

Supplementary Instruction (SI)

CAP 493 MATS Part 1

Safety and Airspace Regulation Group
Airspace, ATM and Aerodromes



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Version: 1

Effective: 20 May 2021

Change to VMC criteria

1. Introduction

- 1.1 The purpose of this Supplementary Instruction (SI) is to detail changes made to the Manual Air Traffic Services (MATS) Part 1 (CAP 493), relating to the implementation of amended VMC minima in UK airspace.

2. Background

- 2.1 Through the Aviation Safety (Amendment) Regulations 2021, the Department for Transport (DfT) intends to amend SERA.5001¹ Table S5-1 VMC visibility and distance from cloud minima with effect from 20 May 2021. This amendment affects the VMC minima in airspace classes D, F and G.
- 2.2 The VMC minima in class D airspace at and below 3,000 ft AMSL or 1,000 ft above terrain, whichever is the higher, will continue to require flights to operate with a flight visibility of at least 5 km and a distance from cloud of at least 1,500 m horizontally and at least 1,000 ft vertically. However, aircraft will also be deemed to have complied with these requirements if they are flying:
- (a) during day only;
 - (b) indicated airspeed of 140 kts or less;
 - (c) remains clear of cloud with the surface in sight and;
 - (i) for aircraft other than helicopters, with a flight visibility of at least 5 km;
 - (ii) for helicopters, with a flight visibility of at least 1,500 m.
- 2.3 The VMC minima in airspace classes F and G at and below 3,000 ft AMSL or 1,000 ft above terrain, whichever is the higher, will continue to require flights to operate with a flight visibility of at least 5 km, clear of cloud and with the surface in sight. However, aircraft will also be deemed to have complied with these requirements if they are flying:
- (a) during day only;
 - (b) indicated airspeed of 140 kts or less;
 - (c) for all aircraft, with a flight visibility reduced to not less than 1,500 m.

¹ In accordance with the European Union (Withdrawal) Act 2018, references to EU regulations are now references to the UK law of the same name. That is, Retained EU Law as amended by UK law.

- 2.4 It is worth noting that the amendment to SERA.5001 Table S5-1 relating to airspace classes F and G will not change the operating environment, as these minima are currently enabled through [Official Record Series\(ORS\) 4 No 1341](#).
- 2.5 Whilst we have confirmation from the DfT of the effective date of the change in legislation, the Aviation Safety (Amendment) Regulations 2021 will not be laid in Parliament until 7 January 2021 and remain subject to Parliamentary process. As such, the amendment may not pass into law, or may be subject to further amendment; albeit the CAA considers both these possibilities unlikely. Irrespective, the CAA has decided to publish this SI ahead of the laying in Parliament in order to ensure that ANSPs have the maximum time available to undertake their implementation activities and, specifically, the safety assessment of the change to the functional system in accordance with ATS.OR.205.
- 2.6 When assessing the impact of this change, ATS units are reminded to consider the following:
- Letters of agreement and memoranda of understanding with adjacent aerodromes and aircraft operators;
 - Entries in AIP AD2 that may refer (directly or indirectly) to SERA.5001 Table S5-1 the VMC visibility and distance from cloud minima;
 - The development and subsequent implementation of amendments to unit instructions, training plans, (and, where appropriate) conversion courses and competence schemes and (where appropriate) to have these approved by the CAA; and,
 - Gaining sufficient assurance that all ATS staff are competent to provide ATS in the changed environment, given the challenges of managing competence whilst staff may be on furlough.

3. Revised MATS Part 1 Procedures

- 3.1 With effect from 20 May 2021, the Manual of Air Traffic Services (CAP493) is amended as shown at Appendix A.
- 3.2 This change will be incorporated into CAP 493 at the next edition.

4. Queries

- 4.1 Any queries or further guidance required on the content of this SI should be addressed to:

ATS Enquiries
Airspace, ATM & Aerodromes
Civil Aviation Authority
Safety and Airspace Regulation Group
Beehive Ringroad
Crawley
West Sussex
RH6 0YR

E-mail: ats.enquiries@caa.co.uk

4.2 Any queries relating to the availability of this SI should be addressed to:

ATS Enquiries
Safety & Business Delivery
Civil Aviation Authority
Safety and Airspace Regulation Group
Beehive Ringroad
Crawley
West Sussex
RH6 0YR

E-mail: ats.documents@caa.co.uk

5. Cancellation

5.1 This SI shall remain in force until incorporated into CAP 493 or is cancelled, suspended or amended.

Appendix A

Section 1, chapter 2, paragraph 4.1:

4. Visual Flight Rules

- 4.1 The pilot of an aircraft is responsible for determining whether or not the meteorological conditions permit flight in accordance with the Visual Flight Rules. The criteria for determining Visual Meteorological Conditions are summarised in the tables below (SERA.5001 Table S5-1).

Table 2:

By Day	Distance from Cloud		Flight Visibility
	Horizontal	Vertical	
At and Above FL 100 (SERA.5001) Class B, C, D, E, F and G airspace	1500 m	300 m (1 000 ft)	8 km
Below FL 100 and above 900 m (3 000 ft) AMSL, or above 300 m (1 000 ft) above terrain, whichever is the higher (SERA.5001) Class B, C, D, E, F and G airspace	1500 m	300 m (1 000 ft)	5 km
At and below 900 m (3 000 ft) AMSL, or 300 m (1 000 ft) above terrain, whichever is the higher (SERA.5001) Class B, C, D and E airspace	1500 m	300 m (1 000 ft)	5 km
<u>Alternatively, in Class D airspace</u> <u>For aircraft other than helicopters, flying at 140 kts IAS or less</u> <u>For helicopters, flying at 140 kt IAS or less</u>	<u>Clear of cloud and with the surface in sight</u>		<u>5 km</u> <u>1500 m</u>
Class F and G airspace <i>Alternatively, for aircraft including helicopters, flying at 140 kt IAS or less</i>	Clear of cloud and with the surface in sight Clear of cloud and with the surface in sight		5 km 1500 m

Table 3:

By Night	Distance from Cloud		Flight Visibility
	Horizontal	Vertical	
At and Above FL 100 (SERA.5001) Class B, C, D, E, F and G airspace	1500 m	300 m (1 000 ft)	8 km
Below FL 100 and above 900 m (3 000 ft) AMSL, or above 300 m (1 000 ft) above terrain, whichever is the higher (SERA.5001) Class B, C, D, E, F and G airspace	1500 m	300 m (1 000 ft)	5 km
At and below 900 m (3 000 ft) AMSL, or 300 m (1 000 ft) above terrain, whichever is the higher (SERA.5001 and SERA.5005(c)(3)(iii)) Class B, C, D, and E airspace	1500 m	300 m (1 000 ft) maintain continuous sight of the surface	5 km
Class F and G airspace	Clear of cloud and maintain continuous sight of the surface		5 km

Note 1: VMC minima for Class A airspace is:

At or above FL100 8 km flight visibility, 1500 m horizontal and 300 m (1 000 ft) vertically away from cloud.

Below FL100 5 km flight visibility, 1500 m horizontal and 300 m (1 000 ft) vertically away from cloud

Note 2: For the purposes of gliders crossing airways in VMC by day the minima will be:

At all levels 8 km flight visibility, 1500 m horizontal and 300 m (1 000 ft) vertically away from cloud

Note 4: UK General Permission ORS4 no. 1342 permits VFR flight within a control zone at night.

Note 5: UK General Exemption ORS4 no. 1343 exempts operations of helicopters conducting Police; HEMS; Search and Rescue (SAR) flights, including SAR training flights operating in accordance with a Letter of Agreement with the Air Traffic Service Provider, from complying with SERA.5005(b) and SERA.5010(b), and air

traffic control units from complying with SERA.5005(b) and SERA.5010(c) when controlling such flights.

Note 6: UK General Exemption ORS4 no. 1344 exempts operations of helicopters conducting powerline, pipeline and rail track inspection flights, from complying with SERA.5005(b) and SERA.5010(b), and air traffic control units from complying with SERA.5005(b) and SERA.5010(c) when controlling such flights.

Note 7: The VMC criteria stated in the table above for flight by day in Class D, F and G airspace at or below 3 000 ft AMSL, or 1 000 ft above terrain, whichever is higher, reflect changes from SERA.5001 Table S5-1, as enabled through the Aviation Safety (Amendment) Regulations 2021.