

International Virtual Aviation Organisation Special Operations Instruction No 4

Creating Airspace Restrictions and Reservations

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Special Operations Department
International Virtual Aviation Organisation

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Introduction

These reserved airspaces will be established by IVAO divisions and may be used by SO pilots to perform dangerous activities as per SO reg 4. These areas shall if possible, be based off real airspace structure where possible. But with this said consideration shall be made to the limitations of IVAO and its systems.

Areas can be created as a permanent area (SO Order) or temporarily for things such as tours, events or on the request of Special operations groups.

Area Types

Below is a list of all the types of areas that are recognised on IVAO, and a description of the restrictions they apply.

Types	
Danger	This type of airspace is not fully closed off to non-participating flights. However, it is highly recommended that permission to enter is still obtained. Therefore, when establishing this type of area, it is strongly recommended that consideration of the effect on non-participating traffic would be, especially with no active controller.
Restricted	This type of airspace is entirely closed off to non-participating flights and permission to enter is required. Therefore, when establishing this type of area, considerations should be taken with regards to current traffic routes.
Prohibited	This type of airspace is used to restrict all flight in that airspace and therefore shall not be used for SO flights.
Temporary Reserved	This type of airspace is a defined volume of airspace generally under the jurisdiction of one aviation authority and temporarily reserved, by common agreement, for the specific use by another aviation authority and through which other traffic may be allowed to transit under an ATS authority.
Temporary Segregated	This type of airspace is entirely closed off to non-participating flights, and permission to enter is required. These areas are temporary and are used for things such as events.

Information Required

Area's shall be defined by the minimum information below;

- **Area Name**
 - The name should be unique
- **Area Type**
 - Danger/Restricted/TRA/TSA
- **Area Activity**
 - Optional

- **Conditions of use**

Below are the conditions of use that shall be used on all airspace on IVAO, after this piece of text on a new line, extra text may be added.

- Danger areas
 - "Reserved and designated for exclusive use by SO flights only, crossing allowed at pilots own risk."
- TRA
 - Suitable text related to the areas use.
- Prohibited
 - "Restricted to all aircraft."
- Other areas
 - This shall always be "Reserved and designated for exclusive use by SO flights only."

Any changes or deviation from the above text must be approved by SO HQ.

- **Lateral Limits**

- This shall be one of 2 shapes either;
 - Simple Polygon
 - Defined by the corner points of the area, and the first and last point, creating a closed shape.
 - Example:"255000N0455000W-300000N0455000W-300000N0500000W-300000N0455000W-255000N0455000W-255000N0455000W"
 - Circle
 - Defined by the centre point and the radius from this point in nautical miles.

- Example: "15NM RADIUS OF 255000N0455000W."
- The area **shall not** be a combination of these shapes and must have defined points. The use of navaids and airspace borders are also not suitable definitions.
- **Vertical limits**
 - The area shall be defined by a higher and lower limit using any of the altitude formats below.
 - 100ft AMSL
 - 100ft
 - SFC
 - FL100
 - UNL
 - Meters may be used, but of feet must also be displayed.
 - Areas published in the SO Order must have set vertical limits.
- **Activation Details**
 - Areas must use one of the activation types stated below
 - Permanently Active
 - This shall be used sparingly, as can be disruptive to none SO pilots. Text that shall always be used for this type "Permanently Active."
 - Time-specific
 - This shall be used if the area is to be opened at set times and days. No exemptions for holiday days shall be made. Format to be used is as the examples below:
 - MON/TUE/FRI 1200-1900z
 - MON-TUE 12-19z, WED 13-15z
 - NOTAM
 - These areas will be opened by a NOTAM from the division staff. IVAO users and SOG can request this type of activation with a minimum 48h notice. This notice shall be by email. Text that shall be used for this type "By NOTAM (on email request at least 48 hours in advance from IVAO users)"

- ATC activation
 - This type of activation can be used in conjunction with the other types of activation or used by itself. Only Area/Centre controllers may activate a restricted area that is within their area of responsibility. This shall be mentioned in the controller's aits remarks.

Data Format

Below are the formats that shall be used when defining Areas.

- **Date**
 - The weekdays shall use the format as stated below
 - MON = Monday
 - TUE = Tuesday
 - WED = Wednesday
 - THU = Thursday
 - FIR = Friday
 - SAT = Saturday
 - SUN = Sunday
 - Dates shall use the format below to avoid confusion;
 - 04-FEB-2021
- **Time**
 - All times shall be given in UTC (Zulu), in one of the two formats below:
 - 1000-1530z
 - 10-15z
- **Coordinates**
 - Coordinates shall be in Degrees, Minutes, Seconds (DMS), in 6 digits format, For example,

514605N0103227W-513530N0101801W-514605N0103227W
 - There shall be no spaces, and every waypoint shall have a "-" between them; also the last and first point shall be the same to close the shape, for

- Example:
 - 514605N0103227W-513530N0101801W-514605N0103227W-514605N0103227W

Using the Data.ivao.aero website

All Airspace restrictions that are created whether that be permanent or temporary shall be published in the Data website.

- **Adding Airspace**

Airspace restrictions are connected to at least one centre (FIR) and therefore under the centre page is where you will find Special Areas.

The data shall be filled in using the same data as present in the divisional SO Order.

Points to note:

- Leave times empty for permanent activation.
- To set the Minimum alt to surface, set the value to "0".
- For unlimited Altitude set value to "99,999".
- Multiple centres (FIR's) may be added.
- Area shape can be added it has been added.
- Circles cannot be added to the map shape, and therefore a circle must be drawn with multiple points.

Example

The screenshot shows the 'Create Special Area for EGTT' form on the IVAO website. The form includes the following fields and options:

- Area Name:** D003 Plymouth
- Area Type:** Danger area (D)
- Start Time (Z):** 12:00
- End Time (Z):** 23:00
- Conditions of Use:** Reserved and designated for exclusive use by SO flights only, crossing allowed at pilots own risk.
- Select Weekdays:** All (checked), Monday, Tuesday, Wednesday, Thursday, Friday, Saturday, Sunday.
- Activation Details:** Monday-Sunday, 1200h-2300h
- Minimum Alt (Ft):** 0
- Maximum Alt (Ft):** 550000
- Centers:** EGTT - London Area Control, EGW - Swarwick Military
- Is Range?:**

Buttons for 'Submit' and 'Reset' are located at the bottom right of the form. The footer of the page contains the copyright information: © 2020 International Virtual Aviation Organisation. All Rights Reserved. Privacy Policy | Terms of Use. Part of this Data was provided by Aerosoft, IVAO Staff Members and Public Data.

- **Editing Areas shapes**

The coordinates that should be imputed are in a decimal format. Therefore, the data from a SO Order must be converted to this format.

Individual waypoints can be added one by one using the green "+" button. Multiple waypoints can be added using the grey button, and of the format:

LAT:LON

LAT:LON

Once added the area will be seen in red on the map at the top of the Centre (FIR's) page.

