



Civil Aviation Authority
SAFETY NOTICE
Number: SN-2023/005



Issued: 9 October 2023

**Remotely Piloted Aircraft Systems (RPAS)
Geo-Awareness**

This Safety Notice contains recommendations regarding operational safety.

Recipients must ensure that this Notice is copied to all members of their staff who need to take appropriate action or who may have an interest in the information (including any 'in-house' or contracted maintenance organisations and relevant outside contractors).

Applicability:	
Aerodromes:	Not primarily affected
Air Traffic:	Not primarily affected
Airspace:	Not primarily affected
Airworthiness:	Not primarily affected
Flight Operations:	RPAS Operators
Licensed/Unlicensed Personnel:	Remote Pilots

1 Introduction

- 1.1 The purpose of this SN is to highlight inaccuracies with some RPAS manufacturers' inbuilt Geo-fencing/awareness. This has been highlighted as a contributing factor to a number of airspace infringements.
- 1.2 The UK Civil Aviation Authority (CAA) has become aware through the Mandatory Occurrence Report (MOR) system of discrepancies between the accurate airspace restrictions published via the Aeronautical Information Publications (AIP) and how manufacturers display airspace information in their systems. This has contributed to incidents where Remote Pilots (RPs) have been unaware that they were flying within restricted airspace.
- 1.3 The law (UK Reg (EU) 2019/947 UAS.OPEN.050(5)) requires that UAS Operators 'update the information into the geo-awareness system when applicable according to the intended location of operation' and failure to comply is a criminal offence (Air Navigation Order 2016 Art. 265A(5)(d)(iii)).
- 1.4 The UAS Operator must download the latest version of the geographical zone data and make this available to the RP such that they can upload it into the geo-awareness system, if such a system is available on the UA used for the operation. This information must be both an accurate, and complete, representation of the applicable airspace restrictions to the UAS Operation.

2 Compliance/Action to be Taken

- 2.1 The purpose of this SN is to provide recommendations and guidance that will enable all RPs, UA Operators and Recognised Assessment Entities to act and:
- a) Reduce the likelihood of similar occurrences in the future
 - b) Provide additional assurance to the CAA that UAS operations conducted close to reserved airspace will be performed safely.

3 Recommendations

- 3.1 This SN strongly recommends that, because airspace restriction information presented by UAS built-in geo-awareness and flight planning software is not always accurate, UAS Operators and RPs should:
- a) Not rely solely on the manufacturers' inbuilt geo-awareness/geofencing for airspace restrictions information
 - b) Ensure they are personally aware of applicable airspace restrictions, where they intend to fly
 - c) Regularly refer to the [AIP updates](#) for accurate airspace restrictions information
 - d) Monitor and take appropriate action in respect of any manufacturers' communications regarding geo-awareness updates and operator requirements

4 Further Information

Updates to the AIP can be found [here](#).

Downloadable files of permanent airspace restrictions, that apply to RPAS, can be found within the AIS [here](#).

Temporary airspace restrictions may be set out within Aeronautical Information Circulars (AICs) within the AIP, and will be notified by NOTAM. Sign up to our [SkyWise](#) alerting system for updates on temporary airspace restrictions

Additional information for Operators and RP can be found in [CAP 722C](#).

5 Queries

Any queries or requests for further guidance as a result of this SN should be addressed to UAVenquiries@caa.co.uk.

6 Cancellation

This Safety Notice will remain in force until further notice.