

**AIRSPACE CO-ORDINATION NOTICE**

Safety and Airspace Regulation Group



<b>ACN Reference:</b>	<b>Version:</b>	<b>Date:</b>	<b>Date of Original</b>
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<b>AR-2024-4625</b>	<b>1.1</b>	<b>24/10/2024</b>	<b>05/07/2024</b>
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Civil Aviation Authority

# AIRCRAFT EMISSION DATA SURVEY FLIGHT (REVEAL)

## NDS

**Subject to NOTAM: No****Date(s) of activity/Validity:**1<sup>st</sup> October 2024 – 1<sup>st</sup> August 2025**Times - ALL TIMES UTC<sup>1</sup>**

0930 – 1800

**Vertical Limits:**

Between FL 250 – FL 350 (RVA) – See section 2

**Allocated Mode 3A (SSR):**

Tactically Issued by ATC

**Aircraft Details:**

Type: BAe146-301  
Callsign: METMAN1 (G-LUXE)

**NDS Approved:****Yes – Subject to the conditions in section 2****Event Sponsor(s):**

Directflight Ltd  
ARA Ops Co-ordinator (Attn: D Simpson/ B Black)  
Building 146,  
Cranfield Airport  
Bedfordshire  
MK43 0AL  
Ops Office 01234 817930  
D.Simpson / 07799 430802  
B.Black / 07464 549161  
ARA.Ops@airtask.com

**Aircraft Operator(s):**

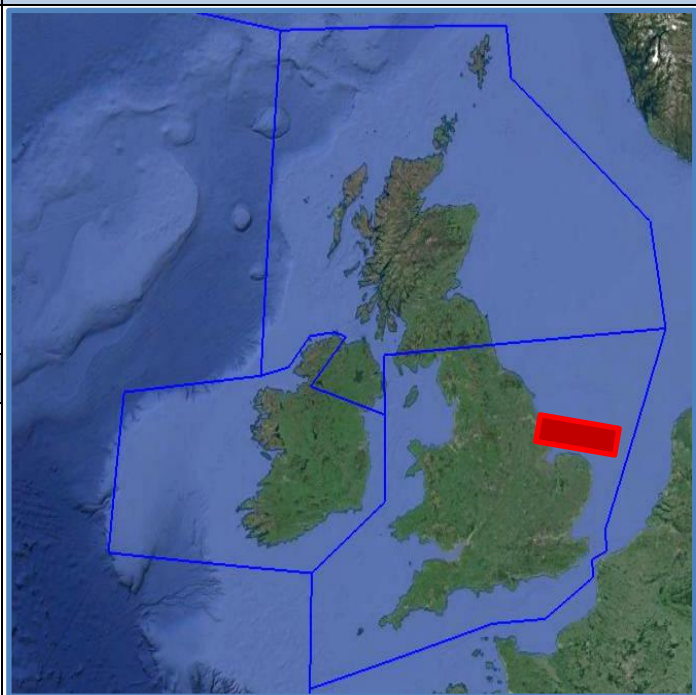
Directflight Ltd  
Building 146,  
Cranfield Airport  
Bedfordshire  
MK43 0AL  
01234 817930  
ARA.OPS@airtask.com

**ATS Units/****Controlling Agencies:**

Prestwick ACC	01294 655300
Swanwick ACC	01489 612420
Swanwick Mil (78 Sqn) East	01489 612408

**Airspace Reservations:**

Nil

**Departure/Destination Aerodrome(s)****ACN Issued by:**

<sup>1</sup> **AIS Temporal Reference System:** Daylight saving time is UTC plus 1 hour. The expression "summer period" indicates that part of the year in which "daylight saving time" is in force. The other part of the year is named the "winter period". Times applicable during the "summer period" are given in brackets.

EGTC - Cranfield Airport

AU3

## SECTION 1: CO-ORDINATION ARRANGEMENTS (GENERAL)

1. The pilot/operator is requested to telephone the ATC authorities on the cover prior to departure in order to notify or update the sortie details including area(s) of operation and planned levels (quoting the ACN Reference). A minimum of 24 hours' notice should be given unless specified in Section 2.
2. There may be other aircraft and/or activities outside Controlled/Regulated Airspace unknown to ATC.
3. The carriage and operation of a serviceable transponder (including Mode 'C') has been specified.
4. The pilot will be responsible for obtaining all necessary ATC clearances and for maintaining R/T contact with appropriate ATC authorities.
5. The pilot/operator will be responsible for obtaining prior clearances to enter any UK Danger Areas affected by the flight profile from the appropriate Range Control Authority unless this is specifically detailed in Section 2.
6. Other Unusual Aerial Activities (UAAs) may be notified to the CAA Safety and Airspace Regulation Group (SARG) and may take place within the airspace encompassed by this flight. The pilot/operator is to ensure that UK Daily NOTAM Nav Warnings are consulted prior to each flight.
7. All flights within Controlled Airspace are subject to the requirements of a Flight Plan in accordance with UK AIP ENR1.10. The ACN Reference should be entered into Field 18 of the Flight Plan together with any relevant 'special handling' codes.
8. Flight prioritisation and Non-Deviating Status is in accordance with the information specified on the ACN Cover. Such status may be afforded to part or all of the flight – see Section 2.
9. Availability of an ATS from Plymouth Military, Swanwick Military (78 Sqn) or Western Radar is subject to unit capacity, priorities and limitations of radar and radio coverage. Minimum pre-flight notification as per UK AIP ENR 1.6 unless otherwise specified in Section 2 of this ACN.
10. The CAA actively encourages the use of Moving map technology in the planning and flying phases of flights to reduce the risk of airspace infringements.

## PUBLICATIONS AND CHANGES

11. The activity area may lie within Controlled and Uncontrolled Airspace as well as airspace reserved for military use. Aircrew are to thoroughly familiarise themselves with UK airspace structures and procedures, in particular those laid down within the UK Aeronautical Information Publication (UK AIP), ENR 1.1 and be fully conversant with UK Flight Information Services in accordance with UK CAP 493 (MATS Pt 1).
12. The CAA VFR 1:500,000 and 1:250,000 charts and the UK AIP ENR 5 depict some, but not all aviation activity sites and amendments should also be checked. Please refer to <http://www.nats-uk.ead-it.com>
13. This ACN details specific coordination essential to the activity taking place and does not remove the need for aircraft operators to comply with national flight planning and notification procedures. Pilots and ANSPs are required to ensure that all related aviation sites are aware of this planned activity and of subsequent changes not captured within this document.
14. The Sponsor or Event Organiser should co-ordinate any changes to this ACN with SARG quoting the ACN Reference at the top of the page.

Airspace Regulation (Utilisation) – AU3  
Email: [AROps@caa.co.uk](mailto:AROps@caa.co.uk)  
Tel: 01293 983880

## SECTION 2: CO-ORDINATION ARRANGEMENTS (SPECIFIC)

15. This ACN details the flight profiles required for the UK's Atmospheric Research Aircraft (ARA) to conduct an aviation emission data survey analysis flight, known as science campaign REVEAL (REducing aViation Emission uncertAinty: cLimate impacts of NOx). The flights will require profiles that fly along, or offset from, L602, Y70 and L603 airways (see detailed map at section 3) in order to collect emission data from aircraft travelling along those routes.

16. **This ACN does not infer any approval to deviate from the ANO, Rules of the Air, or the issued AOC.** Should flight operations require an exemption or specific permission from the regulations, the sponsor shall ensure that these are obtained from the relevant CAA department prior to the flight taking place. It is the sponsors responsibility for ensuring the validity of any such exemption or permission.

17. **Notification.** The sponsor is to engage with the agencies listed on page one of this ACN at least 1 week prior to the planned activity (if notification from science team permits) to ensure that they are made aware of the planned window for the flight and can coordinate with the sponsor the most appropriate timings. The sponsor is to notify the agencies listed on page one of this ACN at least 24 hours prior to undertaking the task. In addition, the pilot is to contact the appropriate agencies at least 2 hours prior to departure to confirm final details and availability of an ATS.

18. **Priority.** This flight has been afforded Non-Deviating Status (NDS) whilst established in the operating area and within Controlled Airspace (CAS), (*UK AIP ENR 1.1 (4.2) & CAP 493 – Section 1, Ch4, Para 17 refers*). Whilst in transit to the operating area, outside CAS and in between runs, the aircraft is categorised as CAT Z, (*CAP 493 – Section 1, Ch4, Para 10c refers*) and attracts no priority. In order to reduce the impact to other airspace users, the controlling authority may request that the pilot hold, or accept radar vectors in order to make best use of the airspace, or to reduce overall delays.

19. **Level.** The aircraft is required to conduct serials between FL250 and FL350. To enable timely planning for ATC, the pilot is responsible for informing ATC of the anticipated time for a level change.

20. **RVSM Status.** The aircraft is RVSM approved, including whilst engaged on measured runs.

21. **Tracks.** The aircraft will follow the route listed below, however the aircraft may request minor deviations in order to achieve the best results. In all cases, the aircraft shall not change level or heading without the explicit approval of ATC when within CAS, or without prior notification when outside CAS. The aircraft shall pre-notify ATC of all expected procedural turns and the direction of travel required.

22. The operating profile as shown in Section 3 is detailed as follows:

a. DOLAS – L603 – ENITO – TOLSA – L602 – LIBSO – DOLAS

23. **Flight Plan & Routing.** The aircraft shall route from EGTC to the required operating area. The sponsor is responsible for submitting a flight plan at least 3 hours prior to departure (following the final notification call). In addition, the following text shall be inserted into Field 18:

RMK/NON-DEVIATING STATUS APPROVED

RMK/AIRSPACE COORDINATION NOTICE AR-2024-4625 REFERS

24. **ATS Provision – Controlled Airspace (CAS).** Access to controlled airspace is subject to the prevailing traffic situation and controller workload. The pilot is responsible for obtaining a clearance to enter controlled airspace prior to penetration.

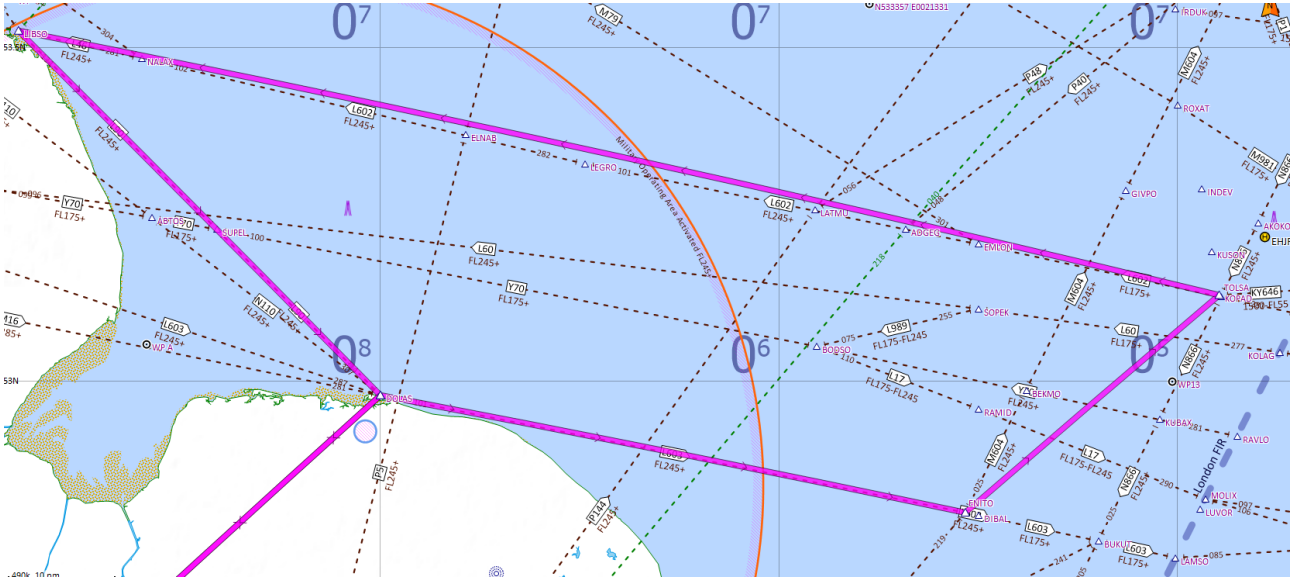
25. **Temporary Reserved Areas (TRA).** The sponsor is responsible for complying with the requirements for access to any TRA iaw the UK AIP – ENR 1.1 (Para 5.1.5).

### SECTION 3

#### Area of Operation

26. A chart highlighting the area of operation is shown below. This is for illustrative purposes only and not for operational planning.

**Chart 1 – Operating area**



27. Sortie Plan

No.	<b><u>Brief Description (including sonde drops)</u></b>	<b>Time (mins)</b>	<b>Time so far (h : mm)</b>
#1	Take off and ascend to FL 300, heading towards point DOLAS	50	0:50
#2	Turn and head E along ATS route L603 to point ENITO	10	1:00
#3	Turn and head N to point TOLSA	5	1:05
#4	Turn and head W along ATS route L602 to point LIBSO	20	1:25
#5	Turn and head SE along ATS route L90 to point DOLAS	10	1:35
#6	Ascend to FL320 and repeat runs through ENITO, TOLSA, LIBSO and DOLAS	45	2:20
#7	Ascend to FL350 and repeat runs through ENITO, TOLSA, LIBSO and DOLAS	45	3:05
#8	At point DOLAS, turn and descend to Cranfield	30	3:35
#9			
#10	<b>If done as a single flight, repeat stage 7 at a different altitude, making a 4:20 flight.</b>		