

Consultation: Regulation (EU) 923/2012 Standardised European Rules of the Air - Visibility and Distance from Cloud Minima within Class D Airspace

CAP 1779



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# Chapter 1 Executive Summary

Since the introduction of Commission Implementing Regulation (EU) No 923 2012 (the Standardised European Rules of the Air (SERA)), the UK has exempted any aircraft being flown within the UK at or below 3,000 feet (ft) above mean sea level (AMSL) and within class D airspace from the requirements of SERA.5001 (VMC visibility and distance from cloud minima) Table S5-1 and SERA.5005(a) (visual flight rules), subject to specific conditions. The SERA requirements are derived from ICAO Annex 2 'Rules of the Air' Chapter 4, Section 4.1. The UK exemption applies when the aircraft is flying in accordance with specific conditions listed in Official Record Series 4 (ORS4) <u>No 1302</u>, which is effective until 12<sup>th</sup> September.

In October 2018 the Department for Transport (DfT) agreed to a continuation of the exemption whilst the CAA undertook activity to comply in full with SERA.5001.

Consequently, the CAA is proposing that the Visual Meteorological Conditions (VMC)<sup>1</sup> distance from cloud minima defined in SERA 5001 are applied to class D airspace in the UK below 3000 ft.

VFR flight within class D airspace will therefore be required to comply with the SERA (and therefore ICAO) vertical distance from cloud. The revision does not preclude special VFR (SVFR) flight in Control Zones (CTRs)<sup>2, 3, 4</sup>, and the CAA has identified a means of mitigating the impacts upon affected air traffic control (ATC) units of a likely increase in the number of SVFR clearance requests through a change to current SVFR separation requirements. Namely refinement of the current requirement for ATC units to provide separation between SVFR flights in a class D CTR providing certain conditions are met.

Stakeholders are invited to submit their views on the CAA's proposals and are invited to respond to questions posed in this document.

Further information regarding SERA in the UK can be found at <u>www.caa.co.uk/sera.</u>

<sup>&</sup>lt;sup>1</sup> SERA Article 2(142): 'visual meteorological conditions' mean meteorological conditions expressed in terms of visibility, distance from cloud, and ceiling, equal to or better than specified minima;

<sup>&</sup>lt;sup>2</sup> SERA Article 2(122): 'special VFR flight' means a VFR flight cleared by air traffic control to operate within a control zone in meteorological conditions below VMC;

FICAO Annex 11, ICAO PANS-ATM Doc 4444, SERA Article 2(122) and SERA.5010 Special VFR in control zones

<sup>&</sup>lt;sup>4</sup> SERA Article 2(61): 'control zone' means a controlled airspace extending upwards from the surface of the earth to a specified upper limit;

### Why are we consulting?

1.1 The CAA is consulting on its intention to adopt the VMC minima prescribed within Regulation (EU) No 923/2012 (the Standardised European Rules of the Air (SERA)) for flights conducted in accordance with the visual flight rules (VFR)<sup>5,6</sup> within class D airspace. This will mean a change to the prescribed weather minima for which VFR flight can be conducted, specifically the applicable vertical distance from cloud. The CAA proposes a mitigation to minimise impacts upon air traffic control (ATC)<sup>7</sup> unit workloads and airspace access. The CAA is of the view that the proposed mitigation will maintain safety, have no adverse effect upon flights in class D airspace conducted in accordance with the instrument flight rules (IFR)<sup>8</sup>, ensure compliance with legislation (and consequential alignment with neighbouring European states) plus see the removal of a long-standing Difference from ICAO Annex 2. This latter outcome additionally satisfies industry expectations regarding reductions in UK Differences from ICAO requirements.

## What are we proposing?

1.2 We are proposing that the UK adopts the SERA (and therefore ICAO) class D VMC below 3000 feet (ft). The CAA has identified mitigation through a change to current special VFR (SVFR) separation requirements, namely refinement of the requirement for ATC units to provide separation between SVFR flights in a control zone (CTR) (Special VFR may only be applied in a CTR) providing certain conditions are met.

# What has been considered?

1.3 The CAA has considered the impact of introducing these changes and has identified a number of options for transitioning to the SERA VMC. It has also considered aircraft movement data from affected ATC units in order to establish the potential impact on ATC unit workload and airspace users.

## Affected stakeholders

1.4 The proposals primarily affect VFR operations and those ATC units acting as CTR/CTA controlling authorities.

# Who is being consulted?

1.5 The CAA is conducting an open consultation on this change.

<sup>&</sup>lt;sup>5</sup> SERA Article 2(139) 'VFR' means the symbol used to designate the visual flight rules;

<sup>&</sup>lt;sup>6</sup> See SERA.5005 Visual flight rules

<sup>&</sup>lt;sup>7</sup> SERA Article 2(30): 'air traffic control service' means a service provided for the purpose of: (a) preventing collisions:

<sup>(1)</sup> between aircraft; and

<sup>(2)</sup> on the manoeuvring area between aircraft and obstructions; and

<sup>(</sup>b) expediting and maintaining an orderly flow of air traffic;

<sup>&</sup>lt;sup>8</sup> SERA.5015 Instrument flight rules (IFR) — Rules applicable to all IFR flights

# How can stakeholders respond?

1.6 Stakeholders are invited to submit their views on the CAA's proposals and to respond to questions posed in the document. Responses can be submitted either through the online survey form<sup>9</sup>, or in writing using the template provided to <u>SERA@caa.co.uk</u> by no later than 31 May 2019. Any enquiries regarding this consultation should be submitted via email.

<sup>&</sup>lt;sup>9</sup> <u>https://consultations.caa.co.uk/future-safety/proposed-changes-to-vmc-minima-in-class-d-airspace</u>

# Chapter 2 The current situation

Aircraft flying VFR in class C, D or E airspace are required by SERA and ICAO Annex 2 to be flown at least 1500 m horizontally and 1000 ft vertically away from cloud and in a flight visibility of at least 5 kilometres (km) at all times.

These rules are detailed within <u>SERA.5001 VMC (visibility and distance from</u> cloud minima) and SERA.5005(a) (visual flight rules)<sup>10</sup>.

In accordance with <u>ORS4 No 1302</u> an aircraft flying within class D airspace within the UK shall be deemed to have complied with SERA.5001 if the aircraft is flown:

- by day only;
- at or below 3000 ft AMSL.
- at a speed which, according to its airspeed indicator, is 140 knots (kts) or less, to give adequate opportunity to observe other traffic and any obstacles in time to avoid a collision; and;
- clear of cloud, with the surface in sight and:
  - o if the aircraft is not a helicopter, in a flight visibility of at least 5 km; or
  - o if the aircraft is a helicopter, in a flight visibility of at least 1,500 m.

Aircraft flying in a CTR can still request a special VFR clearance when they are unable to comply with these criteria.

Current UK requirements are depicted in figures 2a and 2b.

<sup>&</sup>lt;sup>10</sup> <u>https://www.easa.europa.eu/document-library/general-publications/easy-access-rules-standardised-european-rules-air-sera</u>, Page 52.



### Figure 2a

SERA VMC Minima as prescribed in SERA 5001<sup>11</sup>



### Figure 2b

Current UK Class D VMC below 3000 ft AMSL

<sup>&</sup>lt;sup>11</sup> Diagram taken from the CAA Skyway code (CAP1535) (http://www.caa.co.uk/CAP1535S)

### VFR and SVFR operations in Class D airspace

### Visual Flight Rules (VFR)

2.1 The visual flight rules require an aircraft to be flown in accordance with the VMC appropriate to the classification of the airspace<sup>12</sup> in accordance with SERA.5001.

### Special VFR (SVFR)

2.2 A SVFR flight is a VFR flight cleared by ATC to operate within a CTR in meteorological conditions below the applicable VMC (SERA Article 2(122)). SVFR flight is not permitted within CTAs<sup>13</sup>. SERA.5010 details requirements for SVFR flights in CTRs (see Appendix 8.3). Before issuing an SVFR clearance, a controller must consider the prevailing traffic conditions, the extent of the proposed flight and the availability of air-ground communications. SVFR flights are not to hinder normal IFR flights.

<u>CAP493 Manual of Air Traffic Services Part 1</u><sup>14</sup> and UK Aeronautical Information Publication ENR 1.2 detail the conditions, responsibilities and separation required for special VFR flights. Pilot responsibilities include:

- Compliance with ATC instructions;
- Ensuring that their flight conditions enable them to remain clear of cloud, determine their flight path with reference to the surface and keep clear of obstructions;
- Ensuring that they fly at an indicated airspeed of 140 kts or less in order to provide adequate opportunity to observe any obstacles in time to avoid a collision;
- Ensuring that they fly within the limitations of their licence;
- Complying with the relevant minimum height requirements; and,
- Avoiding Aerodrome Traffic Zones (ATZ) unless prior permission for penetration has been obtained from the relevant ATC unit.

<sup>&</sup>lt;sup>12</sup> <u>SERA.6001</u> (<u>https://www.easa.europa.eu/document-library/general-publications/easy-access-rules-standardised-european-rules-air-sera</u>) and SERA Appendix 4 details each of the airspace classifications

<sup>&</sup>lt;sup>13</sup> SERA Article 2(56): 'control area' means a controlled airspace extending upwards from a specified limit above the earth;

<sup>&</sup>lt;sup>14</sup> <u>https://publicapps.caa.co.uk/docs/33/CAP493\_28DEC2017(P).pdf</u> (Section 1, Chapter 2, Flight Rules)

### Chapter 3

# Assessment of VFR flights within Class D CTRs and CTAs

### VFR Transit Data

3.1 The CAA sought VFR transit data from UK aerodromes served by class D CTRs/CTAs. The applicable period was from 1 November 2018 to 31 January 2019.

13 aerodromes provided data in response to our request. Each return provided monthly totals of VFR transits through class D airspace. Data for January is not available in some cases.

Note that data for Southampton (EGHI) also includes the Solent CTA.

	November	December	January
EGHI	34	138	67
EGMC	134	110	149
EGPB	5	10	8
EGLW	64	43	25
EGNT	38	14	20
EGFF	11	3	7
EGLL	17	13	-
EGLC	56	23	-
EGSS	19	6	-
EGCC	158	92	-
EGPD	178	43	-
EGPF	175	59	-
EGSH	33	39	50

### Table 3a

Total VFR transits per month

- 3.2 Metrological data previously provided by the UK Meteorological Office for UK aerodromes with CTRs/CTAs (see chapter 3) was utilised to calculate a mean daily VFR transit figure. The metrological data suggests that at the affected aerodromes a cloud base below 3000 ft occurs approximately 73% of the calendar year (approximately 22 days per calendar month). The monthly total has been used along with the 22-day figure to calculate a daily mean number of VFR tasks.
- 3.3 Assuming cloud height was below 3000ft (based on UK Meteorological Office data) for 22 days per month, the mean number of VFR movements at the affected ATC units is <4 per unit per day.

	November 18	December 18	January 19	Daily Mean (Nov 18-Jan 19)
EGHI	3	8	4	5
EGMC	7	6	7	7
EGPB	2	2	3	2
EGLW	3	2	1	2
EGNT	3	1	1	2
EGFF	<1	<1	<1	<1
EGLL	1	1	-	1
EGLC	1	1	-	1
EGSS	1	<1	-	<1
EGCC	7	4	-	6
EGPD	8	2	-	5
EGPF	8	3	-	6
EGSH	2	2	2	2

### Table 3b

Mean VFR transits per day

- 3.4 It is important to note that the mean figures do not reflect daily or hourly fluctuations in the number of VFR flights controlled. In addition, it should be noted that under the proposed change not all the VFR flights indicated by the figures would necessarily become SVFR flights.
- 3.5 SVFR data for the same period was not obtained.
- 3.6 The sample period was selected as it was assumed that the cloud base would be lower than during other parts of the year, and therefore when aircraft may be being flown more in accordance with the distance from cloud exemption.
- 3.7 CAA analysis of VFR transit, arrivals and departures figures from a number of units during 2007-2015 indicates up to a 42% variance between the 'quieter' (autumn/winter) and 'busier' (spring/summer) months of each calendar year.

### **Meteorological Data**

3.8 The CAA obtained historical meteorological data to determine the number of calendar days (i.e. 24 hours) when the cloud ceiling was at or below 3000ft for all of the UK's CTR/CTA aerodromes. This data was collected for a period of 3652 days between 2006 and 2015. The data suggests that a cloud ceiling at or below 3000ft is experienced for 73% of the year.

Sites	Total number of days cloud ceiling at/below 3000ft between 2006 – 2015 (3652 days)	
	Number of days	% of days
Heathrow, London City, Gatwick, Luton, Northolt, Stansted, Southend	2487	68%
Bournemouth, Southampton	2510	69%
Bristol, Brize Norton, Cardiff,	2743	75%
Birmingham, East Midlands	2753	75%
Norwich	2489	68%
Manchester, Doncaster, Leeds, Liverpool	2664	73%
Newcastle, Durham Tees Valley	2438	67%
Glasgow, Edinburgh, Prestwick	2961	81%
Aberdeen	2487	68%
Belfast International, Belfast City	2959 81%	

Mean	2649	73%

### Table 3c

Weather Data for UK airports indicating number of days cloud below 3000ft

Question 1: Do you agree with the CAA's assessment of typical weather conditions in the UK?

# Chapter 4 Options for change

The CAA believes that the SERA class D distance from cloud requirement can be adopted without significant impact on the identified stakeholders. It has identified the following options regarding transition to full compliance with the SERA.5005 class D VMC requirements:

### **Option 1 - Do nothing**

4.1 The SERA Class D VMC requirements are in directly applicable EU law. This option does not satisfy this requirement and is therefore rejected.

# Option 2 - Introduce SERA class D VMC without change to current SVFR provisions

- 4.2 The SERA class D VMC would be introduced without change to current UK SVFR separation provisions. No change to SVFR conditions stated in SERA.5010.
- 4.3 The advantages associated with this option are identified as being:
  - Increased vertical distance from cloud increases the efficacy of 'see and avoid' for VFR flights within class D airspace.
  - Reduced complexity in the applicable VMC.
  - No change to established (and well-understood) SVFR procedures.
  - No increase to risk of Mid-Air Collision (MAC) between SVFR traffic.
  - Compliance with SERA.
  - Removal of UK Difference from ICAO Annex 2.
- 4.4 The potential disadvantages are considered to be:
  - Increased demand for SVFR, resulting in part from the continued need for concurrent compliance with SERA minimum height requirements<sup>15</sup>, leading to increased controller/unit workload and thus potentially reducing the possibility of airspace access, leading to delays and reroute of affected traffic.
  - Consequential possible increase to MAC risk within adjacent class G airspace if aircraft are unable to obtain VFR or SVFR clearances, and route around the affected airspace as a consequence.
  - Increased radiotelephony (RTF) occupancy.

<sup>&</sup>lt;sup>15</sup> SERA.3105 Minimum heights.

# Option 3 - Introduce SERA class D VMC and amend SVFR separation requirements based on flight visibility

- 4.5 The SERA class D VMC would be introduced with a change to current UK SVFR separation requirements. Under this option, SVFR traffic operating below 3000 ft AMSL in a flight visibility of at least 5 km (if the aircraft is not a helicopter) or 1500 m (if the aircraft is a helicopter) would not be separated from other SVFR traffic. There would be no change to the requirement to separate SVFR traffic from IFR traffic, nor variation from the SVFR conditions stated in SERA.5010.
- 4.6 The advantages associated to this approach are identified as being:
  - Increased vertical distance from cloud increases the efficacy of 'see and avoid' for VFR flights within CTR's.
  - Reduced complexity in the applicable VMC potentially less increase in controller/unit workload compared to option 2.
  - Potentially less possibility of airspace access refusal, which may have led to delays and reroute of affected airspace, compared to option 2.
  - Compliance with SERA.
  - Removal of UK Difference from ICAO Annex 2.
- 4.7 The disadvantages of this option are considered to be:
  - Increased demand for SVFR, resulting in part from the continued need for concurrent compliance with SERA minimum height requirements.
  - Complexity of the qualifying criteria to both ATC and airspace users.
  - Requirement for ATC to know in-flight visibility of all SVFR aircraft to determine need (or not) for separation<sup>16</sup>.
  - Complexity for ATC in continuing to have to provide separation between SVFR operating to/from the controlling aerodrome when the reported visibility at the controlling aerodrome reduces to less than 5 kms.
  - Increased RTF occupancy arising from ATC requests to confirm in-flight visibility, increased pilot requests for traffic information and traffic avoidance advice.

# Option 4 - Introduce SERA class D VMC and amend SVFR separation requirements based on reported ground visibility at the CTR controlling aerodrome

4.8 The SERA class D VMC could be introduced with a change to current UK SVFR separation requirements. Under this option, SVFR traffic operating below 3000 ft AMSL when the reported meteorological conditions at the controlling aerodrome is at least 5 km would not be separated from other SVFR traffic. There would be no change to the requirement to separate

<sup>&</sup>lt;sup>16</sup> SERA.5010(b)(1) Special VFR in control zones

SVFR traffic from IFR traffic, nor variation from the SVFR conditions stated in SERA.5010.

- 4.9 The advantages associated to this approach are identified as being:
  - Potentially less increase in controller/unit workload compared to options 2 and 3.
  - Potentially less possibility of airspace access refusal compared to options 2 and 3.
  - Increased vertical distance from cloud increases the efficacy of 'see and avoid' for VFR flights within class D airspace.
  - Reduced complexity in the applicable VMC.
  - Compared to Option 3, reliance on reported meteorological visibility presents ATC with a clear (and standard) metric to be applied when determining the need to separate SVFR.
  - Compliance with SERA.
  - Removal of UK Difference from ICAO Annex 2.
- 4.10 The disadvantages of this option are considered to be:
  - Increased demand for SVFR, resulting in part from the continued need for concurrent compliance with SERA minimum height requirements<sup>17</sup>.
  - Increased RTF occupancy arising from increased requests for traffic information and traffic avoidance advice requests.
  - Increased complexity for ATC when transitioning from conditions not requiring separation between SVFR traffic, to those that do require separation between SVFR traffic.
  - Potential increase to MAC risk to pilots of aircraft unable to obtain SVFR clearances, and route around the affected CTR as a consequence, but less than that associated with option 3 given the better-defined discriminant between separation/no separation.

<sup>&</sup>lt;sup>17</sup> SERA.3105 Minimum heights.

# Chapter 5 Preferred Option

### Summary of change resulting from the preferred option

- 5.1 The CAA's preferred option is option 4, i.e., compliance with SERA.5001 class D VMC without variation, and refinement of current UK SVFR separation requirements as stated.
- 5.2 Under this option, ATC is still required to provide separation between SVFR and IFR traffic and, when reported meteorological visibility is less than 5 km, between SVFR traffic.

5.3	The change in requir	rements is summar	ised below:

	SERA.5001	Current UK Exemption	Impact
Applicable Airspace	ABCDE	Class D below 3000ft	Common vertical distance from cloud in classes A- E below 3 050 m (10 000 ft) AMSL and above 900 m (3 000 ft) AMSL, or above 300 m (1 000 ft) above terrain, whichever is the higher at all levels. The VMC minima in Class A airspace are included for guidance in SERA.5001 and do not imply acceptance of VFR flights in Class A airspace.
Flight Visibility	5 km	5 km	No change
Horizontal Distance From Cloud	1500 m (5000ft)	1500 m (5000ft)	No change
Vertical Distance From Cloud	300 m (1000 ft)	Clear of cloud, surface in sight	Common vertical distance from cloud in classes A- E below 3 050 m (10 000 ft) AMSL and above 900 m (3 000 ft) AMSL, or above 300 m (1 000 ft) above terrain, whichever is the higher at all levels.
Maximum Speed	250 kts	140 kts or less	250 kts IAS applies to all flights below 3 050 m (10 000 ft) AMSL, except where approved by the competent authority for aircraft types, which for technical or safety reasons, cannot maintain this speed (SERA.6001(a)(4)). No change to the requirements for SVFR flights to be flown:

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<ul><li>(1) clear of cloud and with the surface in sight;</li><li>(2) in a flight visibility is not less than 1 500 m or, for helicopters, not less than 800 m;</li></ul>
(3) at a speed of 140 kts IAS or less to give adequate opportunity to observe other traffic and any obstacles in time to avoid a collision; and
An ATC unit shall not issue a special VFR clearance to aircraft to take off or land at an aerodrome within a control zone, or enter the aerodrome traffic zone or aerodrome traffic circuit when the reported meteorological conditions at that aerodrome are below the following minima:
(1) the ground visibility is less than 1 500 m or, for helicopters, less than 800 m;
(2) the ceiling is less than 180 m (600 ft).

Table 5aSummary of change to applicable VMC requirements

	Current UK Provisions	Revised UK Provisions	Impact
Separation from IFR traffic	SVFR separated from IFR	SVFR separated from IFR	No change
Separation from SVFR traffic	SVFR separated from SVFR	SVFR separated from SVFR above 3000ft	No change
		SVFR not separated from SVFR below 3000ft when reported meteorological visibility is at least 5 km	No change to separation requirements when reported meteorological visibility is less than 5 km. No separation between SVFR traffic when reported meteorological visibility is at least 5 km. No change to requirements for ATC to pass traffic information.
Separation from VFR traffic	SVFR not separated from VFR	SVFR not separated from VFR	No change

### 5.4 The separation criteria for SVFR are described in table 5b.

### Table 5b

Summary of change to SVFR requirements

### Safety benefit

- 5.5 The CAA believes that application of the SERA vertical distance from cloud requirements without variation simplifies the regulatory framework, ensures compliance with applicable EU legislation and removes a Difference from ICAO Standards and Recommended Practices. Such simplification reduces the level of complication associated with the rules of the air, thus engendering greater understanding of these when applied in the UK and elsewhere. This is considered a safety benefit.
- 5.6 In addition, increased vertical distance from cloud increases the efficacy of 'see and avoid' within class D airspace. This is also considered a safety benefit.

Question 2: Do you support the CAA's preferred option and the associated assumptions?

### **Additional Considerations**

### Flight planning

5.7 Pilots are required to pre-plan their flight utilising up-to-date aeronautical information before commencing their flight<sup>18</sup>. This enables pilots to be prepared to apply alternative options if they are refused permission to transit through controlled airspace.

### Abbreviated flight plans and CTR/CTA crossing clearance requests

5.8 As an alternative to submitting a written flight plan, pilots may submit an abbreviated flight plan by RTF means by calling on the appropriate frequency and requesting the transit clearance. Typically, an initial call when aircraft are 15 miles or 5 minutes flying time, whichever is greater<sup>19</sup> from the boundary of controlled airspace is recommended. Later calls may result in access to airspace being delayed.

### NATS advance notification portal

- 5.9 A number of NATS units utilise an advance notice portal which enables pilots to notify an ATC unit of their intentions before they commence their flight. Such advance notice:
  - Enables early warning of requests;
  - Enables better planning of transit flights through controlled airspace;
  - Reduces the RTF loading when requests are made;
  - Reduces ATC workload and therefore enable more efficient use of the airspace.
- 5.10 Details of the pre-notification tool are given on the <u>NATS website</u><sup>20</sup> and in Aeronautical Information Circular Y055/2018.

### **VFR** guides

5.11 Certain ATC units provide useful information and advice for airspace users wishing to transit control zones under VFR in the form of VFR guides, for example <u>Norwich<sup>21</sup></u> and <u>Southend<sup>22</sup></u>. Further generic information on VFR CTR/CTA crossings is available at the <u>Airspace and Safety Initiative website<sup>23</sup></u>.

<sup>&</sup>lt;sup>18</sup> SERA.2010(b) Responsibilities:

Before beginning a flight, the pilot-in-command of an aircraft shall become familiar with all available information appropriate to the intended operation. Pre-flight action for flights away from the vicinity of an aerodrome, and for all IFR flights, shall include a careful study of available current weather reports and forecasts, taking into consideration fuel requirements and an alternative course of action if the flight cannot be completed as planned.

<sup>&</sup>lt;sup>19</sup> UK AIP GEN 3.3 para 3.7.3.1.

<sup>&</sup>lt;sup>20</sup> <u>https://nats.aero/blog/2017/12/help-us-help-nats-launches-ga-pre-notification-tool/</u>

<sup>&</sup>lt;sup>21</sup> https://www.norwichairport.co.uk/wp-content/uploads/Norwich-Airport-Class-D-Airspace-Pilots-Guide-v5.0.pdf

<sup>&</sup>lt;sup>22</sup> http://stobartexecutive.co.uk/downloads/CAS-Safety-Information-Notice-V1.01.pdf)

<sup>&</sup>lt;sup>23</sup> Airspace and Safety initiative website (https://airspacesafety.com/)

### Moving Maps

- 5.12 The use of moving maps is often cited as a useful safety barrier to prevent airspace infringements. An <u>analysis of airspace infringements</u> during 2017 suggests that appropriate use of moving maps could have prevented up to 85% of airspace infringements that year.<sup>24</sup>
- 5.13 The CAA actively promotes the use of moving map technology provided pilots ensure they are using the device and application correctly. Moving map technology provides accurate and reliable estimates of forward positioning to enable timely and effective ATC notification.

<sup>&</sup>lt;sup>24</sup> <u>https://airspacesafety.com/updates/</u>

Question 3: Do you agree with the CAA analysis of the projected workload change for ATC units and the effectiveness of the proposed mitigation?

Question 4: Do you agree with the CAA analysis of the potential impact on the provision of non-IFR flight? Are there any additional factors you feel should be considered?

Question 5: Do you agree with the CAA's assessment of safety impact?

# Chapter 6 Invitation to respond

Stakeholders are invited to submit their views on the CAA's proposals and to respond to questions posed in the document. Responses can be submitted either through the online survey form<sup>25</sup>, or in writing using the template provided to <u>SERA@caa.co.uk</u> by **no later than 31 May 2019.** Any enquiries regarding this consultation should be submitted via email.

 $<sup>^{25}\ \</sup>underline{https://consultations.caa.co.uk/future-safety/proposed-changes-to-vmc-minima-in-class-d-airspace}$ 

# Chapter 7 Next steps

Following conclusion of the consultation it will be necessary for the CAA to assess consultation responses, modify change proposals if necessary based on consultation responses and prepare its consultation report, for publication in July 2019.

Before the end of July 2019 it will be necessary to submit the necessary amendments to the UK Aeronautical Information Publication, and publish necessary changes to CAP 493 Manual of Air Traffic Services Part 1.

It is planned for these to take effect on **12 September 2019 (AIRAC 10/2019)**, at which point the exemption expires and the UK's Difference to ICAO Annex 2 can be removed.

# Chapter 8 Appendix

### 8.1 SERA.5001 VMC visibility and distance from cloud minima (Table S5-1)

Table S5-1*				
Altitude Band	Airspace class	Flight Visibility	Distance from cloud	
At and above 3 050 m (10 000 ft) AMSL	A (**) B C D E F G	8 km	1 500 m horizontally 300 m (1 000 ft) vertically	
Below 3 050 m (10 000 ft) AMSL and above 900 m (3 000 ft) AMSL, or above 300 m (1 000 ft) above terrain, whichever is the higher	A (**) B C D E F G	5 km	1500 m horizontally 300 m (1 000 ft) vertically	
At and below 900m (3000 ft) AMSL, or 300m (1000	A (**) B C D E	5 km	1500 m horizontally 300 m (1 000 ft) vertically	
whichever is higher	FG	5 km (***)	Clear of cloud and with the surface in sight	

(\*) When the height of the transition altitude is lower than 3 050 m (10 000 ft) AMSL, FL 100 shall be used in lieu of 10 000 ft.

(\*\*) The VMC minima in Class A airspace are included for guidance to pilots and do not imply acceptance of VFR flights in Class A airspace.

(\*\*\*) When so prescribed by the competent authority:

(a) flight visibilities reduced to not less than 1 500 m may be permitted for flights operating:

(1) at speeds of 140 kts IAS or less to give adequate opportunity to observe other traffic or any obstacles in time to avoid collision; or

(2) in circumstances in which the probability of encounters with other traffic would normally be low, e.g. in areas of low volume traffic and for aerial work at low levels;

(b) helicopters may be permitted to operate in less than 1 500 m but not less than 800 m flight visibility, if manoeuvred at a speed that will give adequate opportunity to observe other traffic or any obstacles in time to avoid collision.

### 8.2 SERA.6001(a)(4) Classification of airspaces

Class D. IFR and VFR flights are permitted, and all flights are provided with air traffic control service. IFR flights are separated from other IFR flights, receive traffic information in respect of VFR flights and traffic avoidance advice on request. VFR flights receive traffic information in respect of all other flights and traffic avoidance advice on request. Continuous air-ground voice communications are required for all flights and a speed limitation of 250 kts IAS applies to all flights below 3 050 m (10 000 ft) AMSL, except where approved by the competent authority for aircraft types, which for technical or safety reasons, cannot maintain this speed. All flights shall be subject to ATC clearance.

### 8.3 SERA.5010 Special VFR in Control Zones

Special VFR flights may be authorised to operate within a control zone, subject to an ATC clearance. Except when permitted by the competent authority for helicopters in special cases such as, but not limited to, police, medical, search and rescue operations and fire-fighting flights, the following additional conditions shall be applied:

(a) such special VFR flights may be conducted during day only, unless otherwise permitted by the competent authority;

(b) by the pilot:

(1) clear of cloud and with the surface in sight;

(2) the flight visibility is not less than 1 500 m or, for helicopters, not less than 800 m;

(3) fly at a speed of 140 kts IAS or less to give adequate opportunity to observe other traffic and any obstacles in time to avoid a collision; and

(c) an air traffic control unit shall not issue a special VFR clearance to aircraft to take off or land at an aerodrome within a control zone, or enter the aerodrome traffic zone or aerodrome traffic circuit when the reported meteorological conditions at that aerodrome are below the following minima:

(1) the ground visibility is less than 1 500 m or, for helicopters, less than 800 m;

(2) the ceiling is less than 180 m (600 ft).