Wales Low Level Operations

IVAO XU SPECIAL OPERATIONS DEPARTMENT

General

Overview

LFA7 or Low Flying Area 7 is a section of the United Kingdom where Low Level operations regularly take place. It is also home to the famous Mach Loop popular with enthusiasts and photographers alike. This event aims to give you a taste of all the various areas of wales though different routings though varied terrain. All the routes are designed differently for different aircraft and it of course includes the Mach Loop for those who wish to fly it.

Date and Time

Date: 28/01/2023
Time: 14:00z-1700z

Definitions
The following are definitions of some acronyms used throughout this document:

Term	Explanation
GAT	General Air Traffic (e.g. Filed IFR or VFR under S, N or G)
OAT	Operational Air Traffic (e.g. Filed IFR or VFR under M)
RAF	Royal Air Force
XU	IVAO United Kingdom and Ireland Division

Pilots

Guidelines

- Aircraft must be suitable for their low level route they are planning on completing.
- General aviation will be allowed to operate at RAF Valley for the duration of the event.
- Pilots **MUST** register before the event if they wish to take part.
- Formations/Groups will be permitted to participate.
- It is recommended that aircraft arriving from another country **should** operate as GAT until reaching UK airspace.

Arrival

- Pilots wanting to fly in for the event may arrive during the event.
- Pilots are reminded that all airspace above FL195 in the United Kingdom is Class C airspace and must obtain clearance before entering this airspace.

Rules

- Special Operations pilots shall maintain separation from GAT traffic under supervision of ATC at all times.
- Pilots are **NOT PERMITTED** to exceed Mach 0.95 at any time during the event unless ATC permission is granted.

Controllers

Guidelines

- Controllers must have an in-depth understanding of the exercises and phraseology of Special Exercises in the United Kingdom and Ireland Division.
- Controllers should be understanding and accommodating of pilots who are unfamiliar with Special Exercises phraseology and procedures and should assist where possible.
- Controllers must use clear English when there is an apparent misunderstanding in instructions.

Positions

The following positions will be available during the event:

Position	Callsign	Frequency
EGVV_CTR	Swanwick Military	127.450
EGOV_APP	Valley Radar	125.225
EGOV_TWR	Valley Tower	122.100

Assistance

Wikipedia

IVAO United Kingdom and Ireland offer a Wikipedia style information site which can be used for nearly all the information required to fly and control for the event. The following areas are available:

Air Traffic Controller (Generic) - https://wiki.ivao.aero/en/home/divisions/xu/atc

Pilot (Generic) - https://wiki.ivao.aero/en/home/training/main/pilot_documentation

Special Operations Phraseology - https://xu.ivao.aero/soPhraseology

Special Operations (Division) - https://wiki.ivao.aero/en/home/divisions/xu/soc

Email/Forum/Discord

Leading up to this event, you can contact the Special Exercises Department of IVAO United Kingdom and Ireland using the following means:

Purpose	Means	Notes
Email	xu-soc@ivao.aero xu-soac@ivao.aero	
Forum	http://xu.forum.ivao.aero	
Discord	http://ivao.co.uk/discord	IVAO XU Members only.
	https://sod.ivao.aero/discord	IVAO HQ-SOD Discord, Look for 'XU-SOC/XU-SOAC'

Airfield and Charts

Charts

The following resources are available:

Resource	Link
Military AIP (United Kingdom)	https://www.aidu.mod.uk/aip/aipVolumes.html
Civil AIP (United Kingdom)	https://nats-uk.ead-it.com/cms-nats/opencms/en/Publications/AIP/
Charts for Valley	https://www.aidu.mod.uk/aip/pdf/ad/EGOV-Valley-Combined.pdf
SO Order (IVAO XU)	https://sod.ivao.aero/up/order/b1e0633bc4145febc89844619e9d15b8.PDF

RAF Valley Ground Chart. The following resource is a map of the taxiways for RAF Valley:

Parking

Rotary – ASP4
Fast Jets/Trainers – ASP1, ASP2, ASP3 and ASP11
Heavies – ASP1/ASP5

Difficulty

Each route is designed to be flown with varying levels of difficulty depending on both the pilot's skill and experience with low level flying. This is broken into 3 categories noted below. Pilots must advise ATC which difficulty they wish to operate under as well as which route they plan to fly.

- Easy – 350 to 400 knots minimum ground speed and no higher than 800ft above ground level at all times
- Moderate – 400 to 450 knots minimum ground speed and no higher than 500ft above ground level at all times
- Hard – 450 knots minimum ground speed and no higher than 200ft above ground level at all times

Missions/Tasks

Pilots are to fly in or/and out of RAF valley for the event and are to complete at least one of the following missions/tasks but feel free to complete as many missions/tasks as you wish. Flight Plans for FS9, FSX, X-Plane 9/10/11, MSFS2020 and Plan G are all available from this link here - https://drive.google.com/drive/folders/1dWUM_iwCfFFXaYVjYtQgoAe05j5kaWtw?usp=share_link

1. Low-level Route 1 – Mach Loop

Aircraft Type:

Jet Fighters/ Trainers, Light/ Medium Transport, Helicopters, Training aircraft.

Missions:

To maintain your low-level currency, you shall fly 3 laps of the Mach loop in Low flying area 7 (LFA7).

Route:

This flight will be conducted as VFR outside controlled airspace. Below is the advised route for the Mach loop but must fly your own navigation to the entry. The best way to navigate the route is visually via the river mouths and roads.
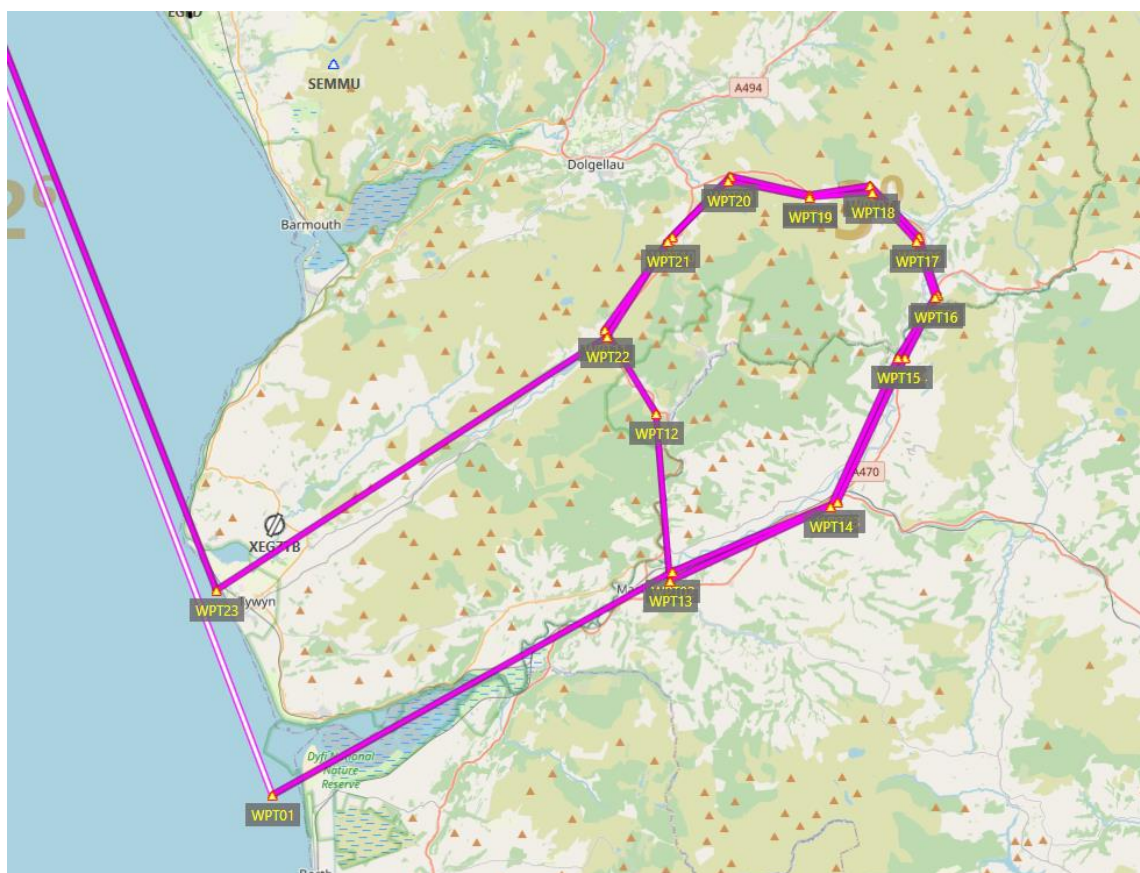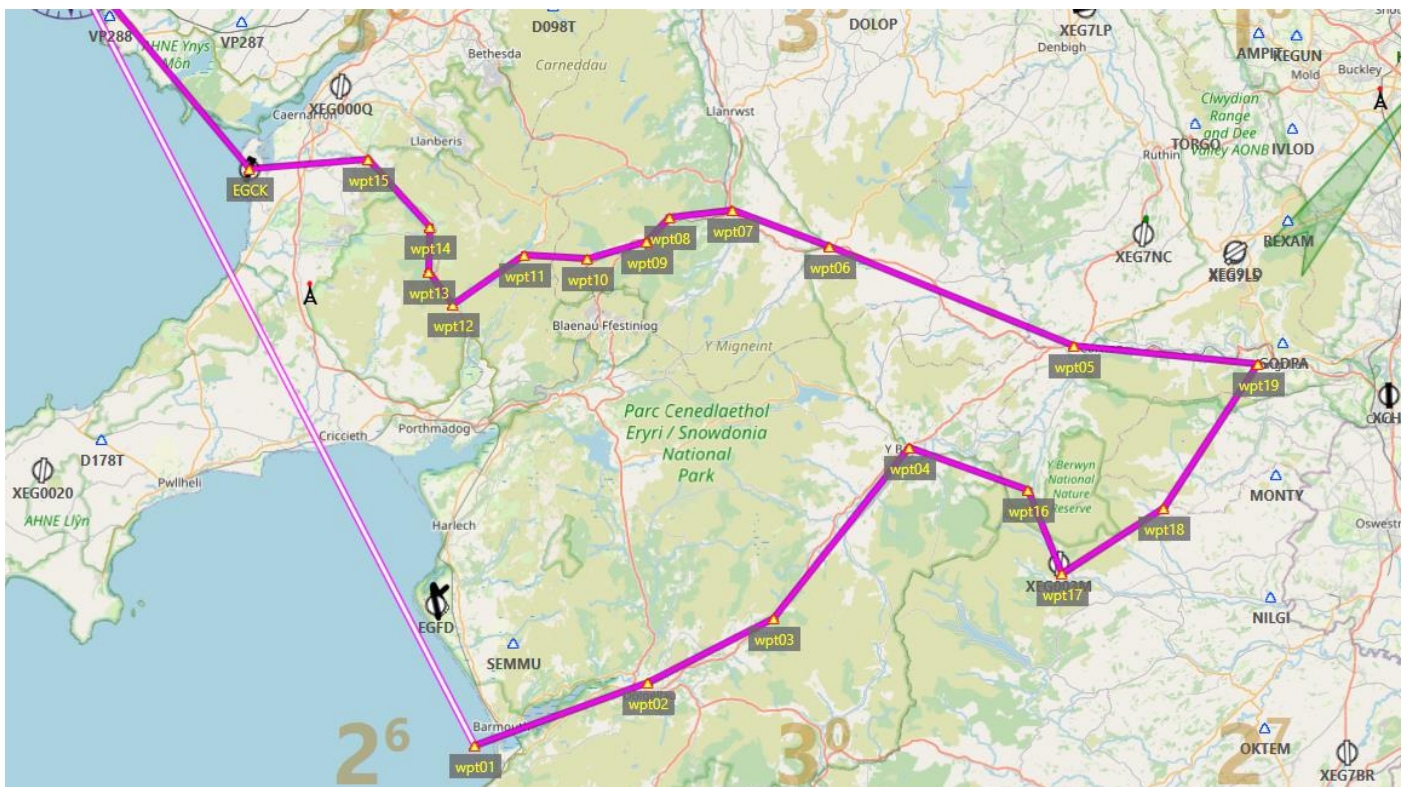
Entry:
523159N0040334W 523541N0035149W

Loop:
523735N0034409W 524122N0034144W 524318N0034140W 524414N0034446W 524446N0034653W 524254N0035035W 524052N0035303W 524009N0035217W 523922N0035057W 523805N0035035W 523648N0035100W

Exit:
524009N0035427W 523447N0040645W

2. Low-level Route 2 – Wales North

Aircraft Type:
Jet Fighters/ Trainers.

Missions:
To maintain your low-level currency, you shall fly a pre-set low-level route thought the North of Wales in Low flying area 7 (LFA7).

Route:
This flight will be conducted as VFR outside controlled airspace. Below is the advised route for the Mach loop but must fly your own navigation to the entry. The best way to navigate the route is visually via the river mouths and roads.

Entry:
524225N040455W

Loop:
524501N035313W 524741N034436W 525441N033520W 525255N032718W 524930N032500W 525211N031805W 525806N031139W 525849N032410W 530255N034051W 530422N034727W 530506N035144W 530308N035316W 530225N035720W 530235N040137W 530033N040628W 530151N040805W 530343N040801W 530606N042015W
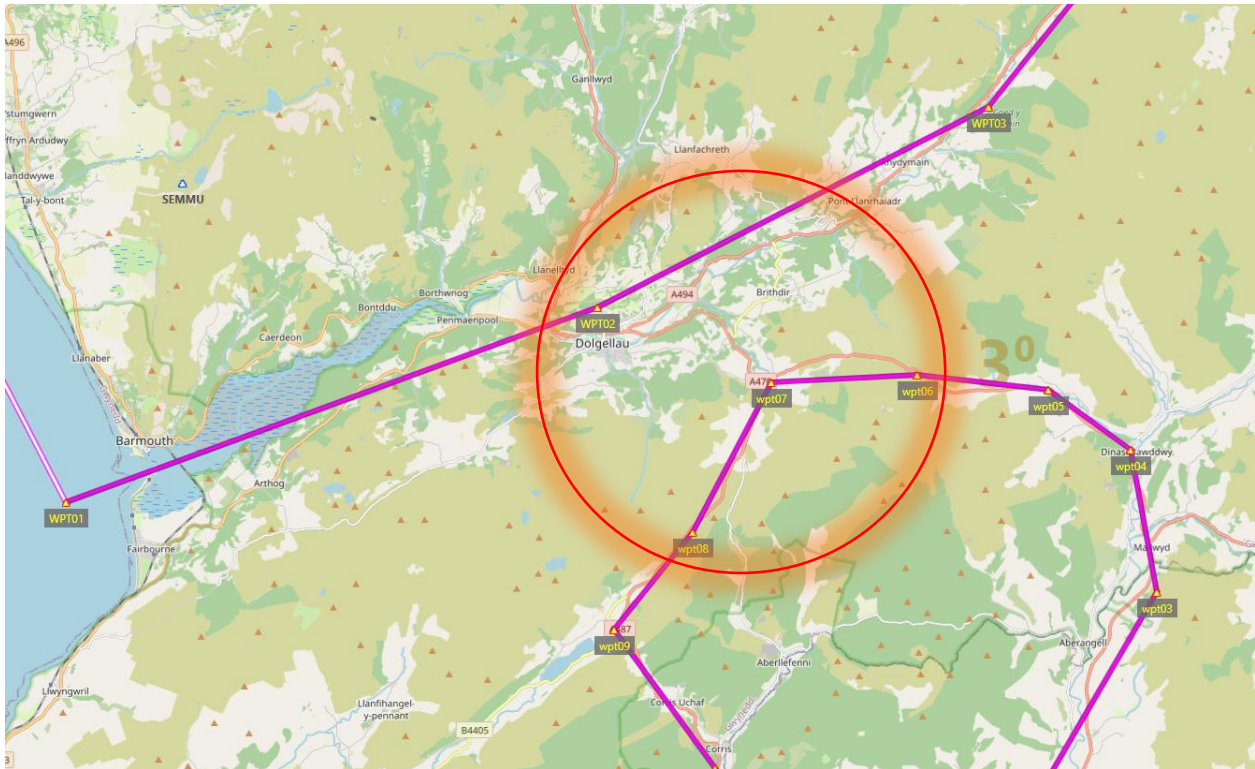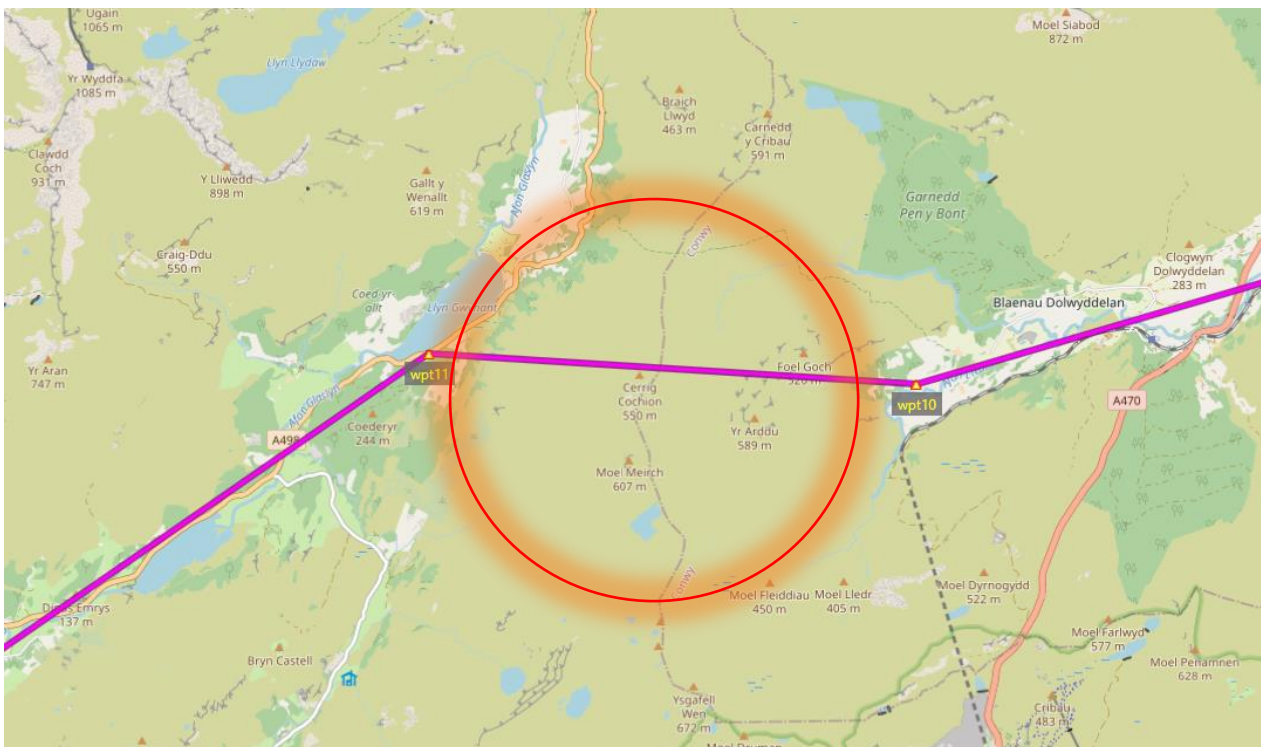
Exit:
530628N042015W or EGCK Caernarfon Overhead

Low-level Route 1/2 – Cautions/Areas of note

When flying either Route 1 or Route 2, pilots are advised to be cautious on sections of both routes due to their proximity to each other. As such pilots are advised to fly on the left hand side of the valley and to maintain their own separation.

On Route 2, there is a section where you switch from valley to valley over a raised area of land. Pilots are advised to be wary of this and plan accordingly.

3. Low-level Route 3 – Wales South

Aircraft Type:

Jet Fighters/ Trainers, Light/ Medium/Heavy Transport, Helicopters, Training aircraft.

Missions:

To maintain your low-level currency, you shall fly a pre-set low-level route thought the South of Wales in Low flying area 7 (LFA7).

Route:

This flight will be conducted as VFR outside controlled airspace. Below is the advised route for the Mach loop but must fly your own navigation to the entry. The best way to navigate the route is visually via the river mouths and roads.
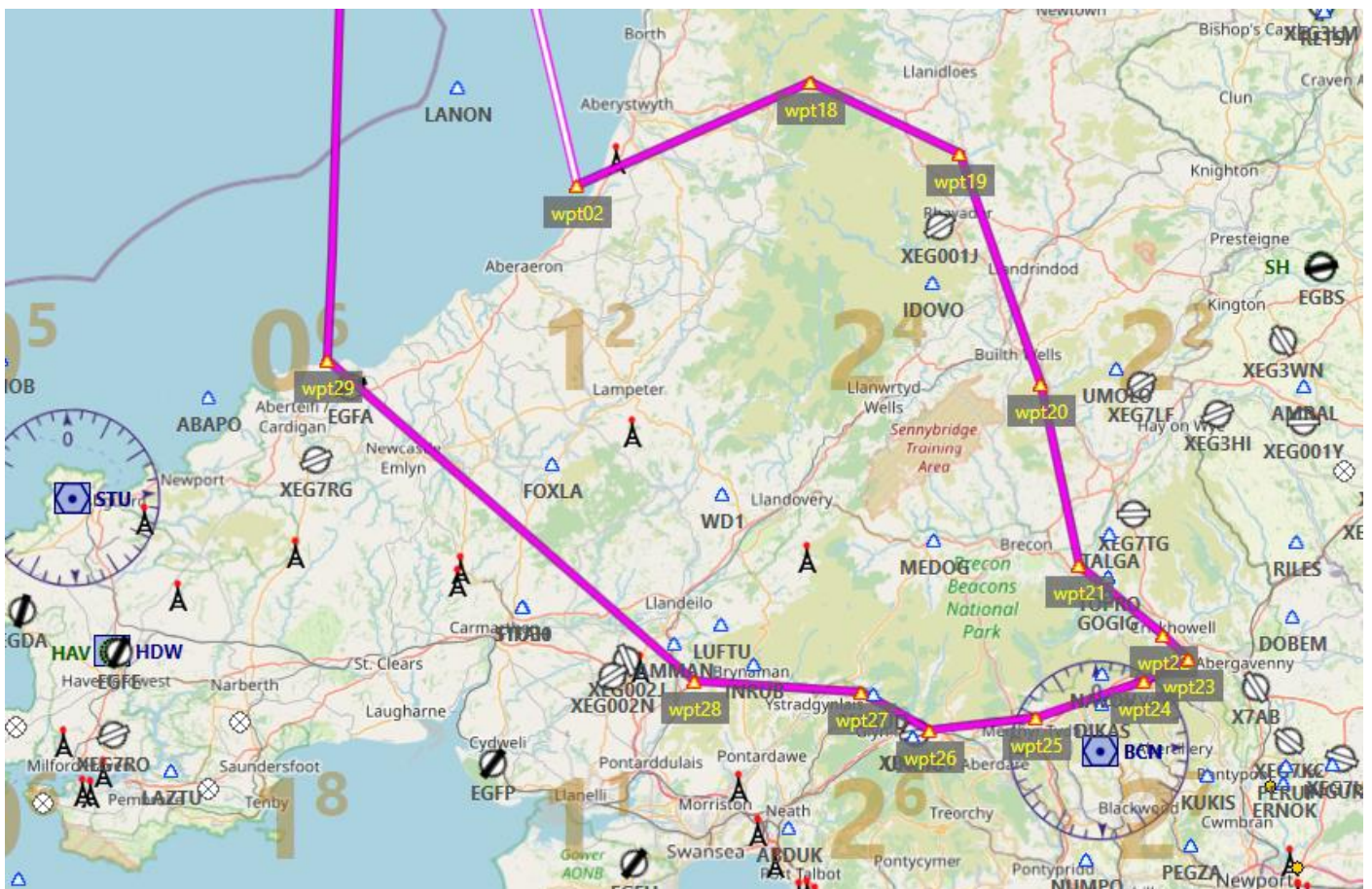
Entry:
521937N040959W

Loop:
522609N034541W 522140N033016W 520702N032157W 515529N031750W 515057N030911W 514926N030637W 514757N031109W 514539N032217W 514453N033324W 514714N034034W 514803N035747W

Exit:
520830N043547W

Navigational Aids

The following local navigational aids are available:

Name	ID	Type	Freq	Distance	Bearing (From EGOV)
Valley	VYL	TACAN	108.4	N/A	N/A
Welshpool	WPL	VOR/DME	115.95	62NM	140˚
Shobdon	SH	ADF	426.0	85NM	149˚
Gloucestershire	GST	ADF	331.0	--	--
Brize Norton	BZN	TACAN	111.90	--	--
Chiltern	CHT	ADF	277.0	--	--

Airfield Info

The following runways will be in use:

Runway	Length	ILS	Circuit	Height
01	1572m	N/A	Right Hand	**1000ft QFE** Run-in and Break 1000ft QFE
13	2290m	108.55	Right Hand	
19	1572m	N/A	Left Hand	
31	2290m	N/A	Left Hand	

Frequency's

The following frequencies will be in use:

Position	Callsign	Frequency
EGVV_CTR	Swanwick Military	127.450
EGOV_APP	Valley Radar	125.225
EGOV_TWR	Valley Tower	122.100

Scenery

While scenery will not be enforced for this event, it is strongly advised you use the following scenery to enhance your experience:

Platform	Link
FSX, FSX:SE, P3Dv1-3	https://flyawaysimulation.com/downloads/files/8029/fsx-raf-valley-scenery/
P3Dv4+	https://militaryaiworks.com/download-hangar/file-library/download/10-scenery/1521-scenery-egov-raf-valley-mspg-simulations-p3dv4-2019-united-kingdom
X Plane 11	https://forums.x-plane.org/index.php?/files/file/43714-egov-raf-valley-for-x-plane-11/
MSFS	https://flightsim.to/file/9361/egov-raf-valley-custom-built