Supplementary Instruction (SI)
CAP 493 MATS Part 1

Safety and Airspace Regulation Group
Future Safety

Number: 2019/06 **Issued: 24 October 2019**

Version: 1 **Effective Date: 27 February 2020**

Class E airspace ATS procedures amendment – phase 2

1. Introduction

1.1 The purpose of this Supplementary Instruction (SI) is to implement the second phase of changes to Class E Airspace Air Traffic Service (ATS) procedures contained within the Manual of Air Traffic Services (MATS) Part 1 (CAP 493).

2. Background

2.1 During 2014 Class F airspace established within the UK was replaced in part by Class E airspace and as part of this change, Class E airspace ATS procedures contained within the MATS Pt 1 were amended. However, during the post implementation review that occurred during 2017 industry feedback highlighted that these revised procedures had generated inefficiencies within the ATM system which needed to be addressed.

2.2 During 2018 the Civil Aviation Authority (CAA) consulted the CAA's National Air Traffic Management Advisory Committee (NATMAC) and several Air Navigation Service Provider (ANSP) stakeholders on proposed refinements to Class E airspace ATS procedures to address these inefficiencies. Subsequent analysis of consultation comments identified that the CAA's preferred choice best balanced different stakeholder opinions; however, implementation of the revised procedures would require a two-phase approach. The first phase was implemented through MATS Pt 1 SI 2019/03 published on 17 May 2019, which became effective on 16 July 2019.

2.3 The second phase of change to class E airspace ATS procedures requires several changes to the following:

(i) MATS Pt 1 (CAP 493) which is implemented through this SI;
(ii) Radiotelephony Manual (CAP 413) which is implemented through CAP 413 SI 2019/01; and
(iii) UK's Aeronautical Information Publication (AIP), which will be published with a double-AIRAC cycle notice period ahead of the effective date of 27 February 2020.

2.4 Additional notice of these changes is also given through the promulgation of the following Aeronautical Information Circulars (AICs) on the AIS website:

(i) AIC Y 127/2019 – Changes to class E ATS procedures; and
(ii) AIC Y 128/2019 – Changes to SSR transponder code procedures.

2.5 For further details please review the following document:

CAP 1800: Consultation Report – Change Proposals for Class E Airspace Procedures

3. Revised MATS Part 1 Procedures

3.1 With effect from 27 February 2020, the Manual of Air Traffic Services (CAP 493) is amended as shown at Appendix A.

3.2 This change will be incorporated into CAP 493 at the next amendment in due course.

4. Queries

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

ATS Enquiries
Future Safety
CAA Safety and Airspace Regulation Group
2W Aviation House
Gatwick Airport South
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 Documents
Future Safety
CAA Safety and Airspace Regulation Group
2W Aviation House
Gatwick Airport South
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:

2.2 Notwithstanding the minimum service requirements associated with each airspace classification, the primary objective of air traffic services is to prevent collisions between aircraft (SERA.7001(a)). In support of this objective, on any occasion a controller considers it necessary in the interests of safety, traffic information and, where appropriate traffic avoidance advice, shall be provided. Pilots are responsible for collision avoidance (SERA.3201) and should be aware of the existence of factors that might adversely affect the ability of a controller to detect a collision hazard and provide timely and accurate traffic information, and when surveillance-based ATS is being provided, traffic avoidance advice.

Section 1, chapter 6:

1B. Type of Surveillance Service

1B.1 The airspace within which the aircraft is flying determines the type of surveillance service available, as shown in the table below.

Table 1:

Types of Airspace	Surveillance Service
Controlled Airspace	Radar Control Service
Outside Controlled Airspace	Deconfliction Service; or Traffic Service

1B.2 Pilots must be advised if a service commences, terminates or changes when:

(1) outside controlled airspace;

(2) entering controlled airspace, except when entering controlled airspace in connection with an IFR flight holding in Class E airspace in accordance with paragraph 1B.5 below;

(3) changing from IFR to VFR or VFR to IFR within Class E airspace;

(4) VFR flights entering Class C or D airspace from Class E airspace, or VFR flights leaving Class C or D airspace to enter Class E airspace;

(5) leaving controlled airspace:

(a) unless pilots are provided with advance notice in accordance with paragraph 1B.4 below; or

(b) except when leaving controlled airspace in connection with an IFR flight holding in Class E airspace in accordance with paragraph 1B.5 below.

1B.3 Additionally, pilots of IFR flights must be advised of the change of airspace classification when entering and leaving Class E airspace when the flight is:

(1) an unplanned diversion; or

(2) no flight plan has been filed at the time a clearance to enter controlled airspace is requested.

The associated phraseology is contained within CAP 413.

1B.4 For flights leaving controlled airspace controllers should provide pilots with advance notice of:

(1) the lateral or vertical point at which the aircraft will leave controlled airspace. Such notice should be provided between 5-10 nm or 3,000-6,000 ft prior to the boundary of controlled airspace;

(2) the type of ATS that will subsequently be provided, unless the aircraft is coordinated and transferred to another ATS unit before crossing the boundary of controlled airspace.

1B.5 IFR airborne holding might not be fully contained within the lateral boundaries of Class E airspace. Controllers are not required to advise pilots of such flights on the changes of ATS provided as they leave or enter Class E airspace. However, the controller shall provide either a Deconfliction Service, or Procedural Service, depending on the availability of ATS surveillance, for the portion of IFR flight in Class G airspace. Controllers are only required to advise pilots when a Procedural Service will be provided as pilots assume, unless otherwise advised, that the type of UK FIS they will receive will be a Deconfliction Service.

Section 1, chapter 6:

10A.4 Aircraft Under Radar Control Service. If the intentions of verified Mode S altitude reporting or Mode C transponding aircraft are not known the minimum separation is for:

(1) IFR flights within Class A, C-E airspace, must be increased to 5,000 feet, or alternative approved minima within MATS Part 2; and

(2) VFR flights within Class C airspace, must be increased to 5,000 feet, or alternative approved minima within MATS Part 2.

10A.5 Unverified Mode S altitude reporting or Mode C data may be used for separation purposes within controlled airspace as follows:

(1) for IFR flights within Class A, C and D airspace, and VFR flights within Class C airspace, a minimum vertical separation of 5,000 feet, or an alternative approved minima within MATS Part 2, and surveillance returns however presented are not allowed to merge;

(2) for IFR within Class E airspace, except against aircraft displaying VFR conspicuity or a Frequency Monitoring Code, a minimum vertical separation of 5,000 feet, or an alternative approved minima within MATS Part 2, and surveillance returns however presented are not allowed to merge; and

(3) for IFR flights within Class E airspace, against aircraft displaying VFR conspicuity or a Frequency Monitoring Code, whenever practicable, pass traffic information and if requested by the pilot or when deemed necessary by the controller, suggest traffic avoidance advice.

Note: The procedure in (2) & (3) only applies to Frequency Monitoring codes notified for the purposes of VFR within Class E airspace.

10A.6 Aircraft that do not meet the published operating requirements for a particular volume of TMZ may be deemed to be operating outside that TMZ unless:

(1) the controller has approved such an aircraft to enter TMZ airspace without identifying the aircraft using an appropriate method; or

(2) information received indicates that an aircraft is lost or has experienced a radio failure.

10A.7 When suggesting traffic avoidance advice, controllers shall aim to prevent surveillance returns from merging.

10A.8 For aircraft receiving a Deconfliction Service, refer to CAP 774, chapter 4, paragraph 4.10.

Section 1, chapter 6:

15.2 The action to be taken by controllers when they observe an unknown aircraft, which they consider to be in unsafe proximity to traffic receiving an ATS varies according to the airspace classification in which the event takes place as follows:

Table 5:

Class	Action to be taken by the Controller
A	If surveillance derived or other information indicates that an aircraft is making an unauthorised penetration of the airspace, is lost, or has experienced radio failure, flights shall be given traffic avoidance advice and traffic information shall be passed.
C	If surveillance derived or other information indicates that an aircraft is making an unauthorised penetration of the airspace, is lost, or has experienced radio failure: IFR flights shall be given traffic avoidance advice and traffic information shall be passed. VFR flights shall be given traffic information and if requested by the pilot or when deemed necessary by the controller, traffic avoidance advice shall be suggested.
D	If surveillance derived or other information indicates that an aircraft is making an unauthorised penetration of the airspace, is lost, or has experienced radio failure: IFR flights shall be given traffic avoidance advice and traffic information shall be passed. VFR and SVFR flights shall be given traffic information and if requested by the pilot or when deemed necessary by the controller, traffic avoidance advice shall be suggested; see note 1.
E	Pass traffic information unless the controller's primary function of sequencing and separating IFR flights is likely to be compromised. IFR flights shall be given traffic avoidance advice if surveillance derived or other information indicates that an aircraft is lost, or has

	experienced a radio failure, or an aircraft operating in accordance with IFR infringes Class E airspace; see note 3. IFR flights shall be given traffic information whenever practicable and if requested by the pilot or when deemed necessary by the controller, traffic avoidance advice shall be suggested; and Participating VFR flights shall be given traffic information in accordance with CAP 774 – UK Flight Information Services.
G	Flights receiving either the Deconfliction Service or Procedural Service shall be given traffic information and deconfliction advice in accordance with CAP 774 – UK Flight Information Services; see note 2, and Flights receiving either the Traffic Service or Basic Service shall be given traffic information in accordance with CAP 774 – UK Flight Information Services.

Note 1: When providing traffic avoiding advice, controllers shall remind pilots of their responsibility to remain clear of cloud with the surface in sight.

Note 2: When the controller considers that more immediate action is required by the pilot, traffic avoidance advice may be passed by ATC before traffic information.

Note 3: Whenever the flight rules employed by pilots of unknown aircraft cannot be determined the procedure detailed in section 1, chapter 6, paragraph 10A.5(2) shall be applied.