

# Supplementary Instruction (SI) CAP 1032 AFISO Licensing

Safety and Airspace Regulation Group

Flight Operations



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## Training for the use of a Flight Information Display

### 1 Introduction

- 1.1 The purpose of this Supplementary Instruction (SI) is to insert guidance material and detail the national requirements for the licensing of aerodrome FISOs. To provide guidance and information to providers of air traffic services and applicants for, and holders of, the aerodrome FISO Licence, on the training for the use of Flight Information Display (FID) systems in the provision of aerodrome flight information service (AFIS) into the Aerodrome Flight Information Service Officer (FISO) Licensing Manual (CAP 1032).
- 1.2 This document supports Article 200 of the Air Navigation Order 2016, by providing training requirements for FISO licence holders and organisations employing them.
- 1.3 ATS surveillance systems may be utilised to perform different functions – basic functions and enhanced functions – in supporting the provision of AFIS. The performance of basic functions or enhanced functions is dependent upon, the performance specification of the ATS surveillance system in-use and this extends the existing licence privileges granted to the AFISO upon completion of the required training.
- 1.4 The requirements contained herein relate only to training towards the performance of basic functions in supporting the provision of AFIS.
- 1.5 The terms and abbreviations contained within this document are sourced, primarily, from retained European Union (EU) Regulations, as amended by various UK Statutory Instruments (made under the European Union (Withdrawal) Act 2018). For example, Regulation (EU) No 923/2012 Standardised European Rules of the Air (SERA) as retained (and amended in UK domestic law) under the European Union (Withdrawal) Act 2018 (“UK Reg (EU) No 923/2012”).

### 2 Background

- 2.1 Supplementary Instruction (SI) No 03/2021 to the FISO Manual (CAP 797) introduced procedures and guidance for the use of a flight information display (FID) in the provision of AFIS. To support this, Aerodrome FISO Licensing (CAP 1032) shall via this SI include requirements relating to the development of unit training materials to enable the utilisation of the FID.
- 2.2 This work has also resulted in supporting amendments to Air Traffic Service Safety Requirements (CAP 670) to introduce specifications for the FID.

**3 Amendment to CAP 1032**

- 3.1 With effect from 15 December 2021, CAP 1032 is amended as shown at Appendix A of this document. This change will be incorporated into CAP 1032 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  
Licensing Policy  
CAA Safety and Airspace Regulation Group  
Aviation House  
Beehive Ringroad  
Crawley  
West Sussex  
RH6 0YR

E-mail: [ats.enquiries@caa.co.uk](mailto:ats.enquiries@caa.co.uk)

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

ATS Enquiries  
Licensing Policy  
CAA Safety and Airspace Regulation Group  
Aviation House  
Beehive Ringroad  
Crawley  
West Sussex  
RH6 0YR

E-mail: [ats.documents@caa.co.uk](mailto:ats.documents@caa.co.uk)

**5 Cancellation**

- 5.1 This SI shall remain in force until incorporated into CAP 1032 or it is cancelled, suspended or amended.

## Appendix A

### CAP 1032 Foreword

**Editorial Note.** *The text below is intended to replace the Foreword.*

## Foreword

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### Introduction

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In publishing 'Aerodrome Flight Information Service Officer Licensing (CAP 1032)', the CAA satisfies the obligation in Air Navigation Order 2016 Article 200(2) and (8), to specify such courses of training as the CAA may require to be undertaken for an individual to be granted a flight information service officers (FISO) licence or, on occasion, to maintain such a licence.

The purpose of this publication is to detail the national requirements for the licensing of aerodrome FISOs, and to provide guidance and information to providers of air traffic services and applicants for, and holders of, the aerodrome FISO Licence.

The terms and abbreviations contained within this document are sourced, primarily, from retained European Union (EU) Regulations, as amended by various UK Statutory Instruments (made under the European Union (Withdrawal) Act 2018). For example, Regulation (EU) No 923/2012 Standardised European Rules of the Air (SERA) as retained (and amended in UK domestic law) under the European Union (Withdrawal) Act 2018 ("UK Reg (EU) No 923/2012").

### Interpretation of words

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To avoid any misunderstanding within this document, certain words or terms are to be interpreted as having specific meanings as follows:

**is to, are to, shall, must**

Means that compliance with the instruction or regulatory requirement is necessary.

**should**

Means that it is strongly advisable that an instruction is carried out and is applied where the more positive

'shall' is unreasonable but nevertheless a pilot/ FISO would have to have good reason for not doing so.

**may**

Means that an instruction is permissive, optional or alternative, e.g. 'a FISO may seek assistance ....' but would not if they did not need it.

**will**

Is used for informative or descriptive writing, e.g. 'pilots will file...' is not an instruction to the FISO.

## **Protocol**

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Where this document refers to 'the CAA' it means the UK Civil Aviation Authority's Safety and Airspace Regulation Group.

In the interests of simplicity, any reference to the masculine gender can be taken to mean either male or female.

### **CAP 1032 Glossary of terms**

**Editorial Note.** *The following revised text and additional terms are inserted within the glossary of terms.*

## **Definitions**

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The following terms have been defined to remove any doubt about the meaning of instructions in the text of this document. Other terms and abbreviations used in this document are defined within CAP 1430 the UK Air Traffic Management Vocabulary.

Terms annotated with an asterisk (\*) are based upon equivalent definitions contained within UK Reg (EU) 2015/340 relating to the licensing of air traffic controllers and which have been adapted to provide terminology appropriate to the licensing of FISOs and to suit national licensing requirements.

### **A**

**Abnormal situation** Means circumstances, including degraded situations, which are neither routinely nor commonly experienced and for which an air traffic controller has not developed automatic skills (\* UK CAA)

**ATS surveillance system** A generic term meaning variously, ADS-B, PSR, SSR or any comparable ground-based system that enables the identification of aircraft.

**Note.** A comparable ground-based system is one that has been demonstrated, by comparative assessment or other methodology, to have a level of safety and performance equal to or better than monopulse SSR. (ICAO PANS-ATM (Doc 4444))

**Automatic dependent surveillance – broadcast (ADS-B)** A means by which aircraft, aerodrome vehicles and other objects can automatically transmit and/or receive data such as identification, position and additional data, as appropriate, in a broadcast mode via a data link. (UK Reg (EU) No 923/2012 Article 2(47))

## E

**Emergency situation** Means a serious and dangerous situation requiring immediate actions. (\* UK CAA)

## P

**Performance objective** A clear and unambiguous statement of what a student is expected to do (Performance) according to a level in terms of quality, quantity and time (Standard) and the conditions under which the performance is to be carried out (Conditions): PSC. (UK CAA)

**Position indication** The visual indication, in non-symbolic and/or symbolic form, on a situation display, of the position of an aircraft, aerodrome vehicle or other object. (ICAO PANS-ATM (Doc 4444))

## S

**Secondary surveillance radar (SSR)** A surveillance radar system which uses transmitters/receivers (interrogators) and transponders. (UK Reg (EU) No 923/2012 Article 2(118))

**Strayed aircraft** Means an aircraft which has deviated significantly from its intended track or which reports that it is lost. (UK Reg (EU) No 923/2012 Article 2(123))

## T

**Training objective** A holistic term covering all objectives of a training course: i.e. a syllabus is a list of training objectives classified by subjects, topics and sub-topics showing the training necessary to fill the training gap and achieve the course aim. Not all of these need to be demonstrated, as taxonomy levels will differ. (UK CAA)

**CAP 1032 Appendix D**

*Editorial Note. The text **below** is inserted as a new appendix D. Only main body text has been red underlined, not the headings, to aid readability.*

**APPENDIX D****Training for the use of a Flight Information Display**

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**Introduction**

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- D.1 Supplementary Instruction (SI) No 03/2021 introduced to the FISO Manual (CAP 797) procedures and guidance for the use of a flight information display (FID) in the provision of AFIS. To support this, the Aerodrome FISO Licensing manual (CAP 1032) must include requirements relating to the development of unit training materials to enable the utilisation of the FID.
- D.2 The provisions described in Appendix D to CAP 1032 relating to training for the use of a FID must be read in conjunction with those detailed within CAP 797 for the operational use of the FID.
- D.3 ATS surveillance systems may be utilised to perform different functions – basic functions and enhanced functions – in supporting the provision of AFIS. The performance of basic functions or enhanced functions is dependent upon, inter alia, the performance specification of the ATS surveillance system in-use and the licence privileges granted to the AFISO.
- D.4 The requirements contained herein relate only to training towards the performance of basic functions in supporting the provision of AFIS.
- D.5 The purpose of the FID is to improve the situational awareness of AFISOs and to assist them in providing information that is useful for the safe and efficient conduct of flights. In implementing and utilising a FID, AFIS units shall take steps to ensure that pilots are aware that they are not in receipt of an ATS surveillance service.
- D.6 The information presented on the FID shall not be used as a substitute for pilot position reports, or to replace the read-back of those ATS messages specified in the Radiotelephony Manual (CAP 413) paragraph 2.70. The information presented on the FID may be used as an aid to confirm pilot position reports.

D.7 The use of an ATS surveillance FID system in the provision of AFIS does not relieve the pilot-in-command of an aircraft of any responsibilities.

## General requirements

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### Unit training plan

D.8 AFIS units shall develop and maintain a training plan and associated local instructions to support the introduction and utilisation of a FID. In seeking approval from the CAA to utilise a FID, the training plan and local instructions shall form part of the submission to the CAA. Where AFIS units maintain a unit training plan (UTP), the content related to the use of the FID shall be contained therein.

D.9 The purpose of the training plan is to:

- (a) Pursuant to ATM/ANS.OR.B.005(a)(6), explain how unit instructional staff will gain the required competencies to provide training to other unit staff in the use of the FID; and,
- (b) Ensure that AFISOs are competent in the use of the FID and the manner of its use in supporting the provision of AFIS.

D.10 Training for the use of the FID should be delivered in 3 phases:

- (a) **Phase 1.** Classroom training – designed to impart understanding of:
  - the principles and limitations of cooperative ATS surveillance systems;
  - the operation of the FID; and the ATS procedures and RT phraseology related to the use of the FID.
- (b) **Phase 2.** Off-line training – designed to apply learning in a simulated environment.
- (c) **Phase 3.** Live-training – designed to apply learning in a live environment.

D.11 The first 2 phases of training may be combined into one but must be completed before the AFISO begins live training.

D.12 Training for the use of a FID should be adapted to take into consideration whether:

- (a) the trainee already holds a valid AFISO licence at the unit where training for the use of a FID will be undertaken; or,

- (b) the trainee is undertaking training towards an initial validation assessment which will include the use of a FID.

### Examination and assessment

- D.13 To confirm that the AFISO has achieved the phase 1 and 2 training objectives, an oral examination and practical assessment must take place, and be successfully passed, before the AFISO commences phase 3 live training. The pass mark for the oral examination is 75%.
- D.14 To confirm that the AFISO has achieved the phase 3 training objectives, they must undergo an assessment to confirm that they are competent to utilise the FID in exercising the privileges of their licence. Of particular relevance at this stage is that the AFISO does not place undue emphasis on the FID when exercising the privileges of their licence.
- D.15 The training plan and local instructions submitted to the CAA shall detail the mechanisms and arrangements for the oral examination and practical assessments. These should include what actions will be undertaken should an AFISO be unsuccessful in achieving the required standard.
- D.16 The CAA reserves the right to attend any examination and/or assessment relating to the validity of an AFISO licence, including those associated with incorporating the use of a FID within the privileges associated with this licence.

### Training records

- D.17 AFIS units shall retain detailed records of AFISOs undertaking or having undertaken unit training in the use of the FID, to show that all requirements have been met.

### Maintaining competence

- D.18 AFISO Licensing (CAP 1032) chapter 1, paragraph 1.48(a) requires AFIS units to “have a mechanism for monitoring and ensuring the continuing competence of licence holders between the biennial revalidation assessments”.
- D.19 As such, AFIS units should ensure that the skills of individual AFISOs are maintained within the licence validity period through regular structured training packages; this includes the management of abnormal or emergency situations. These packages should include standard practices and procedures for use of the FID, including the management of emergencies and/or failures, which may include lessons learnt from specific local events or from lessons promulgated more widely such as from the CAA or EUROCONTROL.



## Training Objectives

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D.20 AFIS units shall establish training objectives for the 3 phases of unit training which shall be based on the safety assessment undertaken in accordance with ATS.OR.205 Safety Assessment and Assurance of Changes to the Functional System and those 'aspects' detailed below. These training objectives must be detailed within the UTP.

D.21 AFIS units may seek assistance from their unit ATS Inspector in developing performance objectives.

### Phase 1 - Classroom training

D.22 Training objectives for phase 1 as a minimum, shall address at least the following aspects:

#### The principles and limitations of cooperative surveillance

- Types of cooperative surveillance; e.g. secondary surveillance radar (SSR), automatic dependent surveillance – broadcast (ADS-B);
- Types of electronic conspicuity equipment and data; e.g. SSR transponder, ADS-B device (including FLARM, Power-FLARM, Pilot Aware, Sky Echo etc);
- Limitations of cooperative surveillance systems and of types of electronic conspicuity equipment.

#### The purpose of the FID

- Appendix F to the FISO Manual (CAP 797);
- Emphasis that the FID is to support the provision of AFIS only by improving the AFISOs situational awareness;

#### Functional operation of the FID

- FID symbology including:
  - aircraft position indications and data labels;
  - overlays for airspace and geographic features;
- Management of FID symbology by the AFISO;
- Limitations of the FID as identified in unit instructions;
- Operation of additional functionality associated with the FID.

#### Provision of AFIS supported by the FID

- Functions of the ATS surveillance system utilised by the unit including associated RT phraseology;

- Aircraft SSR and ADS-B labels: recognition versus identification;
- Conflict recognition and awareness of the pilot's responsibilities for collision avoidance utilising the FID, noting the limitations of cooperative surveillance systems;
- Awareness of terrain clearance and the pilot's responsibilities;
- Abnormal and emergency situations (ABES), including recognition of and response to:
  - aircraft emergency;
  - RT fail;
  - unlawful interference and aircraft bomb threat;
  - strayed aircraft;
  - TCAS RA events;
  - transponder or electronic conspicuity device failure; and
  - loss or degradation of FID functionality.

## Phase 2 - Off-line training

D.23 AFISOs must experience, in a simulated environment, using the FID, (in all of the functions of the ATS surveillance system that are specified in unit instructions), in scenarios that are relevant to the unit.

D.24 The FID may have an 'off-line' mode using recorded air traffic data to assist in providing a simulated environment. Alternatively, training may be achieved in a 'desktop' fashion, with the training objectives and scenarios simulated and/or discussed.

D.25 Training objectives for phase 2 as a minimum, shall address the practical application of the objectives for the 'classroom training' phase, and at least the following scenarios:

### **Airborne conflict<sup>1</sup>:**

- within the aerodrome traffic circuit, providing a warning in general terms;

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<sup>1</sup> See CAP 774 UK Flight Information Services Chapter 2 'Traffic Information' paragraphs 2.5 to 2.9.

- outside the aerodrome traffic circuit, providing a warning in general terms;
- providing a warning where a definite risk of collision exists.

### **Flight path monitoring and navigational assistance**

- cross-check between an aircraft's reported position in the aerodrome traffic circuit, its visually observed position in the aerodrome traffic circuit and the position indication on the FID;
- aircraft appears to be approaching an area with a markedly different minimum sector altitude (MSA) and is reported or observed to be operating below that MSA;
- support the handling of a strayed aircraft;
- providing an estimated position report to a pilot.

### **ABES**

- including recognition of and response to:
  - aircraft emergency;
  - RT fail;
  - TCAS RA event;
  - transponder or electronic conspicuity device failure; and
  - loss or degradation of FID functionality.

## **Phase 3 - Live training**

D.26 AFIS units shall establish a minimum number of hours that the AFISO is required to provide a safe and efficient AFIS, whilst using the FID, in representative traffic conditions.

D.27 Performance objectives for phase 3 as a minimum, shall address the 'live' application of the performance objectives achieved and scenarios observed in the previous phases of training.

D.28 All performance objectives must have been achieved and demonstrated consistently before the AFISO is formally recommended for assessment. These should be addressed in the UTP or equivalent.

## **Conduct of the Validation Assessment**

D.29 The syllabus for the validity assessment is based upon [CAP 797](#) and local operational instructions and detailed in Appendix B. Where applicable, the training, examination and assessment requirements for the use of ATS

surveillance systems in supporting the provision of AFIS are detailed in this Appendix. The candidate is assessed as 'Pass' or 'Fail' and shall pass in all parts of the assessment in order to be successful for use of the FID.