

22 August 2014

Policy Statement

SPECIAL USE AIRSPACE - SAFETY BUFFER POLICY FOR AIRSPACE DESIGN PURPOSES

1. Scope and Definition

- 1.1 Special Use Airspace (SUA) is airspace designated for operations of a nature such that limitations on airspace access may be imposed on other aircraft not participating in those operations. Often these operations are of a military nature. The designation of SUAs identifies to other users the areas where such activity occurs, provides for segregation of that activity from other users, and allows charting to keep airspace users informed of potential hazards. In the UK FIRs and other airspace for which the UK has responsibility, SUAs usually take the form of Danger Areas (DA) that are established to provide protection to other airspace users from activities that may not be conducted in accordance with the Rules of the Air¹ and may be hazardous to other aircraft.
- 1.2 Such airspace structures - in keeping with Commission Regulation (EC) 2150 of 2005 laying down common rules for the flexible use of airspace - shall be of a temporary nature, applied only for limited periods of time and based on actual requirement.² The CAA, through the Safety and Airspace Regulation Group (SARG), is responsible for ensuring the safe and efficient use of UK airspace. In meeting this remit, SARG shall ensure that SUA structures are adequately separated from other adjacent airspace structures³ when considering Airspace Change Proposals (ACP).
- 1.3 This document sets out the formal Safety Buffer policy for the design of new or revised airspace arrangements. The stipulated criteria shall be incorporated into all new ACPs but need not be applied retrospectively, where existing airspace arrangements have been proved safe through established operational practice.
- 1.4 Within the London and Scottish FIRs and airspace for which the UK has responsibility, SUA is established to support two generic types of activity:
 - a. Ordnance fired from the surface of the Earth or from aircraft in normal flight (i.e. not engaged in unusual air activities) and activities conducted from aircraft in normal flight (e.g. parachuting).
 - b. Aircraft engaged in unusual aerial activities that may also include the release of ordnance.
- 1.5 Criteria to be applied to safety buffers are detailed below.

¹ As defined in the Rules of the Air Regulations 2007.

² In accordance with the Danger Area Policy the promulgated hours of operation for a DA are to be the minimum required to carry out the task for which the DA has been established.

³ These include, but are not limited to, airways, upper air routes, Terminal Control Areas (TMAs), Control Areas (CTAs), Control Zones (CTRs))

2. Policy

- 2.1 Ordnance Fired from the Surface of the Earth or by Aircraft in Normal Flight, or Other Activities Conducted by Aircraft in Normal Flight. All Danger Area activities related to the release or discharge of ordnance undertaken within the London and Scottish FIRs have an associated Range Danger Area/Zone⁴ (RDA/Z) based on a "worst case" event. The RDA/Z takes into account the latent energy of the delivery vehicle/weapon and, where appropriate, the component parts of such a device. It includes all the airspace which could be affected by shrapnel, shockwave and other ballistic factors. SUA encompassing the entire RDA/Z area, usually in the form of a Danger Area (DA), is notified. Similarly, where an activity is conducted from aircraft in normal flight⁵, that activity is managed to ensure that it remains within the promulgated area.
- 2.2 Such aircraft whether flying inside or outside a DA will fly in accordance with the Rules of the Air; consequently, other aircraft may safely fly immediately adjacent to the promulgated SUA lateral and vertical limits and no additional safety buffer will be required.⁶
- 2.3 The following descriptors as listed at UK AIP ENR 5.1 shall be considered as part of this group of activities and will therefore not require the application of a lateral and/or vertical buffer:
- Live Firing; Para Dropping; Target Towing; Demolition; Balloons; Bombing; Surface Explosions; Air Firing; Unmanned Aircraft Systems (UAS) (Visual Line of Sight (VLOS)⁷); and Torpedo Dropping.
- 2.4 Aircraft Engaged in Unusual Aerial Activities Requiring Segregation.⁸ There have been occasions when aircraft engaged in unusual aerial activities operating within existing SUA structures (i.e. DA or Military Training Area) have unintentionally exceeded the promulgated limits of that area, albeit for brief periods. In order to mitigate this hazard, an additional safety buffer would be required between the edge of the SUA containing such activity and adjacent airspace structures.
- 2.5 The following descriptors as listed at UK AIP ENR 5.1 will require the application of a lateral and/or vertical buffer:

⁴ Joint Services Publication 403 Vol IV Glossary of Terms and Definitions (https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/33907/JSP403_Vol4v2_3.pdf):

'The Range Danger Area/Zone (RDA/Z) is the space within a range in which there may be a risk to personnel, equipment or property from firing authorised weapons. The RDA/Z must be wholly contained within the range or training area boundary. Access to, and movement within the RDA/Z must be controlled. The measures taken to monitor and control access must be detailed in Range Standing Orders (SO).

Note: The boundaries on land are always marked, signed, flagged and often fenced to warn the public and to deter access; at sea, buoys may have to be provided.'

⁵ 'Normal Flight' for the purposes of this policy constitutes the operation of an aircraft consistent with the Rules of the Air Regulations 2007 or aircraft operated in accordance with military regulations (Air Navigation Order 2009 Art 160).

⁶ For further guidance see the UK AIP ENR 1.1 General Rules paragraph 5.1.3.

⁷ ICAO defines VLOS as 'an operation in which the remote pilot or [remotely piloted aircraft] observer maintains direct unaided visual contact with the remotely-piloted aircraft'. See also CAP722 'Unmanned Aircraft System Operations in UK Airspace – Guidance'.

⁸ For the purposes of this Policy Statement, the term "unusual aerial activities requiring segregation" relates to aviation activity that could adversely affect the normal operations of other airspace users or where a pilot may be unable to comply with the Rules of the Air.