fueling, and 10x Touch & Go activity).
  - (e) Total private & emergency services cancelled inbound air movements: **1** (2x Fueling, 1x Touch & Go activity, and 1x non specified).

Note: (d) & (e) demonstrates the potential of a further 232 inbound and outbound air movements which could be included in the volume of traffic, had the aircraft operators not elected to cancel their requirement to use Portland Heliport.

<b>AIP Amendments:</b>	
Changes to (AD 3.17) where appropriate (licensed aerodromes only)	Not applicable. Information pre-exists in UK Civil AIP.
Revisions to chart: a. AD 3-EGDP-4-1 – Portland Heliport inbound/outbound Flight Procedures	
Any other amendments:	<ul style="list-style-type: none"> <li>a. ENR 2.2 Other Regulated Airspace (ATZ)</li> <li>b. ENR 5 Navigation Warnings (FRZ)</li> <li>c. AD 3.16 (EGDP) Air Traffic Services Airspace (ATZ/FRZ)</li> </ul>

When complete, please return with safety assessment and supporting maps to  [@caa.co.uk](mailto: @caa.co.uk).



### Annex A - Volume of Traffic General Aviation Study - Summary

A study was conducted in an attempt to understand the volume of traffic and the air user activity in the vicinity of the proposed Portland ATZ/ FRZ.

#### Criteria

This study was conducted over a summer period between 1<sup>st</sup> to 7<sup>th</sup> August 2023. This period was selected as it is highly likely to see higher volumes of GA activity due to the better weather conditions. The study area represented a 26nm circumference around Portland and captured all transponding/ tracked aircraft activity operating within or crossing the study area at or below 3000ft ALT. The study utilised data from Flight Radar 24 web services to compile tracked and/ or transponding aircraft movements.

#### Findings

The study found that 179 air movements operated inside the study area during this period (Table 1) which met the above criteria. From the total study air movements captured, only 10 transponding air movements are recorded as having entered the proposed dimensions of the Portland ATZ/FRZ. Table 1 uses brackets (x) to denote the number of air movements, from the daily total which entered the proposed ATZ/FRZ airspace dimensions. Figure 4 displays the 10 air movement routes captured during the entire study period.

Organisation / Ownership	1 <sup>st</sup> August	2 <sup>nd</sup> August	3 <sup>rd</sup> August	4 <sup>th</sup> August	5 <sup>th</sup> August	6 <sup>th</sup> August	7 <sup>th</sup> August
Ministry of Defence / Military Other	6 (1)	2	4	2	0	0 (1)	3 (2)
National Grid / Infrastructure / Services	2 (2)	3 (1)	1 (1)	2 (1)	4	2	5
Private Ownership / Unknown	9	1	15	39 (1)	2	49	28
<b>TOTAL</b>	<b>17</b>	<b>6</b>	<b>20</b>	<b>43</b>	<b>6</b>	<b>51</b>	<b>36</b>

Table 1 – Summary Table of Total Air Movements which met Study Criteria

Heat maps representing the captured air movements for each of the 7-day study can be found in the Annex B.

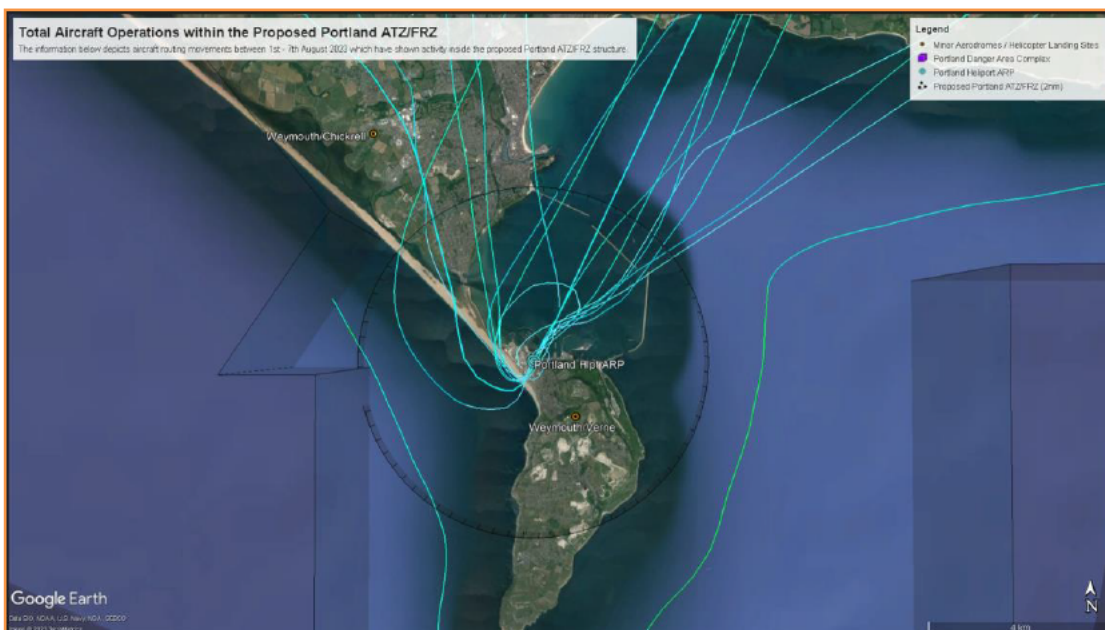


Figure 3 – Heat map of air movements entering a proposed ATZ/FRZ.

## Volume of Traffic General Aviation Study (Annex A continued)

### Categorisation and Themes

The table below shows a breakdown of the type of air users operating within and/ or crossed through the proposed ATZ/ FRZ dimension area during the study period.

Organisation / Ownership	Frequency (Count)	Percentage (%) of air movements inside the Proposed ATZ/FRZ
Ministry of Defence / Military Other	4	40%
National Grid / Infrastructure / Services	5	50%
Private Ownership	1	10%

Table 2 – Transponding/tracked Aircraft Type within proposal Portland ATZ/FRZ

The study showed that of the 10 transponding aircraft to enter the proposed ATZ/ FRZ airspace dimensions, 8 of the air movements qualified as a Portland Heliport arrival/departure. All remaining air movements crossed through the proposed airspace.

It is worth stating that aircraft operating in Class G airspace and below FL100 have no requirement, beyond safe airmanship, to operate a transponder. The above study, although based on tracked and transponding air movements, provides an indication of aircraft traffic intensity in the vicinity of the proposed Portland ATZ/ FRZ.

### Annex B – GA Study: Daily Heatmaps of Transponding Air Movements

This annex contains a total of seven heat maps each representing a day of study. The heat maps capture daily air movements within the study criteria between 00:00 – 23:59 hours on each day.

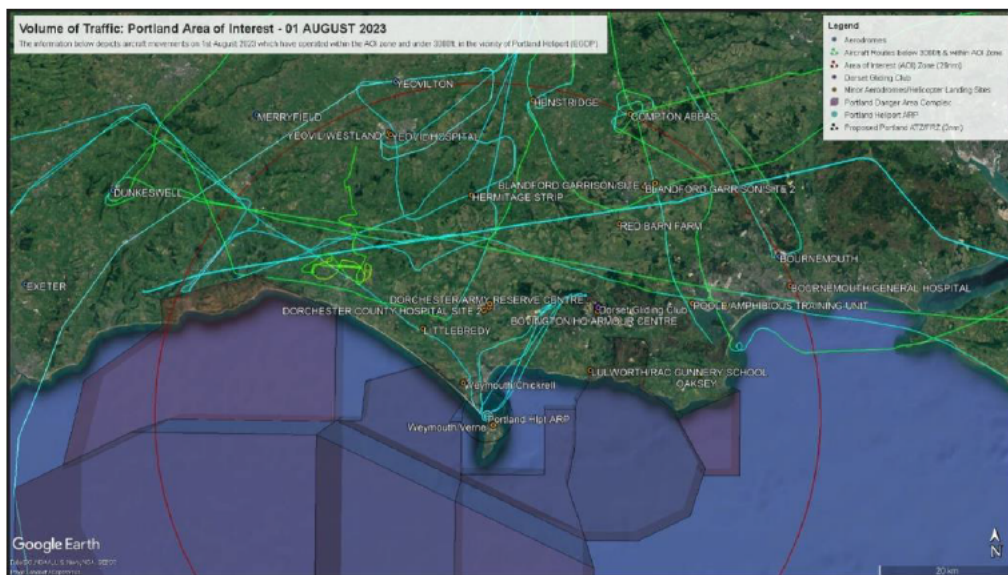


Figure 5 – Heat map of air movements on 1<sup>st</sup> August 2023.

### Volume of Traffic GA Study - Annex B (continued)

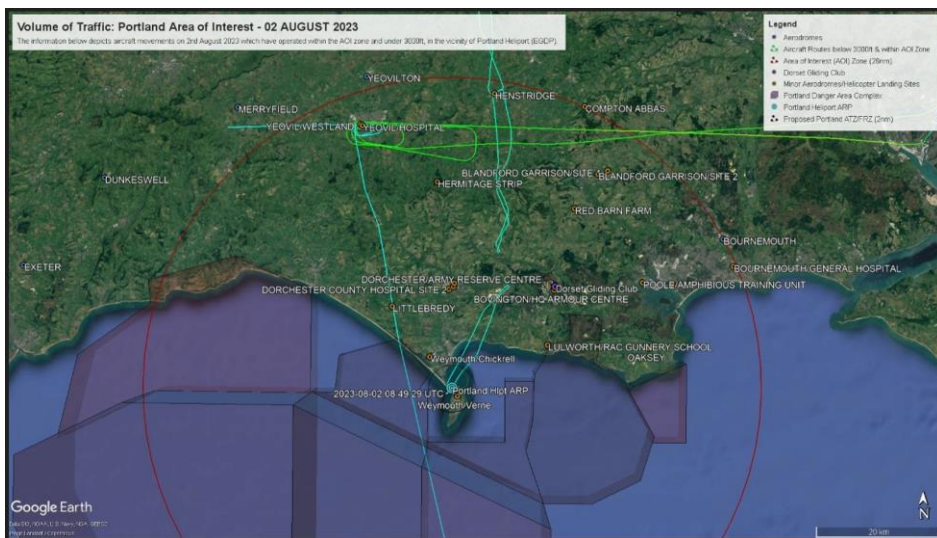


Figure 6 – Heat map of air movements on 2<sup>nd</sup> August 2023.

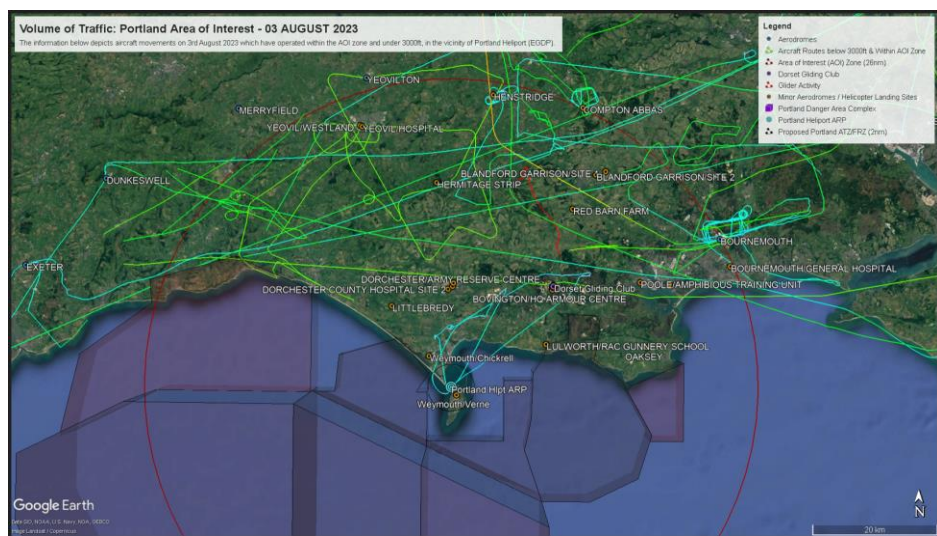


Figure 7 – Heat map of air movements on 3<sup>rd</sup> August 2023.

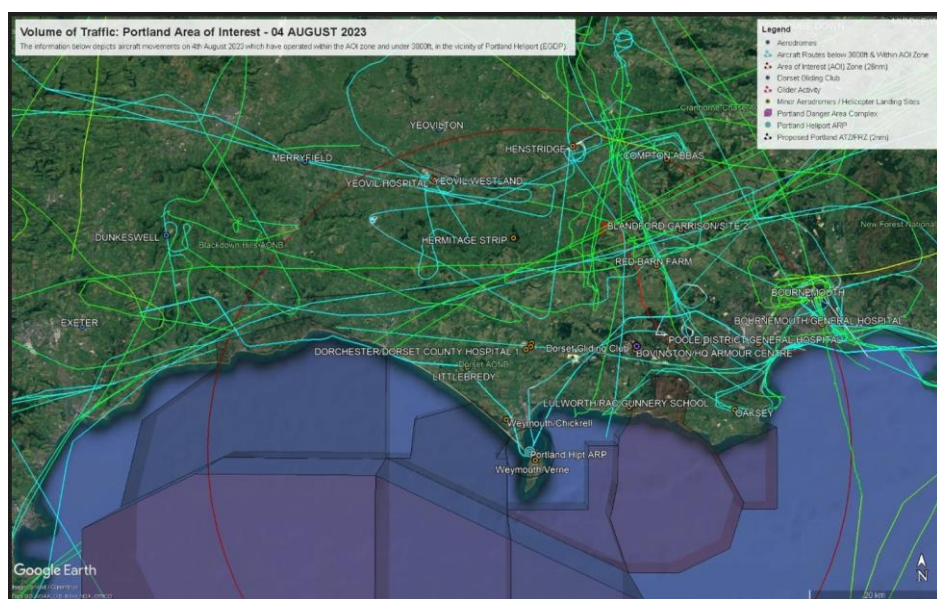


Figure 8 – Heat map of air movements on 4<sup>th</sup> August 2023.

Volume of Traffic GA Study - Annex B (continued)

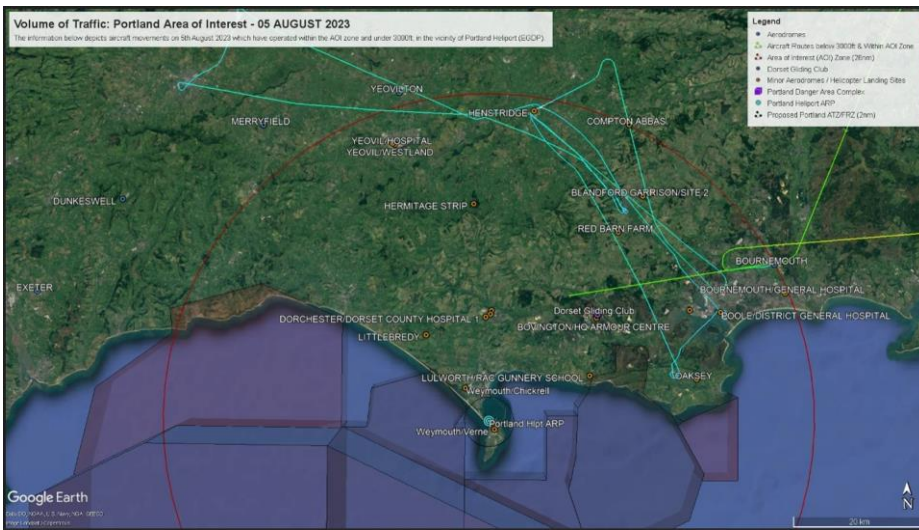


Figure 9 – Heat map of air movements on 5<sup>th</sup> August 2023.

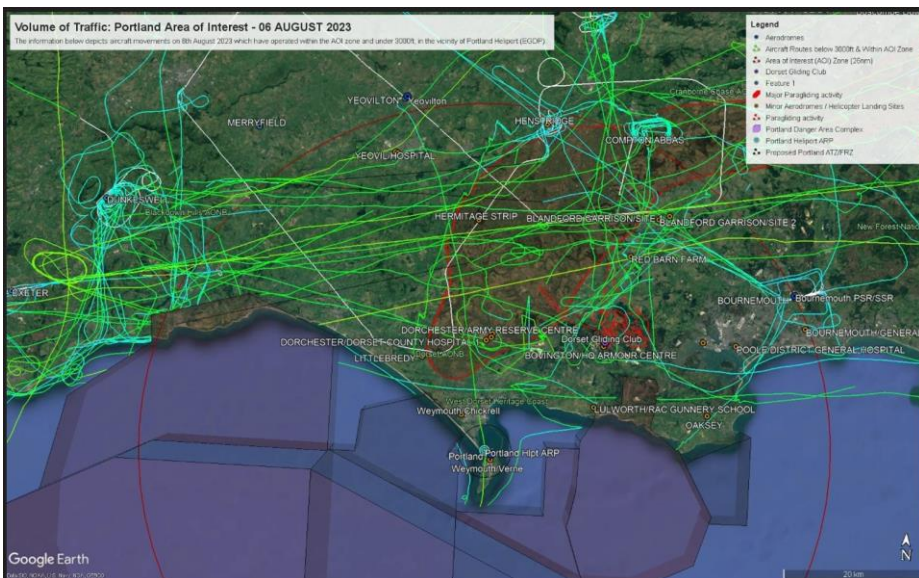


Figure 10 – Heat map of air movements on 6<sup>th</sup> August 2023.

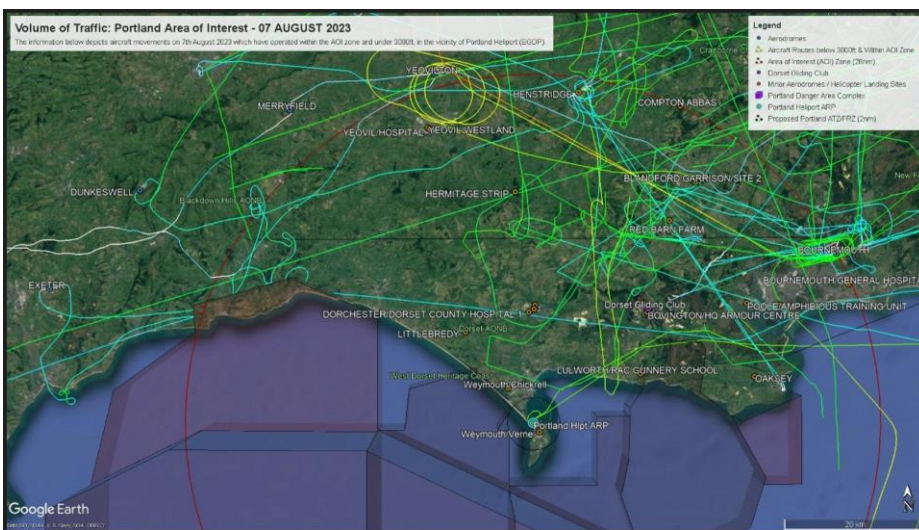


Figure 11 – Heat map of air movements on 7<sup>th</sup> August 2023.

**SARG Airspace Regulatory Approval use only.**

Serial	Design Check	Design Approved/Not Approved	Verified By (Case Officer Signature)
1	Ascertain that the aerodrome for which the ATZ is required conforms with one of the establishment criteria prescribed in Rule 11.		
2	Verify ATZ datum, normally the centre of the longest runway or for grass airfields, the centre of the landing area.		
3	<p>Visit the unit applying for the establishment of the ATZ and any other aerodrome or aviation activity site that might be affected by the planned ATZ.</p> <ul style="list-style-type: none"> <li>• Gather statistical evidence of existing unit-based movements and adjacent unit movements information on the respective levels of activity, taking into account the type of aircraft involved.</li> <li>• Obtain details of any co-ordination procedures (MOU, LOA) that might exist and copies of extant documents to provide evidence of co-ordination for future use.</li> </ul>		
4	Determine size of the proposed ATZ in accordance with Article 5 of the Air Navigation Order 2016 and establish the hours of operation of the ATC, FIS or AGC facility.		
5	<p>Liaise with Surveillance &amp; Spectrum Management (S&amp;SM) for frequency allocation requirement.</p> <p>(Note: when an ATZ is disestablished the continued requirement for the frequency is to be reviewed and FS Spectrum and Surveillance Policy informed if no longer needed).</p>		
6	<p>Ensure that the proposed ATZ is clear of:</p> <ul style="list-style-type: none"> <li>• Established or planned controlled airspace.</li> <li>• Notified areas, danger areas, restricted areas, HIRTAs</li> </ul>		

7	Determine if the proposed ATZ lies close to another aerodrome or overlaps an associated ATZ or MATZ. Consider the need for operating agreements with adjacent aerodromes or activity centre.		
8	Determine if the proposed ATZ affects the established IFR or VFR traffic patterns of other aerodromes.		
9	Determine through liaison with DAATM what impact the proposed ATZ will have on military low-level operations.		
10	Determine whether there is any other aviation activity (gliding, parachuting, microlite site, etc.) in the vicinity of the proposed ATZ.		
11	When the above co-ordination has been completed, promulgate to NATMAC via a Consultative Letter		

Change recommended by:

**Name:**

**Date:** / /

Change referred to sponsor for the following reason (insert details)

Change approved by:

**Name:**

**Appointment:**

**Date:** / /