



# **CIVIL AVIATION PUBLICATION**

## **CAP 14**

### **ADVANCED PILOT TRAINING**

**INDEX**

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## CAP 14

## ADVANCED PILOT TRAINING

*INDEX*

Section	Title	Page No.
<b>1.</b>	<b>Introduction</b> .....	1
1.1	Purpose .....	1
1.2	State of Licence Issue Requirements .....	1
1.3	Requirement .....	1
1.3.1	General Aviation Operators .....	1
1.3.2	Commercial Air Transport Operators.....	1
1.4	Terminology .....	2
<b>2.</b>	<b>FSTD Policy</b> .....	2
<b>3.</b>	<b>Approval Requirement</b> .....	3
3.1	San Marino Licence Holders.....	3
3.2	CAT Operators .....	3
3.3	Training Facility & FSTD Approval .....	3
<b>4.</b>	<b>Foreign Training Facilities &amp; Devices</b> .....	3
4.1	FAR 142 Organisations .....	3
4.2	EASA Part FCL Organisations .....	4
4.3	Application .....	5
<b>5.</b>	<b>San Marino Training Facilities &amp; Devices</b> .....	5
5.1	General.....	5
5.2	Approved Training Organisations .....	5
5.3	Training and Procedures Manual .....	6
5.4	Facilities.....	7
5.5	Personnel .....	7
5.6	Training Aircraft .....	8
5.7	Aerodromes and Operating Sites.....	9
5.8	Records.....	9
5.9	Oversight .....	9
5.10	Evaluation and Checking .....	10
5.11	Safety Management System .....	10
<b>6.</b>	<b>Considerations</b> .....	10
6.1	Zero Flight Time (ZFT) .....	10
6.2	Specific Functions.....	10



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## 1. INTRODUCTION

### 1.1 Purpose

The purpose of this CAP is to provide guidance and policy information to all operators of San Marino registered aircraft on the use of foreign or San Marino based pilot training facilities and training devices. The CAP also provides guidance for the approval of training organisations (ATO) located in San Marino. The information in this publication is primarily for existing licence holders and does not address pilot training for the initial issue of a licence.

*Note 1: This CAP does not apply to San Marino registered aircraft, operated under an ICAO Article 83bis arrangement, whereby San Marino is not the State of the Operator.*

*Note 2: This CAP does not address Flying Training Organisations (FTO). Please refer to CAP 16 on Personnel Licensing.*

### 1.2 State of Licence Issue Requirements

Regardless of the requirements stated in this CAP all holders of a validation of a licence issued by the San Marino CAA must meet the requirements of the State that issued the licence. This includes the use of simulators and associated training for the issuance of a type rating, instrument rating or revalidation of a licence.

### 1.3 Requirement

#### 1.3.1 General Aviation Operators

Unless a pilot is the holder of a licence issued by the San Marino CAA, there is no requirement for the training facility or training device to be inspected or approved. For holders of a licence issued by the San Marino CAA the requirements of paragraph 2 apply.

#### 1.3.2 Commercial Air Transport Operators

The CAA requires that the training facilities and training devices utilised by a Commercial Air Transport (CAT) operator for the following, to be approved. This approval may not require an inspection of the facility and/or training devices (Refer to paragraph 4).

- ▷ Commander upgrade course
- ▷ OPC
- ▷ Training for an approval issued by the CAA (RVSM, PBN, EFB, CPDLC, AWO etc.)

In addition, the syllabi of training for the following must also be approved.

- ▷ Commander upgrade course
- ▷ OPC



- ▷ CRM
- ▷ Dangerous Goods
- ▷ Training for an approval issued by the CAA (RVSM, PBN, EFB, CPDLC, AWO etc.)
- ▷ Emergency and safety equipment training

#### 1.4 Terminology

- (a) Flight Simulation Training Device (FSTD). A training device which is a Full Flight Simulator (FFS), a Flight Training Device (FTD), a Flight & Navigation Procedures Trainer (FNPT), or a Basic Instrument Training Device (BITD).
- (b) Full Flight Simulator (FFS). A full size replica of a specific type or make, model and series aeroplane flight deck, including the assemblage of all equipment and computer programmes necessary to represent the aeroplane in ground and flight operations, a visual system providing an out of the flight deck view, and a force cueing motion system. It is in compliance with the minimum standards for FFS Qualification.
- (c) Flight Training Device (FTD). A full size replica of a specific aeroplane type's instruments, equipment, panels and controls in an open flight deck area or an enclosed aeroplane flight deck, including the assemblage of equipment and computer software programmes necessary to represent the aeroplane in ground and flight conditions to the extent of the systems installed in the device. It does not require a force cueing motion or visual system. It is in compliance with the minimum standards for a specific FTD Level of Qualification.
- (d) Flight and Navigation Procedures Trainer (FNPT). A training device which represents the flight deck or cockpit environment including the assemblage of equipment and computer programmes necessary to represent an aeroplane or class of aeroplane in flight operations to the extent that the systems appear to function as in an aeroplane. It is in compliance with the minimum standards for a specific FNPT Level of Qualification.
- (e) Basic Instrument Training Device (BITD). A ground based training device which represents the student pilot's station of a class of aeroplanes. It may use screen based instrument panels and spring loaded flight controls, providing a training platform for at least the procedural aspects of instrument flight.
- (f) Other Training Device (OTD). A training aid other than FFS, FTD, FNPT or BITD, which provides for training where a complete flight deck environment is not necessary.

## 2. FSTD POLICY

For holders of a San Marino licence and/or CAT operators;

- (a) Any foreign training facility and training device requiring approval from the CAA shall be already be approved by the applicable regulatory authority.



- (b) Any training facility and training device used for the addition of a type rating (to a San Marino licence only), OPC or upgrade training shall be approved by the CAA before use.
- (c) Unless specifically authorized by the CAA, all operators of turbojet aeroplanes as well as all aircraft over 9000 kg, shall utilise FFS for type rating, OPC and upgrade training. Operators of these aircraft should have a regular FFS programme every six months.
- (d) An operator of an aircraft mentioned in (c) above may be permitted to conduct a PPC in the aircraft instead of a FFS and usually for one occasion only within a 12 month period provided there is sufficient justification.
- (e) The FSTD used must be representative of the type aircraft and, if applicable, the particular variation of the type for which the training or check is being conducted. The CAA may permit various differences, such as engine type or model variation upon application and SMS risk assessment.
- (f) Any FFS, FTD, FNPT, BITD or OTD used to gain a credit towards a San Marino licence or type rating shall be approved by the CAA.

### **3. APPROVAL REQUIREMENT**

#### **3.1 San Marino Licence Holders**

All foreign and San Marino training facilities and/or training devices utilised by San Marino flight crew licence holders must be approved by the CAA before training and/or testing will be recognized by the CAA.

The CAA may grant approval for simulator/training device credits and such credits would normally be based on the requirements of CAR LIC.

#### **3.2 CAT Operators**

All foreign and San Marino training facilities and/or training devices proposed to be utilised by San Marino AOC holders for OPC, command upgrade must be approved by the CAA during the application process or before any required training and/or testing is conducted at such facilities.

#### **3.3 Training Facility & FSTD Approval**

The CAA will accept FAA and EASA approvals in accordance with paragraph 4.

Where a training facility and/or training device is not approved by the FAA or EASA, an inspection may be required of the facility, training devices and Instructor/examiner personnel every two years.

### **4. FOREIGN TRAINING FACILITIES & DEVICES**

#### **4.1 FAR 142 Organisations**

- (a) Recognition.



The CAA will accept the approval of a valid FAA 142 organisation upon application, together with the approved FSTDs located at the facility.

(b) Inspection.

FSTDs located at foreign Training Centres, which are approved under FAR 142, need not be inspected by the CAA. Provided that the Training Centre has a valid Training Centre Certificate issued by the FAA and that the applicable FSTDs retain their FAA evaluation validity, the CAA will conduct a random inspection on a representative FAR 142 organisation and associated FSTDs every two years.

That inspection would validate all FAR 142 approved Training Centres.

(c) Examiners.

The CAA will recognize all instructors and examiners approved under FAR 142 for the particular Training Centre and any checks conducted by those Examiners.

(d) Training and Checking.

(1) For GA operators, the training and checking must be to FAR 91 standard for captains and co-pilots.

(2) For CAT operators, the training and checking must be to the applicable FAR 135 or FAR 121 standard for captains and co-pilots and to a CAA approved syllabus for upgrade training.

*Note: The relevant forms must be signed by the Training Centre Examiner with his/her designation number.*

## 4.2 EASA Part FCL Organisations

(a) Recognition.

The CAA will accept the approval of a valid EASA Part FCL Type Rating Training Organisation (TRTO) upon application, together with the associated FSTDs located at the facility, provided the organisation is approved by an EASA Member State.

(b) Inspection.

Approved FSTDs, located at a TRTO, need not be inspected by the CAA. Provided that the TRTO has a valid approval issued by an EASA Member State and the applicable FSTDs retain their FSTD qualification, the CAA will conduct a random inspection on a representative organisation and simulator every two years. That inspection would validate all EASA approved TRTOs.

(c) Examiners.

The CAA would recognize instructors and examiners approved by an EASA Member State.





- (d) Training and Checking.

The CAA would recognize skill tests, type rating tests and proficiency checks conducted by a FSE or TRE approved by an EASA Member State provided the checks were conducted in accordance with EASA Part FCL or to a CAA approved syllabus for upgrade training.

### **4.3. Application**

An operator, which requires CAA approval to use a foreign Training facility and/or training device, shall apply to the CAA in writing giving at least 14 days' notice. Supporting information and foreign approvals of the training organisation and FSTDs, as well as aircraft model, engine and performance differences should be included in the letter of application.

Should an inspection be required by the CAA, all costs shall be borne by the operator.

The CAA will issue a Letter of Approval provided the application and supporting documentation is in order.

## **5. SAN MARINO TRAINING FACILITIES & DEVICES**

### **5.1 General**

To be approved by the CAA, all San Marino based Training Organisations must meet the requirements of CAR LIC and Appendices. The CAA will conduct an inspection of the organisation and, if satisfactory, approve the facility for use. San Marino operators must apply for approval to use this facility. Foreign operators may also use this facility but it is up to their regulatory authority to approve them and the CAA does not get involved.

Any FSTDs located at that facility that requires qualification must be qualified by an Authority or personnel specifically trained and qualified for that task.

### **5.2 Approved Training Organisations**

A Training Organisation wishing to offer approved training to meet CAR LIC requirements shall obtain the approval of the Authority.

An organisation seeking approval shall provide a training and procedures manual, including quality systems, SMS and descriptions of its training schemes. After consideration of the application Form SM 96, the Training Organisation will be inspected to ensure that it meets the requirements set out in the CAR LIC.

Subject to satisfactory inspection, approval of the organisation will initially be granted for a period of one year, revalidation of the approval may be granted for further periods of one year.

The following should be considered;

- (a) The training courses as contained in the training and procedures manual shall be approved.



- (b) Any approval can be varied, suspended or revoked by the Authority if any of the approval requirements or standards cease to be maintained to the minimum approved level.
- (c) If a Training Organisation wishes to make changes to an approved course or to its training manual the approval of the Authority shall be obtained before the changes are implemented. Training Organisations need not advise the Authority of minor changes in day-to-day operations. Where any doubt exists as to whether a proposed change is minor, the Authority shall be consulted.
- (d) A Training Organisation may make training arrangements with other training organisations or make use of alternative base aerodromes as part of its overall training organisation, subject to the approval of the Authority. These arrangements must be contained in the training and procedures manual.
- (e) A Training Organisation shall nominate a person acceptable to the Authority who shall satisfy the Authority that sufficient funding is available to conduct training to the approved standard. Such person shall be known as the Accountable Manager. The Accountable Manager may also be the Head of Training.
- (f) The management structure shall ensure supervision of all grades of staff by persons having the experience and qualities necessary to ensure the maintenance of high standards. Details of the management structure, indicating individual responsibilities, shall be included in the organisation's training and procedures manual.

*Note: Further guidance is given in CAR LIC and must be consulted for the additional requirements for ATO.*

### **5.3 Training and Procedures Manual**

The training organisation shall provide a training and procedures manual for the use and guidance of personnel concerned. This manual may be issued in separate parts and shall contain at least the following information:

- (a) a general description of the scope of training authorised under the organisation's terms of approval;
- (b) the content of the training programmes offered including the courseware and equipment to be used and shall include training in knowledge and skills related to human performance.;
- (c) a description of the organisation's Safety Management System and quality assurance system;
- (d) a description of the organisation's facilities;
- (e) the name, duties and qualification of the Accountable Manager (i.e. the person designated as responsible for compliance with the requirements of the approval);



- (f) a description of the duties and qualification of the personnel designated as the Head of Training (i.e. the person responsible for planning, performing and supervising the training);
- (g) a description of the procedures used to establish and maintain the competence of instructional personnel;
- (h) a description of the method used for the completion and retention of the training records;
- (i) a description, when applicable, of additional training needed to comply with an operator's procedures and requirements; and
- (j) when an approved training organisation is authorised to conduct the testing required for the issuance of a licence or rating, a description of the selection, role and duties of the authorised personnel, as well as the applicable requirements established by the CAA.
- (k) the name(s) and address(es) of the main aerodromes and/or operating site(s) at which the training is to be conducted;
- (l) the flight time limitation scheme for flight instructors, including the maximum flying hours, maximum flying duty hours and minimum rest time between instructional duties.

The training organisation shall ensure that the training and procedures manual is amended as necessary to keep the information contained therein up to date.

Copies of all amendments to the training and procedures manual shall be furnished promptly to all organisations or persons to whom the manual has been issued.

#### **5.4 Facilities**

The facilities and working environment shall be appropriate for the task to be performed and be acceptable to the CAA. The training organisation shall have, or have access to, the necessary information, equipment, training devices and material to conduct the courses for which it is approved. Synthetic training devices shall be qualified according to requirements established by the CAA and their use shall be approved by the CAA to ensure that they are appropriate to the task.

#### **5.5 Personnel**

- (a) General

The organisation shall employ the necessary personnel to plan, perform and supervise the training to be conducted. The training organisation shall ensure that all instructional personnel receive initial and continuation training appropriate to their assigned tasks and responsibilities.



(b) Accountable Manager

The training organisation shall nominate a person responsible for ensuring that it is in compliance with the requirements for an approved organisation (Accountable Manager).

(c) Head of Training

A Head of Training shall be nominated. The Head of Training may be the Accountable Manager for an ATO not involved with the issuance of a licence and shall have extensive experience as an instructor in the areas relevant for the training provided by the ATO and shall possess sound managerial capability.

The Head of Training's responsibilities shall include:

- (1) ensuring that the training provided is in compliance with CAR LIC; and
- (2) ensuring the satisfactory integration of flight training in an aircraft or a flight simulation training device (FSTD) and theoretical knowledge instruction; and
- (3) supervising the progress of individual students.

(d) Flight Instructors

Flight instructors and flight simulation training instructors shall hold the qualifications required by CAR LIC for the type of training that they are providing.

(e) Theoretical knowledge instructors

Theoretical knowledge instructors must have;

- (1) a practical background in aviation in the areas relevant for the training provided and have undergone a course of training in instructional techniques; or
- (2) previous experience in giving theoretical knowledge instruction and an appropriate theoretical background in the subject on which they will provide theoretical knowledge instruction.

## 5.6 Training Aircraft

- (a) The ATO shall use an adequate fleet of training aircraft or FSTDs appropriate to the courses of training provided.
- (b) The ATO shall only provide training in FSTDs when it demonstrates to the Authority:
  - (1) the adequacy between the FSTD specifications and the related training programme;
  - (2) that the FSTDs used are qualified;



- (3) in the case of full flight simulators (FFSs), that the FFS adequately represents the relevant type of aircraft; and
  - (4) that it has put in place a system to adequately monitor changes to the FSTD and to ensure that those changes do not affect the adequacy of the training programme.
- (c) If the aircraft used for the skill test is of a different type to the FFS used for the visual flight training, the maximum credit shall be limited to that allocated for flight and navigation procedures trainer II (FNPT II) for aeroplanes and FNPT II/III for helicopters in the relevant flight training programme.
- (d) Flight test training organisations. Aircraft used for flight test training shall be appropriately equipped with flight testing instrumentation, according to the purpose of the training.

### **5.7 Aerodromes & Operating Sites**

When providing flight training on an aircraft, the ATO shall use aerodromes or operating sites that have the appropriate facilities and characteristics to allow training of the manoeuvres relevant, taking into account the training provided and the category and type of aircraft used.

### **5.8 Records**

The training organisation shall retain detailed student records to show that all requirements of the training course have been met as agreed by the CAA.

The training organisation shall maintain a system for recording the qualifications and training of instructional and examining staff, where appropriate. The records shall be retained for a minimum period of 3 years after the instructor or examiner ceases to perform a function for the training organisation.

The following records shall be kept for a period of at least 3 years after the completion of the training:

- (a) details of ground, flight, and simulated flight training given to individual students;
- (b) detailed and regular progress reports from instructors including assessments, and regular progress flight tests and ground examinations; and
- (c) information on the licences and associated ratings and certificates of the students, including the expiry dates of medical certificates and ratings.

### **5.9 Oversight**

The CAA will maintain an effective oversight programme of the approved training organisation to ensure continuing compliance with the approval requirements.



## 5.10 Evaluation and Checking

When the CAA has authorised an approved training organisation to conduct the testing required for the issuance of a rating, the testing shall be conducted by personnel authorised by the CAA or designated by the training organisation in accordance with criteria approved by the CAA.

## 5.11 Safety Management System

An ATO that is exposed to safety risks during the provision of its services shall implement a safety management system acceptable to the Authority that, as a minimum:

- (a) identifies safety hazards;
- (b) ensures the implementation of remedial action necessary to maintain agreed safety performance;
- (c) provides for continuous monitoring and regular assessment of the safety performance; and
- (d) aims at a continuous improvement of the overall performance of the safety management system.

A safety management system shall clearly define lines of safety accountability throughout the approved training organization, including a direct accountability for safety on the part of senior management.

## 6. CONSIDERATIONS

### 6.1 Zero Flight Time (ZFT)

ZFT only applies to pilots, who have in excess of 2500 hours total flying time, with at least 1000 jet transport flying time.

In accordance with CAR OPS 1.945 a pilot, undertaking a ZFTT course, shall:

- (a) Commence Line Flying Under Supervision as soon as possible within 21 days after completion of the skill test.
- (b) Complete the six take-offs and landings not later than 21 days after the completion of the skill test.
- (c) Conduct the first four take-offs and landings of the Line Flying Under Supervision in the aeroplane under the supervision of a TRI(A) occupying a pilot's seat.

### 6.2 Specific Functions

Operators, which require recency or recurrent training for specific functions, such as All Weather Operations (AWO), Head Up Display (HUD) or ZFT, shall ensure that the simulator is approved for that function and fitted with the necessary hard/software to support that function.