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**GHANA CIVIL AVIATION (FLIGHT STANDARDS) DIRECTIVES**



**PART 3 — APPROVED TRAINING ORGANISATIONS**

**NOVEMBER 2018**

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## **INTRODUCTION**

Part 3 of the Directives addresses the certification and administration of Approved Training Organisations (ATO). Part 3 uses Standards contained in ICAO Annex 1 for the approval of training organisations and has also adapted these Standards to cover other areas of airman training. The use of an ATO for the training and qualification of airmen is common in modern aviation, most particularly as operators upgrade their aircraft inventory and airmen transition to new aircraft. The interrelation between ATO requirements under Part 3 and the licensing and certification requirements of Part 2 is plain. The requirements for ATO operation apply to the standards required for adequate training for qualification for a Ghanaian certification. Thus, where personnel who require Ghanaian certification receive training from a foreign ATO, the foreign ATO shall meet ATO standards contained in this Part. This situation will be encountered when a Ghanaian Air Operator Certificate (AOC) holder, such as a national airline, is part of a regional consortium with AOC holders from other Contracting States in the region, and the consortium has established an ATO in only one of the regional Contracting States.

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### 3.1 GENERAL

#### 3.1.1 APPLICABILITY

Part 3 prescribes the requirements for issuing approvals to organisations for the training of aviation personnel, and prescribes the operating rules for the holders of an Approved Training Organisation (ATO) certificate.

#### 3.1.2 DEFINITIONS

For the purpose of Part 3, the following definitions shall apply-

**Accountable manager (training).** The manager who has corporate authority for ensuring that all training can be financed and carried out to the standard required by the Authority. The accountable manager may delegate, in writing, to another person in the organisation to become the accountable manager when authorised by the authority.

**Advanced flight training device.** A flight training device that has a cockpit that accurately replicates a specific make, model, and type aircraft cockpit, and handling characteristics that accurately model the aircraft handling characteristics.

**AME Course.** A training course for AME maintenance ratings (airframe/powerplant/avionics)

**Approved training.** Training conducted under special curricula and supervision approved by a civil aviation authority that, in the case of aviation personnel, is conducted in an approved training organization

**Approved training organisation.** An organisation approved by the Authority in accordance with the requirements of this part to perform airman training and operating under the supervision of that civil aviation authority.

**Authority.** The Ghana Civil Aviation Authority.

**Finding.** A finding is a conclusion by the operator's audit personnel that demonstrates non-conformity with a specific standard.

**Flight Training Equipment.** Flight simulators, flight training devices, and aircraft.

**Line-Operational Simulation.** Simulation conducted using operational-orientated flight scenarios that accurately replicate interaction among flightcrew members and between flightcrew members and dispatch facilities, other crewmembers, air traffic control, and ground operations.

**Line Operational Flight Training (LOFT).** Training in a simulator with a complete crew using representative flight segments which contain normal, abnormal, and emergency procedures that may be expected in line operations

**Level 1 Aviation Training Organisation (ATO).** A flight training facility which conducts all or substantially all of each flight-training course using aircraft.

**Level 2 Aviation Training Organisation (ATO).** A flight training facility which conducts all or substantially all of each flight training course using simulation media

which are qualified and approved by the Authority.

**Level 3 Aviation Training Organisation (ATO).** A category used to describe an approved training organization that conducts ground and practical training that is not associated with flight training.

**Policy.** A document containing the organisation's position or stance regarding a specific issue.

**Procedure.** A way of documenting a process.

**Procedures manual.** A manual containing procedures, instructions and guidance for use by personnel of the ATO in the execution of their duties in meeting the requirements of the certificate.

**Process.** A set of interrelated or interacted activities which transform inputs into outputs

**Quality.** The totality of features and characteristics of product or service that bear on its ability to satisfy stated or implied needs

**Quality assurance.** All the planned and systematic actions necessary to provide adequate confidence that all training activities satisfy given standards and requirements, including the ones specified by the approved training organisation in relevant manuals.

**Quality audit.** A systematic and independent examination to determine whether quality activities and related results comply with planned arrangements and whether these arrangements are implemented effectively and are suitable to achieve objectives.

**Quality inspection.** That part of quality management involving quality control. In other words, inspections accomplished to observe events/actions/documents, etc., in order to verify whether established operational procedures and requirements are fulfilled during the accomplishment of the event or action, and whether the required standard is achieved. Student stage checks and skill tests are quality inspections, and they are also quality control functions.

**Quality manager.** The manager responsible for the monitoring function and for requesting remedial action. In an ATO, the quality manager is responsible directly to the head of training.

**Quality manual.** The document containing the relevant information pertaining to the approved training organisation's quality assurance system.

**Quality of training.** The outcome of the training that meets stated or implied needs within the framework of set standards.

**Safety management system.** A systematic approach to managing safety, including the necessary organizational structures, accountabilities, policies and procedures.

**Satellite ATO.** An ATO at a location other than primary location of the ATO.

**Speciality curriculum.** A set of courses that is designed to satisfy a requirement of the Civil Aviation Regulations and that is approved by the Authority for use by a

particular Level 2 ATO or satellite Level 2 ATO. The speciality curriculum includes training requirements unique to one or more Level 2 ATO clients.

**State safety program.** An integrated set of regulations and activities aimed at improving safety.

**Training specifications.** A document issued to a certified Aviation Training Organisation by the Authority that prescribes that organisation's training, checking, and testing authorisations and limitations, and specifies training program requirements.

### 3.1.3 ABBREVIATIONS

The following abbreviations are used in Part 3.

**A** – Aeroplane

**AFM** – Aircraft Flight Manual

**AME** – Aircraft Maintenance Engineer

**AMTO** – Approved Maintenance Training Organisation

**ATCO** – Air Traffic Controller

**ATO** – Aviation Training Organisation

**ATPL** – Airline Transport Pilot Licence

**CFI** – Chief Flight Instructor

**CGI** – Chief Ground Instructor

**CPL** – Commercial Pilot Licence

**CRM** – Crew Resource Management

**FE** – Flight Engineer

**GCAD** – Ghana Civil Aviation Directives

**H** – Helicopter

**IFR** – Instrument Flight Rules

**ICAO** – International Civil Aviation Organisation

**MMEL** – Master Minimum Equipment List

**MPL** – Multi-crew Pilot Licence

**NOTAM** – Notice to Airmen

**PIC** – Pilot-in-Command

**PPL** – Private Pilot Licence

**QA** – Quality Assurance

**RT** – Radiotelephony

**VFR** – Visual Flight Rules

**3.2 CERTIFICATION OF A TRAINING ORGANISATION AND CONTINUED VALIDITY****3.2.1 APPLICABILITY**

The section prescribes the requirements for the certification of a training organisation and continued validity of the certificate.

**3.2.2 GENERAL**

- (1) The Authority may approve an ATO to provide the following:
  - (a) Any training activity that leads toward the issuance of a licence, rating, authorisation or approval.
  - (b) Provision of training services necessary for an operator to meet the requirements of Part 9 of these Flight Standards Directives.
  - (c) Special curricula training designed to meet:
    - (i) Qualification-based training requirements, including those deemed acceptable through the approval of an 'alternate means of compliance' mechanism, or
    - (ii) Competency based training and assessment requirements, or
    - (iii) Those training requirements deemed acceptable through the approval of an 'alternative means of compliance' mechanism.
- (2) No person may operate as a certificated ATO without, or in violation of, an approved training organisation certificate, ratings or training specifications issued under this part.
- (3) The ATO shall display the ATO certificate in a place accessible to the public in the principal place of business of the training center.
- (4) The certificate and training specifications issued to an approved training organisation shall be available on the premises for inspection by the public and the Authority.
- (5) The approval of a training organisation by the Authority shall be dependent upon the applicant demonstrating compliance with the requirements of this Part and the safety management system requirements of GCAD.

**3.2.3 APPROVED TRAINING ORGANISATION CERTIFICATE**

- (1) The ATO certificate will consist of two (2) documents—
  - (a) A one page certificate signed by the Authority; and
  - (b) A multi-page training specifications signed by the Accountable Manager and the Authority containing the terms, conditions, and authorisations.
- (2) An ATO shall perform training, checking and testing, or part thereof, only for which it is rated and within the terms, conditions, and authorisations placed in its training specifications.
- (3) The ATO certificate will contain the following items and be in a format as shown in IS: 3.2.3—
  - (a) The certificate number specifically assigned to the ATO;

- (b) The name and location (principal place of business) of the ATO;
  - (c) The date of issue and period of validity;
  - (d) Terms of approval relating to the courses to be taught; and
  - (e) Authority signature.
- (4) The training specifications will contain the following—
- (a) The certificate number specifically assigned to the ATO;
  - (b) The type of training authorised, including approved courses;
  - (c) Authorisations for the ATO; including special approvals and limitations;
  - (d) The name and address of any satellite training centers, and the approved training offered at each location;
  - (e) The facilities and equipment required to conduct the training authorised;
  - (f) The staff required to perform the applicable duties under this Part;
  - (g) Accountable manager and Authority signatures;
  - (h) The date issued or revised; and
  - (i) Other items the Authority may require or allow.

#### **3.2.4 ADVERTISING**

- (1) No training organisation may advertise as a certificated Approved Training Organisation until an approved training organisation certificate has been issued to that facility.
- (2) No certificated Approved Training Organisation may make any statement, either in writing or orally, about itself that is false or is designed to mislead any person.
- (3) Whenever the advertising of an Approved Training Organisation indicates that it is certificated, the advertisement must clearly state the approved training organisation's certificate number.
- (4) An ATO whose certificate has been surrendered, suspended, revoke or terminated shall promptly:
  - (a) remove all indications, including signs, wherever located, that the ATO was certified by the Authority;
  - (b) notify all advertising agents, and media employed by the certificate holder to cease all advertising indicating that the ATO is certified by the Authority.

#### **3.2.5 APPLICATION FOR AN ATO CERTIFICATE**

- (1) The application for approval of a training organisation shall be made in a form and in a manner acceptable to the Authority.
- (2) Each application must be made at least 120 calendar days before the beginning of any proposed training or 90 days before effecting an amendment to any approved training, unless a short filing period is approved by the Authority.
- (3) Each applicant shall provide –

- (a) A statement showing that the minimum qualification requirements for each management position are met or exceeded;
- (b) A statement acknowledging that the applicant shall notify the Authority within 10 working days of any change made in the assignment of persons in the required management positions;
- (c) The proposed training authorisations and training specifications requested by the applicant;
- (d) The proposed location of each training facility and any satellite facility location, the proposed courses to be taught at each location, and the equipment at each location including FSTDs, training aircraft and any aerodromes or sites to be used;
- (e) Two copies of its proposed Training and Procedures manual;
- (f) Two copies of each proposed training course curriculum, including syllabi, outlines, courseware, procedures, and documentation to support the curriculum for which approval is sought;
- (g) Documentation of the training organisation's quality assurance and quality system;
- (h) A statement of the maximum number of students it expects to teach at any one time;
- (i) Documentation of the training organisation's Safety Management System;
- (j) A statement of compliance to all applicable GCAD for the proposed training, including pertinent subparts and each relevant section of these Flight Standards Directives, which should be identified and accompanied by a brief description.
- (k) Any additional information the Authority requires the applicant to submit.

### **3.2.6 ISSUANCE OF AN ATO CERTIFICATE**

An applicant may be issued an ATO certificate if, after investigation, the Authority finds that the applicant—

- (a) Meets the applicable Directives for an ATO certificate, and
- (b) Is properly and adequately equipped for the performance of the training sought.

### **3.2.7 DURATION AND RENEWAL OF ATO CERTIFICATE**

- (1) A certificate issued to an ATO, located either inside or outside Ghana shall, be effective from the date of issue until—
  - (a) The 12th month after the date on which it was initially issued, subject to satisfactory compliance with the requirements of this Part; or
  - (b) The 24th month after the date on which it was renewed, subject to satisfactory compliance with the requirements of this Part; or
  - (c) The ATO surrenders the certificate, or
  - (d) The Authority suspends or revokes the certificate.

- (2) The holder of a certificate that expires or is surrendered, suspended, or revoked by the Authority must return the certificate and training specifications to the Authority within five (5) working days of expiration, surrender or receipt from the Authority of notice of suspension or revocation.
- (3) A certificated ATO that applies for a renewal of its certificate must submit its request for renewal no later than 90 days before the current certificate expires. If a request for renewal is not made within this period, the ATO must follow the application procedures for initial issuance as prescribed by the Authority.

### **3.2.8 CONTINUED VALIDITY OF APPROVAL**

Unless the approval has previously been surrendered, superseded, suspended, revoked or expired by virtue of exceeding any expiration date that may be specified in the approval certificate, the continued validity of approval is dependent upon—

- (a) The ATO remaining in compliance with this Part;
- (b) The Authority being granted access to the organisation's facilities to determine continued compliance with this Directive; and
- (c) The payment of any charges prescribed by the Authority.

### **3.2.9 INSPECTION**

- (1) The Authority may, at any time, inspect an ATO holder on the ATO holder's premises to determine the ATO's compliance with this Part.
- (2) Inspections will be conducted at least annually. Inspections may be extended to a twenty-four (24) month basis if, the holder continues to meet the requirements under which it was originally certificated or approved.
- (3) Inspections will also be performed on the applicant for, or the holder of, an ATO certificate held outside the authorising state. This inspection may be delegated to the State where the ATO is located, provided an arrangement exists.
- (4) After an inspection is made, the certificate holder will be notified, in writing, of any deficiencies found during the inspection.
- (5) The findings shall be classified as follows:
  - (a) A level 1 finding is any significant non-compliance applicable requirements of this Directive, with organization procedure manuals or with the term of an approval, certificate or with the content of a declaration which lowers the safety and hazards seriously the safety.
  - (b) A level 2 finding is any non-compliance with applicable requirements of this Directive, with organization procedure manuals or with the term of an approval, certificate or with the content of a declaration which could lower the safety and possibly hazard the safety.
  - (c) A level 3 finding (Observation) is a minor irregularity which is considered to be an observation and warrants attention.
- (6) After receipt of notification of findings according to paragraph (5), the holder of the training organisation approval shall, within a period prescribed by the Authority:

- (a) identify the root cause of the non-compliance; and
  - (b) define a corrective action plan.
- (7) Following measures taken in paragraph (6), the ATO holder shall demonstrate corrective action to the satisfaction of the Authority within a period agreed with the Authority.
- (8) When during oversight or by other means evidence is found showing non-compliance with the requirements of Part 6 by the AMTO, the Authority shall take the following actions:
- (a) For level 1 findings, immediate action shall be taken by the Authority to revoke, limit or suspend in whole or in part, depending upon the extent of the level 1 finding, the training organisation approval, until successful corrective action has been taken by the organisation.
  - (b) For level 2 findings, the corrective action period granted by the Authority must be appropriate to the nature of the finding but in any case initially must not be more than three months. In certain circumstances and subject to the nature of the finding the authority may extend the three month period subject to a satisfactory corrective action plan agreed by the Authority.
  - (c) For level 3 findings, the training organisation should consider this issue and advise the Authority in writing of its thoughts and intentions with respect to corrective action.
- (9) If a training organization fails to submit an acceptable corrective action plan or fails to apply the corrective measures within the time limit agreed or extended by the authority, the degree of seriousness of non-compliance increases to level 1 and the measures provided for in paragraph (8) (a).

### **3.2.10 SUSPENSION OR REVOCATION**

The Authority may suspend or revoke an ATO certificate if it is established that a certificate holder has not met, or no longer meets the requirements of Part 3.

### **3.2.11 CHANGES TO THE ATO AND CERTIFICATE AMENDMENTS**

- (1) To enable the Authority to determine continued compliance with this Part, the ATO shall provide written notification to the Authority for approval at least 90 days prior to any of the following changes—
- (a) The name of the organisation;
  - (b) The location of the organisation;
  - (c) The facilities, equipment or staff that could affect the ATO certification or ratings;
  - (d) Any ratings held by the ATO, whether granted by the Authority or held through an ATO certification issued by another contracting State;
  - (e) Additional locations of the organisation;
  - (f) Items in the Training and Procedures Manual, including the syllabi and curricula;

- (j) The accountable manager; or
  - (k) The list of management personnel identified as described in the Training and Procedures Manual.
- (2) The Authority will amend the ATO certificate if the ATO notifies the Authority of a change in—
- (a) Location or facilities or equipment;
  - (b) Additional locations of the organisation;
  - (c) Rating, including deletions;
  - (d) Items in the Training and Procedures Manual, including the syllabi and curricula;
  - (e) Name of the organisation with same ownership; or
  - (f) Ownership.
- (3) The Authority may amend the ATO certificate if the ATO notifies the Authority of a change in—
- (a) The accountable manager;
  - (b) The list of management personnel identified as described in the Training and Procedures Manual; or.
  - (c) Items in the Training and Procedures Manual, including the syllabi and curricula.
- (4) When the Authority issues an amendment to an ATO certificate because of new ownership of the ATO, the Authority will assign a new certificate number to the amended ATO certificate.
- (5) The Authority may—
- (a) Prescribe, in writing, the conditions under which the ATO may continue to operate during any period of implementation of the changes noted in 3.2.11(1); and
  - (b) Hold the ATO certificate in abeyance if the Authority determines that approval of the ATO certificate should be delayed; the Authority will notify the ATO certificate holder, in writing, of the reasons for any such delay.
- (6) If changes are made by the ATO to the items listed in 3.2.11(1) without notification to the Authority and amendment of the ATO certificate by the Authority, the ATO certificate may be suspended, or revoked, by the Authority.

### 3.2.12 LOCATION OF THE ATO

- (1) **Principal place of business.** An applicant for, or holder of, a certificated ATO under this Part shall establish and maintain a principal place of business office that is physically located at the address shown on its certificate.
- (2) **Satellite ATOs.** The holder of an ATO certificate may conduct training in accordance with a training programme approved by the Authority at a satellite ATO if:
- (a) The facilities, equipment, personnel and course content of the satellite ATO meet the applicable requirements; and

- (b) The instructors at the satellite ATO are under the direct supervision of management personnel of the principal ATO, and
  - (c) The Authority has issued training specifications to the ATO that reflect the name and address of the satellite ATO and the approved courses offered at the satellite ATO.
- (3) **Foreign locations of ATOs.** An ATO or a satellite of an ATO approved by the Authority may be located in the country or outside the country and is subject to all the applicable requirements of this Part.

### 3.2.13 FACILITIES, EQUIPMENT AND MATERIAL – GENERAL REQUIREMENTS

- (1) The facilities and working environment of the ATO shall be appropriate for the task to be performed and acceptable to the Authority.
- (2) The ATO shall have the necessary information, technical data, equipment, training devices and material to conduct the courses for which it is approved.
- (3) Any training devices used by the ATO shall be qualified according to requirements established by the Authority and their use shall be approved by the Authority to ensure they are appropriate to the task.
- (4) A certificate holder shall not make a substantial change in facilities, equipment or material that have been approved for a particular training programme, unless that change is approved in advance by the Authority.
- (5) The facility that is the ATO principal place of business –
  - (a) Shall not be shared with, or used by, another ATO, and
  - (b) Shall be adequate to maintain the files and records required to operate the business of the ATO.

*Note: The ICAO Doc 9625, Manual of Criteria for the Qualification of Flight Simulation Training Devices, provides guidance on the approval of flight simulation training devices.*

### 3.2.14 PERSONNEL – GENERAL REQUIREMENTS

- (1) The ATO shall nominate a person responsible for ensuring that it is in compliance with the requirements for an approved organisation.
- (2) The ATO shall employ the necessary personnel to plan, perform and supervise the training to be conducted.
- (3) The competence of instructional personnel shall be in accordance with procedures and to a level acceptable to the Authority.
- (4) The ATO shall ensure that all instructional personnel receive initial and recurrent training appropriate to their assigned tasks and responsibilities. The training programme established by the ATO shall include training in knowledge and skills related to human performance.
- (5) The training programme for ATO employees shall be contained in the ATO Training and Procedures Manual.

*Note: Guidance material to design training programmes to develop knowledge and skills in human performance can be found in ICAO Doc 9683, Human Factors Training Manual.*

**3.2.15 RECORDKEEPING – GENERAL REQUIREMENTS****(1) Student records.**

- (a) The ATO shall retain detailed student records to show that all requirements of the training course have been met as approved by the Authority.
- (b) These records shall be kept for a minimum period of two (2) years after completion of the training.

**(2) ATO Staff Records.**

- (a) The ATO shall maintain a system for recording the qualifications and training of instructional and examining staff, where appropriate.
- (b) These records shall be kept for a minimum period of two (2) years after the instructor or examiner ceases to perform a function for the ATO.

**3.2.16 ATO APPROVED FOR TESTING**

- (1) The Authority may approve an ATO to conduct the testing required for the issuance of a licence or rating.
- (2) The ATO personnel authorised to conduct the testing shall be approved by the Authority.

**3.2.17 QUALITY ASSURANCE AND QUALITY SYSTEM**

- (1) **Quality assurance system.** The ATO shall establish a quality assurance system, acceptable to the Authority, which ensures that training and instructional practices comply with all relevant requirements.
- (2) The ATO shall establish a quality system, acceptable to the Authority, to ensure that training and instructional practices comply with all relevant requirements.
- (3) The ATO quality assurance and quality system shall be established in accordance with the instruction and information contained in IS: 3.2.17.

**3.2.18 ATO TRAINING AND PROCEDURES MANUAL – GENERAL REQUIREMENTS**

- (1) The ATO shall provide a training and procedures manual, approved by the Authority, 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 ATO's terms of approval;
  - (b) The content of the training programmes offered including the courseware and equipment to be used;
  - (c) A description of the organisation's quality assurance system;
  - (d) A description of the organisation's facilities;
  - (e) The name, duties and qualification of the person designated as the Accountable Manager;

- (f) A description of the duties and qualification of the personnel 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) A description of the selection, role and duties of authorised persons approved to conduct testing for a licence or rating, when an ATO has been approved by the Authority to conduct such testing.
- (2) The ATO shall ensure that the training and procedures manual is amended as necessary to keep the information contained therein up to date.
  - (3) The ATO shall promptly furnish copies of all amendments to the training and procedures manual to the Authority and other personnel and organisations to which the manual has been issued.

### **3.2.19 DUTY PERIOD LIMITATIONS**

- (1) A person who holds a flight instructor certificate shall not conduct more than 8 hours of flight training in any 24-consecutive-hour period.
- (2) A flight simulation training device instructor, excluding briefing and debriefing, shall not conduct more than 8 hours of instruction in any 24-consecutive-hour period.
- (3) A student in a certificated Aviation Maintenance Engineer school may not be required to attend classes of instruction more than 8 hours in any day or more than 6 days or 40 hours in any 7-day period.

### **3.2.20 ATO SAFETY MANAGEMENT SYSTEM**

An ATO shall implement a safety management system acceptable to the Authority as outlined in the Ghana Civil Aviation (Safety Management Systems) Directives.

### **3.2.21 OUTSOURCING TO THIRD-PARTY PROVIDERS**

- (1) The ATO may outsource courseware, facilities and equipment and instructional personnel to a third-party, provided that the ATO has been approved by the Authority --
  - (a) For the training that is to be conducted, and
  - (b) To contract with third-party to be used.
- (2) The ATO shall be accountable for the quality of third-party providers, including suitability of courseware, facilities and equipment and instructional personnel, used to meet the ATO approved programmes.

**3.3 ADDITIONAL REQUIREMENTS FOR INSTRUCTION FOR FLIGHT CREW LICENCES****3.3.1 GENERAL**

In addition to the requirements of Subpart 3.2, this subpart prescribes additional requirements for ATOs teaching flight crew curricula.

**3.3.2 CURRICULUM APPROVAL****3.3.2.1 FLIGHT CREW TRAINING COURSES**

The Authority may approve, as provided in the training specifications, the ATO to conduct the following courses of instruction to an applicant for, or holder of an ATO certificate, provided the applicant meets the requirements of Part 2 and Part 3 of these Safety Directives:

- (a) Private pilot licence course;
- (b) Commercial pilot licence course;
- (c) Instrument rating course;
- (d) Commercial pilot licence or Instrument rating-multi-engine or CRM integrated course;
- (e) Multi-crew pilot licence course;
- (f) Airline transport pilot licence course;
- (g) Flight Dispatcher or Flight Operations Officer;
- (h) Flight engineer licence course;
- (i) Flight navigator licence course;
- (j) Class rating course;
- (k) Type rating course;
- (l) Crew resource management course;
- (m) Flight instructor course;
- (n) Ground instructor;
- (o) Test Pilot;
- (p) Instructor course for additional type or class ratings;
- (q) Instructor course for flight simulation training;
- (r) Refresher courses;
- (s) Any preparation or recurrent curriculum required for AOC holders;
- (t) Any preparation curriculum for aerial work; and
- (u) Other courses as the Authority may approve.

*Note 1: See ICAO Document 7192, Part B-5, Volume 1 and 2 for Integrated Commercial Pilot Course*

**3.3.2.2 TRAINING COURSE APPROVAL – QUALIFICATION BASED AND ALTERNATE MEANS OF COMPLIANCE**

- (1) The applicant for, or holder of, an ATO certificate shall apply to the Authority for approval for each course to be offered or amended.
- (2) The applicant or ATO shall submit two (2) copies of the training course or amendment to the Authority as part of the application when applying for new or amended training course approval.
- (3) The applicant or ATO shall submit the application to the Authority at least thirty (30) days before any training under the course is scheduled to begin.
- (4) Except as provided in 3.3.2.3 of this subpart, each training course for which approval is requested shall meet the minimum ground and flight training time requirements specified in Part 2 of these Directives for the licence, rating or authorisation sought.
- (5) Each training course for which approval is requested must contain:
  - (a) A description of each room used for ground training, including the room size and the maximum number of students that may be trained in the room at one time;
  - (b) A description of each type of audiovisual aid, projector, tape recorder, mockup, chart, aircraft component, and other special training aids used for ground training;
  - (c) A description of each flight simulation training device used for training;
  - (d) A listing of the aerodromes at which training flights originate and a description of the facilities, including pilot briefing areas that are available for use by the ATO's students and personnel at each of those aerodromes;
  - (e) A description of the type of aircraft including any special equipment used for each phase of training;
  - (f) The minimum qualifications and ratings for each instructor assigned to ground or flight training; and
  - (g) A training syllabus that includes the following information—
    - (i) The prerequisites for enrolling in the ground and flight portion of the course that include the pilot certificate and rating (if required by this part), training, pilot experience, and pilot knowledge;
    - (ii) A detailed description of each lesson, including the lesson's objectives, standards, and planned time for completion;
    - (iii) A description of what the course is expected to accomplish with regard to student learning;
    - (iv) The expected accomplishments and the standards for each stage of training; and
    - (v) A description of the checks and tests to be used to measure a student's accomplishments for each stage of training.

**3.3.2.3 TRAINING COURSE APPROVAL –ALTERNATIVE MEANS OF COMPLIANCE AND COMPETENCY BASED TRAINING AND ASSESSMENT**

- (1) An ATO may request and receive initial approval for a period of not more than 24 calendar months for any training course under this part that does not meet the minimum hours for a licence prescribed by Part 2 of these Flight Standards Directives, provided that:
- (a) the ATO shows that the training will provide an equivalent level of competency at least equal to the minimum experience requirements for personnel not receiving such training, and
- the following provisions are met:
- (vi) The ATO holds an ATO certificate issued under this part and has held that certificate for a period of at least 24 consecutive calendar months preceding the month of the request;
- (vii) In addition to the information required by 3.3.2.2 (3), the training course specifies planned ground and flight training time requirements for the course;
- (viii) The school does not request the training course to be approved for examining authority, nor may that school hold examining authority for that course; and
- (ix) The knowledge test and or skill test for the course is to be given by—
- (A) An Aviation Safety Inspector; or
- (B) An examiner who is not an employee of the school.
- (2) An ATO may request and receive final approval for any training course under this part that does not meet the minimum hours for a licence prescribed by Part 2 of these Flight Standards Directives, provided the following conditions are met:
- (a) The ATO has held initial approval for that training course for at least 24 calendar months.
- (b) The ATO has—
- (i) Trained at least 10 students in that training course within the preceding 24 calendar months and recommended those students for a pilot, flight instructor, or ground instructor certificate or rating; and
- (ii) At least 80 percent of those students passed the skill or knowledge test, as appropriate, on the first attempt, and that test was given by—
- (A) An Aviation Safety inspector; or
- (B) An examiner who is not an employee of the school.
- (3) In addition to the information required by 3.3.2.2 (3) of this section, the training course specifies planned ground and flight training time requirements for the course.
- (4) The ATO does not request that the training course be approved for examining authority nor may that school hold examining authority for that course.

**3.3.3 PERSONNEL FOR FLIGHT CREW TRAINING IN THE ATO**

- (1) The applicant for an ATO certificate or a current certificate holder teaching flight crew curricula shall have on the staff the following—
  - (v) An Accountable Manager;
  - (w) A Quality Manager;
  - (x) A Head of Training;
  - (y) A Chief Flight Instructor, as applicable;
  - (z) A Chief Ground Instructor, as applicable; and
  - (aa) An adequate number of ground and flight instructors relevant to the courses provided.
- (2) Each instructor to be used for training shall have received the appropriate training and hold the appropriate licences and ratings or ratings as required by Part 2 of these Flight Standards Directives.
- (3) The duties and qualifications of the personnel listed in this paragraph are contained in IS:3.3.3.

**3.3.4 FACILITIES REQUIRED FOR FLIGHT CREW TRAINING****3.3.4.1 TRAINING FACILITIES**

An applicant for, and holder of an ATO certificate teaching flight crew curricula shall have facilities, as determined by the Authority, appropriate for the maximum number of students expected to be taught at any time, as follows:

- (a) Flight operations facilities:
  - (i) An operations room;
  - (ii) A flight planning room;
  - (iii) Adequate briefing rooms;
  - (iv) Offices for the instructors.
- (b) Knowledge instruction facilities, including—
  - (v) Classroom accommodation;
  - (vi) Suitable demonstration equipment;
  - (vii) A RT training and testing facility;
  - (viii) A library;
  - (ix) Offices for instructors.

**3.3.4.2 TRAINING AIRCRAFT**

An applicant for, or holder of, an ATO certificate must ensure that each aircraft used for flight instruction and solo flights meets the following requirements:

- (a) Except for flight instruction and solo flights in a curriculum for agricultural aircraft operations, external load operations, and similar aerial work operations, the aircraft must have a standard airworthiness certificate or a foreign airworthiness certificate acceptable to the Authority.
- (b) The aircraft must be maintained and inspected in accordance with Part 8: 8.3 and an approved maintenance programme.
- (c) The aircraft must be equipped as provided in the training specifications for the approved course for which it is used.
- (d) Except as provided in (e) below, each aircraft used in flight training must have at least two pilot stations with engine-power controls that can be easily reached and operated in a normal manner from both pilot stations;
- (e) Airplanes with controls such as nose-wheel steering, switches, fuel selectors, and engine air flow controls that are not easily reached and operated in a conventional manner by both pilots may be used for flight instruction if the certificate holder determines that the flight instruction can be conducted in a safe manner considering the location of controls and their non-conventional operation, or both.
- (f) Each aircraft used in a course involving instrument flight rule en-route operations and instrument approaches must be equipped and maintained for instrument flight rule operations. For maneuvering of an aircraft by reference to instruments, the aircraft may be equipped as provided in the approved course of training.

#### **3.3.4.3 FLIGHT SIMULATION TRAINING DEVICES**

- (1) An applicant for, or holder of an ATO certificate, approved to use flight simulation training devices, shall show that each flight simulation training device used for training and checking will be or is specifically qualified and approved by the Authority for:
  - (a) Each manoeuvre and procedures for the make, model and series of aircraft, set of aircraft, or aircraft type simulated, as applicable; and
  - (b) Each training programme or training course in which the flight simulation training device is used.
- (2) Each qualified and approved flight simulation training devices used by an ATO must:
  - (a) Be maintained to ensure the reliability of the performances, functions, and all other characteristics that were required for their qualification;
  - (b) Be modified to confirm with any modification to the aircraft being simulated if the modification results in changes to performance, functions, or other characteristics required for qualification;
  - (c) Be given a functional preflight check each day before being used; and
  - (d) Have a discrepancy log in which the instructor or evaluator, at the end of each training session, enters each discrepancy.

**3.3.4.4 AERODROMES AND SITES**

- (1) Each applicant for, and holder of, an ATO certificate shall show that it has continuous use of each aerodrome and site (for helicopter training) at which training flights originate, and that the aerodrome has an adequate runway and the necessary equipment.
- (2) The base aerodrome, and any alternative base aerodrome, at which flying training is being conducted shall have at least one runway or take-off area that allows training aircraft to make a normal take-off or landing at the maximum certificated take-off or maximum certificated landing mass, under the following conditions:
  - (a) Under calm wind (not more than four knots) conditions;
  - (b) At temperatures equal to the mean high temperature for the hottest month of the year in the operating area;
  - (c) If applicable, with the powerplant operation, and landing gear and flap operation recommended by the manufacturer; and
  - (d) In the case of a takeoff—
    - (x) clearing all obstacles in the take-off flight path by at least 50 feet;
    - (xi) with a smooth transition from lift-off to the best rate of climb speed without exceptional piloting skills or techniques;
- (3) Each airport must have a wind direction indicator that is visible at ground level from the ends of each runway;
  - (a) Have adequate runway electrical lighting if used for night training; and
  - (b) Have a traffic direction indicator when:
    - (i) the airport does not have an operating control tower; and
    - (ii) traffic and wind advisories are not available.
  - (c) Except as specified in item (e) below, each airport used for night training flights must have permanent runway lights
  - (d) An airport or seaplane base used for night training flights in seaplanes may be approved by the Authority to use adequate, non-permanent lighting or shoreline lighting.
  - (e) Sites shall be available for:
    - (i) confined area operation training;
    - (ii) simulated engine off autorotation;
    - (iii) sloping ground operation.

**3.3.5 ADDITIONAL, SPECIFIC OPERATING RULES FOR FLIGHT CREW TRAINING****3.3.5.1 TRAINING AND PROCEDURES MANUAL**

- (1) Each applicant for, or holder of an ATO certificate shall prepare and maintain a Training Manual and a Procedures Manual containing information and instructions to enable staff to perform their duties and to give guidance to students on how to comply with course requirements.
- (2) The Training Manual and Procedures Manual may be combined.

- (3) The ATO shall ensure that the Training Manual and the Procedures Manual are amended as necessary to keep the information contained therein up to date.
- (4) Copies of all amendments to the Training Manual and the Procedures Manual shall be furnished promptly by the ATO to all organisations or persons to whom the manual has been issued.

*Note: See IS 3.3.5.1 for detailed requirements for the Training Manual and the Procedures Manual and format for each manual.*

### **3.3.5.2 RECORD KEEPING FOR FLIGHT CREW TRAINING**

- (1) **Students.** An ATO that is approved to conduct flight crew training shall maintain a record for each trainee that contains—
  - (a) The name of the trainee
  - (b) A copy of the trainee's airman certificate, if any, and any medical certificate;
  - (bb) The name of the course and the make and model of flight training equipment used;
  - (cc) The trainee's prerequisite experience and course time completed;
  - (dd) The trainee's performance on each lesson and the name of the instructor providing instruction;
  - (ee) The date and result of each end-of-course skill test and the name of the examiner conducting the test; and
  - (ff) The number of hours of additional training that was accomplished after any unsatisfactory skill test.
- (2) **ATO staff.** An ATO that is approved to conduct flight crew training shall maintain a record for each instructor approved to instruct a course approved in accordance with this subpart, that indicates the instructor has complied with all applicable instructor requirements of these Directives.
- (3) **Record retention.** An ATO shall keep all records for a minimum period of two (2) years
  - (a) For students, from the date of completion of training, testing or checking;
  - (b) For ATO staff, from the date of the last employment.
- (4) The ATO shall make the records available to the Authority upon request and at a reasonable time and shall keep the records –
  - (a) For students, at the ATO or satellite ATO where the training, testing, or checking occurred, and
  - (b) For ATO staff, at the ATO or satellite ATO where the person is employed.
- (5) The ATO shall provide to a trainee, upon request, and at a reasonable time, a copy of his training records.

### **3.3.5.3 GRADUATION CERTIFICATE**

- (1) An ATO shall issue a graduation certificate to each student who completes its approved course of training.

- (2) The graduation certificate must be issued to the student upon completion of the course of training and contain at least the following information;
- (a) The name and certificate number of the ATO;
  - (b) The name of the graduate to whom it was issued;
  - (c) The course of training for which it was issued;
  - (d) The date of graduation;
  - (e) A statement that the student has satisfactorily completed each required stage of the approved course of training including the tests for those stages;
  - (f) A certification of the information contained on the graduation certificate by the chief instructor for that course of training; and a statement showing the cross-country training that the student received in the course of training.

#### **3.3.5.4 EXAMINING AUTHORITY FOR ATOs TEACHING FLIGHT CREW CURRICULA**

- (1) An ATO shall meet the following prerequisites to receive initial approval to be an examining authority:
- (a) The ATO shall complete the application for examining authority on a form and in a manner prescribed by the Authority;
  - (b) The ATO shall hold an ATO certificate and rating issued under this Part;
  - (c) The ATO must have held the rating in which examining authority is sought for at least 24 consecutive calendar months preceding the month of application for examining authority;
  - (d) The training course for which examining authority is requested may not be a course that is approved without meeting the minimum ground and flight training time requirements of this part; and
  - (e) Within 24 calendar months before the date of application for examining authority, at least 90 percent of the students in the ATO must have passed the required skill or knowledge test, or any combination thereof, for the licence or rating for which examining authority is sought, on the first attempt, and that test was given by—
    - (i) An Aviation Safety inspector; or
    - (ii) A designed examiner who is not an employee of the ATO.
- (2) The examining authority of the ATO is valid for 24 months, unless suspended or revoked by the Authority, and may be renewed upon request to the Authority by the ATO.
- (3) An ATO that holds examining authority may recommend a person who graduated from its course for the appropriate knowledge or skill test.
- (4) The ATO that holds examining authority will administer the tests or checks as required by Parts 2 and 8 of these Safety Directives, as appropriate to the licence or rating sought.
- (5) A pilot school that holds examining authority must maintain—

- (a) A record of all airman licences or ratings it issues, which consist of the following information in chronological order:
  - (i) The date the airman licence was issued;
  - (ii) The student to whom the airman certificate was issued, and that student's permanent mailing address and telephone number;
  - (iii) The training course from which the student graduated;
  - (iv) The name of person who conducted the knowledge or practical test;
  - (v) The type of airman licence or rating issued to the student; and
  - (vi) The date the student's airman application file was sent to the Authority for processing for a permanent airman licence.
- (b) A copy of the record containing each student's graduation certificate, airman application, airman licence, superseded airman licence (if applicable), and knowledge test or skill test results; and
- (c) Retain these records for two (2) years and make them available to the Authority upon request. These records shall be surrendered to the Authority when the ATO ceases to have examining authority.

#### **3.3.5.5 STUDENT TRANSFER OF CREDIT BETWEEN ATOs TEACHING A FLIGHT CREW CURRICULUM**

A person who transfers from one ATO to another ATO may receive credit for that previous flight crew training, provided the following requirements are met:

- (a) The maximum credited training time does not exceed one-half of the receiving ATO's curriculum requirements;
- (b) The person completes a knowledge and proficiency test conducted by the receiving ATO for the purpose of determining the amount of experience and knowledge to be credited;
- (c) The receiving ATO determines, based on the person's performance on the knowledge and proficiency test required by paragraph (b) of this section, the amount of credit to be awarded, and records that credit in the person's training record;
- (d) The person who requests credit for previous experience and knowledge obtained the experience and knowledge from another ATO approved training course; and
- (e) The receiving ATO retains a copy of the person's training record from the previous ATO.

#### **3.3.5.6 INSPECTIONS OF THE ATO TEACHING FLIGHT CREW CURRICULA**

Each ATO shall allow the Authority to inspect the ATO facilities, equipment and records at any reasonable time and in any reasonable place in order to determine compliance with these regulations and the ATO's certificate and training specifications.

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**3.4 ADDITIONAL REQUIREMENTS FOR INSTRUCTION FOR MAINTENANCE LICENCES AND TRAINING****3.4.1 GENERAL**

In addition to the requirements of Subpart 3.2, this subpart prescribes additional requirements for ATO's teaching maintenance curricula.

**3.4.2 CURRICULUM APPROVAL****3.4.2.1 AIRCRAFT MAINTENANCE ENGINEERS TRAINING COURSES**

The Authority may approve, as provided in the training specifications, the ATO to conduct the following courses of instruction to an applicant for, or the holder of an ATO certificate, provided the applicant meets the requirements of Part 2 and Part 3 of these Flight Standards Directives:

- (a) Aircraft Maintenance Engineers course;
- (b) Airframe rating course;
- (c) Powerplant rating course;
- (d) Airframe and Powerplant combined ratings course;
- (e) Avionics rating course;
- (f) Aviation Repairman Specialist;
- (g) Parachute rigger; and
- (h) Other courses as the Authority may approve.

**3.4.2.2 TRAINING COURSE APPROVAL—QUALIFICATION BASED AND ALTERNATE MEANS OF COMPLIANCE**

- (1) An applicant for an ATO certificate shall apply to the Authority for approval for each course to be offered or amended.
  - (a) The applicant or ATO shall submit a copy of the training course or amendment to the Authority as part of the application when applying for new or amended training course approval.
  - (b) The applicant or ATO shall submit the application to the Authority at least thirty (30) days before any training under the course is scheduled to begin.
- (2) Except as provided in 3.4.2.3 of this section, each training course for which approval is requested must meet the minimum training time requirements specified in Part 2 of these Flight Standards Directives for the licence, rating or authorisation sought.
- (3) Each training course for which approval is requested must contain:
  - (a) A description of each room used for training, including the room size and the maximum number of students that may be trained in the room at one time;
  - (b) A description of each type of audiovisual aid, projector, tape recorder, mockup, chart, aircraft component, and other special training aids used for training;

A description of the minimum equipment to be used in each course;

- (gg) The minimum qualifications and ratings for each instructor assigned to training, including initial and continuing training; and
- (hh) A training syllabus that includes the following information—
  - (i) The prerequisites for enrolling in the course;
  - (ii) A detailed description of each lesson, including the lesson's objectives, standards, and planned time for completion;
  - (iii) The subjects and items to be covered and the level of proficiency to meet;
  - (iv) For each subject, the proportions of theory and other instruction to be given;
  - (v) A description of what the course is expected to accomplish with regard to student learning,
  - (vi) The expected accomplishments and the standards for each stage of training, including the required practical projects to be completed; and
  - (vii) A description of the checks and tests to be used to measure a student's accomplishments for each stage of training.

#### **3.4.2.3 TRAINING COURSE APPROVAL—ALTERNATIVE MEANS OF COMPLIANCE AND COMPETENCY BASED TRAINING AND ASSESSMENT**

- (1) An ATO may request and receive initial approval for a period of not more than 24 calendar months for any training course under this part that does not meet the minimum hours for a licence prescribed by Part 2 of Safety Directives, provided that:
  - (a) The ATO shows that the training will provide an equivalent level of competency at least equal to the minimum experience requirements for personnel not receiving such training, and
  - (2) The following provisions are met:
    - (i) The ATO holds an ATO certificate issued under this part and has held that certificate for a period of at least twenty-four (24) consecutive calendar months preceding the month of the request;
    - (ii) In addition to the information required by 3.4.2.2(3), the training course specifies planned training time requirements for the course;
    - (iii) The school does not request the training course to be approved for examining authority, nor may that school hold examining authority for that course; and
    - (iv) The knowledge test and or skill test for the course is to be given by—
      - (A) An Aviation Safety Inspector; or
      - (B) An examiner who is not an employee of the school.

- (2) An ATO may request and receive final approval for any training course under this part that does not meet the minimum hours for a licence prescribed by Part 2 of these Directives, provided the following conditions are met:
- (a) The ATO has held initial approval for that training course for at least twenty-four (24) calendar months.
  - (b) The ATO has—
    - (i) Trained at least 10 students in that training course within the preceding twenty-four (24) calendar months and recommended those students for an AME certificate or rating; and
    - (ii) At least 80 percent of those students passed the skill or knowledge test, as appropriate, on the first attempt, and that test was given by—
      - (A) An Aviation Safety inspector; or
      - (B) An examiner who is not an employee of the school.
  - (b) In addition to the information required by 3.4.2.2 (3), the training course specifies planned theoretical knowledge and practical training time requirements for the course.
  - (c) The ATO does not request that the training course be approved for examining authority nor may that school hold examining authority for that course.

### 3.4.3 PERSONNEL

- (1) The applicant for an ATO certificate or current certificate holder teaching maintenance curricula shall have on the staff the following—
  - (a) An Accountable Manager;
  - (b) A Quality Manager;
  - (c) A Head of Training;
  - (d) An adequate number of instructors relevant to the courses provided.
- (2) Each instructor to be used for training shall have received the appropriate training and hold the appropriate licence and or rating as required by Part 2.
- (3) The duties and qualifications of training and instruction staff as follows:
  - (a) **Head of Training.** The Head of Training shall have overall responsibility for ensuring satisfactory integration of theoretical knowledge instruction and practical training and for supervising the progress of individual students. The Head of Training shall have had extensive experience in training as an instructor for AME licensing and possess a sound managerial capability.

**(b) Instructors.**

- (i) Each ATO shall provide the number of instructors holding appropriate licences and ratings, issued under Part 2, that the Authority determines is necessary to provide adequate instruction and supervision of the students.
- (ii) An ATO may provide specialised instructors, who are not licensed but who are approved in accordance with Part 2, to teach mathematics, physics, basic electricity, basic hydraulics, drawing, and similar subjects.

**3.4.4 FACILITIES REQUIRED FOR AIRCRAFT MAINTENANCE ENGINEERS TRAINING**

- (1) An applicant for, and holder of, an ATO certificate shall have facilities, as determined by the Authority, appropriate for the maximum number of students expected to be taught at any time, as follows:
  - (a) An enclosed classroom.
  - (b) Suitable facilities arranged to assure proper separation from the working space, for parts, tools, materials and similar articles.
  - (c) Suitable area for application of finishing materials, including paint spraying.
  - (d) Suitable areas equipped with wash tank and degreasing equipment with air pressure or other adequate cleaning equipment.
  - (e) Suitable facilities for running engines.
  - (f) Suitable area with adequate equipment, including benches, tables, and test equipment, to disassemble, service and inspect:
    - (i) Ignition systems, electrical equipment and appliances;
    - (ii) Carburettors and fuel systems; and
    - (iii) Hydraulic and vacuum systems for aircraft, aircraft engines, and their appliances.
  - (g) Suitable space with adequate equipment, including tables, benches, stands and jacks for disassembling, inspecting and rigging aircraft.
  - (h) Suitable space with adequate equipment for disassembling, inspecting, assembling, troubleshooting and timing engines.
- (2) An applicant for, or holder of an ATO certificate with approved AME courses shall have and maintain the following instructional equipment as is appropriate to the rating sought:
  - (a) various kinds of airframe structures, airframe systems and components, powerplants and powerplant system and components (including propellers) of a quantity and type suitable to complete the practical projects required by its approved training programme;
  - (b) at least one aircraft of a type acceptable to the Authority;

- (3) An applicant for, or holder of an ATO certificate with an AME rating shall have airframes, powerplants, propellers, appliances and components thereof, to be used for instruction and from which students will gain practical working experience and shall insure that the airframes, powerplants, propellers, appliances and components thereof be sufficiently diversified as to show the different methods of construction, assembly, inspection and operation when installed in an aircraft for use.
- (4) An applicant for an ATO certificate with an AME rating, or an applicant seeking an additional AME rating, shall have at least the facilities, equipment and materials appropriate to the rating sought.
- (5) An applicant for, or holder of, an ATO certificate with an AME rating shall maintain, on the premises and under the full control of the ATO, an adequate supply of material, special tools and shop equipment used in constructing and maintaining aircraft as is appropriate to the approved training programme of the ATO, in order to assure that each student will be properly instructed.
- (6) A certificate holder may not make a substantial change in facilities, equipment or material that have been approved for a particular training programme, unless that change is approved by the Authority in advance.

### **3.4.5 ADDITIONAL, SPECIFIC OPERATING RULES FOR MAINTENANCE TRAINING**

#### **3.4.5.1 TRAINING AND PROCEDURES MANUAL**

- (1) Each applicant for, or holder of an ATO certificate shall prepare and maintain a Training Manual and a Procedures Manual containing information and instructions to enable staff to perform their duties and to give guidance to students on how to comply with course requirements.
- (2) The Training Manual and Procedures Manual may be combined.
- (3) The ATO shall ensure that the Training Manual and the Procedures Manual is amended as necessary to keep the information contained therein up to date.
- (4) Copies of all amendments to the Training Manual and the Procedures Manual shall be furnished promptly by the ATO to all organisations or persons to whom the manual has been issued.

*Note: See IS: 3.4.5.1 for detailed requirements for the Training Manual and the Procedures Manual and the format for each manual.*

#### **3.4.5.2 RECORDKEEPING**

- (1) **Students.** An ATO that is approved to conduct maintenance training shall maintain a record for each trainee that contains—
  - (a) The name of the trainee
  - (b) A copy of the trainee's airman certificate, if any;
  - (c) The name of the course and the instruction credited;
  - (d) The trainee's prerequisite experience and course time completed;
  - (e) The trainee's performance on each lesson and the name of the instructor providing instruction;

- (f) The date and result of each end-of-course test and the name of the examiner conducting the test; and
  - (g) The number of hours of additional training that was accomplished after any unsatisfactory test.
  - (h) A current progress chart or individual progress record for each student, showing the practical projects or laboratory work completed, or to be completed, in each subject.
- (2) **ATO staff.** An ATO that is approved to conduct maintenance training shall maintain a record for each instructor approved to instruct a course approved in accordance with this subpart, that indicates the instructor has complied with all applicable instructor requirements of these regulations.
- (3) **Record retention.** An ATO shall keep all records for a minimum period of two (2) years
- (a) For students, from the date of completion of training or testing
  - (b) For ATO staff, from the date of the last employment.
- (4) The ATO shall make the records available to the Authority upon request and at a reasonable time and shall keep the records –
- (a) For students, at the ATO or satellite ATO where the training, testing, or checking occurred, and
  - (b) For ATO staff, at the ATO or satellite ATO where the person is employed.
- (5) The ATO shall provide to a trainee, upon request, and at a reasonable time, a copy of his or her training records.

#### 3.4.5.3 GRADUATION CERTIFICATE

- (1) An ATO shall issue a graduation certificate to each student who completes its approved course of training.
- (2) The graduation certificate must be issued to the student upon completion of the course of training and contain at least the following information;
  - (a) The name and certificate number of the ATO;
  - (b) The name of the graduate to whom it was issued;
  - (c) The course of training for which it was issued;
  - (d) The date of graduation;
  - (e) A statement that the student has satisfactorily completed each required stage of the approved course of training including the tests for those stages;
  - (6) A certification of the information contained on the graduation certificate by the Head of Training for that course of training.

#### 3.4.5.4 EXAMINING AUTHORITY FOR ATO'S TEACHING MAINTENANCE CURRICULA

- (1) An ATO shall meet the following prerequisites to receive initial approval for examining authority:

- (a) The ATO shall complete the application for examining authority on a form and in a manner prescribed by the Authority;
  - (b) The ATO shall hold an ATO certificate and rating issued under this Part;
  - (c) The ATO shall have held the rating in which examining authority is sought for at least twenty-four (24) consecutive calendar months preceding the month of application for examining authority;
  - (d) Within twenty-four (24) calendar months before the date of application for examining authority, at least 90 percent of the students in the ATO must have passed the required skill or knowledge test, or any combination thereof, for the licence or rating for which examining authority is sought, on the first attempt, and that test was given by—
    - (i) An Aviation Safety inspector; or
    - (ii) A designated examiner who is not an employee of the ATO.
- (2) The examining authority of the ATO is valid for twenty-four (24) months, unless suspended or revoked by the Authority, and may be renewed upon request to the Authority by the ATO.
- (3) An ATO that holds examining authority may recommend a person who graduated from its course for the appropriate knowledge or skill test.
- (4) The ATO that holds examining authority will administer the tests as required by Part 2 as appropriate to the licence or rating sought.
- (5) An ATO that holds examining authority may conduct knowledge and skill tests on a progressive schedule if approved by the Authority. This may be necessary due to the length and complexity of an inclusive maintenance training programme.
- (6) An ATO that holds examining authority must maintain—
- (a) A record of all airman licences or ratings it issues, which consist of the following information in chronological order:
    - (i) The date the airman certificate or licence was issued;
    - (ii) The student to whom the airman certificate/licence was issued, and that student's permanent mailing address and telephone number;
    - (iii) The training course from which the student graduated;
    - (iv) The name of person who conducted the knowledge or skill test;
    - (v) The type of airman licence or rating issued to the student; and
    - (vi) The date the student's airman application file was sent to the Authority for processing for a permanent airman licence.
  - (b) A copy of the record containing each student's graduation certificate, airman application, airman licence, superseded airman certificate or licence (if applicable), and knowledge test or skill test results; and
  - (c) Retain these records for two (2) years and make them available to the Authority upon request. These records must be surrendered to the Authority when the ATO ceases to have examining authority.
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**3.4.5.5 STUDENT TRANSFER OF CREDIT BETWEEN ATOs TEACHING A MAINTENANCE CURRICULUM**

A person who transfers from one ATO to another ATO may receive credit for that previous maintenance training, provided the following requirements are met:

- (a) The maximum credited training time does not exceed one-half of the receiving ATO's curriculum requirements for the licence or rating;
- (2) The person completes a knowledge and practical test conducted by the receiving ATO for the purpose of determining the amount of experience and knowledge to be credited;
- (3) The receiving ATO determines, based on the person's performance on the knowledge and practical test required by paragraph (b) of this section, the amount of credit to be awarded, and records that credit in the person's training record; and
- (4) The receiving ATO retains a copy of the person's training record from the previous ATO.

**3.4.5.6 INSPECTIONS OF THE ATO TEACHING MAINTENANCE CURRICULA**

Each ATO shall grant unlimited, unrestricted and unimpeded access to the Authority to inspect the ATO's facilities, equipment and records at any reasonable time and in any reasonable place in order to determine compliance with these regulations and the ATO's certificate and training specifications.

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**GHANA CIVIL AVIATION**

**(FLIGHT STANDARDS) DIRECTIVES**

**PART 3 — IMPLEMENTING STANDARDS**

**IS 3.2.1.3 APPROVED TRAINING ORGANISATION CERTIFICATE**

 <p style="text-align: center;"><b>Republic of Ghana</b> <b>GHANA CIVIL AVIATION AUTHORITY</b></p> <p style="text-align: center;"><b>APPROVED TRAINING ORGANIZATION</b></p> 
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<b>A. ATO INFORMATION:</b>	
1. ATO NUMBER:	3. EFFECTIVE DATE:
2. APPROVING STATE:	4. EXPIRY DATE:

<b>B. TRAINING ORGANIZATION INFORMATION &amp; POINT OF CONTACT:</b>	
1. ATO OFFICIAL NAME:	5. ATO PRIMARY BASE:
2. ATO TRADING NAME:	6. ATO ACCOUNTABLE MANAGER E-MAIL CONTACT:
3. ATO CONTACT TELEPHONE:	7. ATO MAILING ADDRESS:
4. ATO CONTACT FAX:	8. ATO MAILING ADDRESS:

<b>C. ISSUING AUTHORITY INFORMATION</b>	
1. CAA ORGANIZATION:	4. CAA E-MAIL CONTACT:
2. CAA TELEPHONE:	5. CAA MAILING ADDRESS:

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3. CAA FAX:	6. CAA MAILING ADDRESS:
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<b>D. CERTIFICATE APPROVAL INFORMATION</b>		
This certificate certifies that the organization listed in this Training Organization Approval Certificate is authorized to perform training of personnel, as defined in the Training Specifications issued to this organization, in accordance with the provisions of the Ghana Civil Aviation Directives, Training and Procedures Manual and curriculums that are approved by the GCAA.		
1. DATE OF ISSUE:	2. SIGNATURE OF ISSUING AUTHORITY:	3. PRINTED NAME & OFFICAL TITLE:

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## IS 3.2.17      **QUALITY ASSURANCE AND QUALITY SYSTEM**

- (1) In order to show compliance with 3.2.17, an ATO should establish its quality assurance and quality system in accordance with the instruction and information contained in the following paragraphs.

### **1.0 Quality policy and strategy**

**1.1** The ATO shall describe how the organisation formulates, deploys and reviews its policy and strategy and turns them into plans and actions applicable to all levels of the organisation. A formal written quality policy statement should be prepared, establishing a commitment by the accountable executive of the training organisation to achieving and maintaining the highest possible standards in quality. The quality policy should reflect the achievement and continued compliance with all applicable Ghana regulations and any additional standards specified by the ATO.

**1.2** The accountable executive of the training organisation will have the overall responsibility for the standard in quality including the frequency, format and structure of the internal management review and analysis activities and may delegate the responsibility for the tasks defined under paragraph 2 of this Appendix to a quality manager. Depending on the size and scope of the organisation and the requirements of the Licensing Authority, the accountable executive and quality manager may interact in different ways as illustrated in the organisational charts in ICAO Doc 9841, Appendix C.

### **2.0 Quality manager**

**2.1** The primary role of the quality manager is to verify, by monitoring activities in the field of training, that the standards as established by the ATO and any additional requirements of the Licensing Authority are being carried out properly.

**2.2** The quality manager should be responsible for ensuring that the quality system is properly documented, implemented, maintained and continuously reviewed and improved.

**2.3** The quality manager should:

report directly to the head of training (see Note); and  
have unencumbered access to all parts of the ATO.

*Note: When the head of training is not the accountable executive, reporting mechanisms should be instituted to ensure that the accountable executive is aware of all issues impacting the quality of the training services being provided by the affected ATO (see example 2 in ICAO Doc 9841, Appendix C).*

**2.4** The quality manager should be responsible for ensuring that personnel training related to the quality system is conducted.

### **3.0 Quality assurance**

**3.1** The term quality assurance is frequently misunderstood to mean the testing and checking of products and services. Organisations that only do checking and testing activities are merely applying 'quality control' measures, which are designed to catch product and service defects, but not necessarily prevent them. For example, an ATO that administers exams at the end of the training syllabus, only to discover that a large proportion of the students have failed to meet the required standard has only identified a deficiency in expected results. The implication would be that there could be a problem with the training programme, or the instructor, or even the student selection criteria. In this instance, the ATO has no idea what the real problem is or what to do about it. Quality control, by itself, provides limited value without the suite of complementary activities that comprise QA.

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**3.2** QA, on the other hand, attempts to improve and stabilise the training process to identify and avoid, or at least minimise, issues that lead to problems in the first place. It continuously verifies that standards are adhered to throughout the training process by introducing various checkpoints and controls. It further introduces a system of audits to ensure that documented policies, processes, and procedures are consistently followed. It is the ‘assurance’ part of quality management.

A QA plan for an ATO should encompass well-designed and documented policies, processes and procedures for at least the following activities.

- Monitor training services and process controls;
- Monitoring assessment and testing methods;
- Monitor personnel qualifications and training;
- Monitor training devices and equipment qualification, calibration and functionality, as applicable;
- conduct internal and external audits;
- develop, implement, and monitor corrective and preventive actions and associated reporting systems; and
- utilise appropriate statistical analysis to identify and respond appropriately to trends.

**3.4** An effective QA plan will aid significantly in the ATO’s compliance with requirements, its conformity with the standards and the adequacy of its training activities. To take the ATO’s performance to a higher level requires a structure that ensures that the combined QA effort of the employees reaches its full potential.

*Note: Annex 1 only requires ATOs to establish and implement QA policies, processes, and procedures acceptable to the Licensing Authority granting the approval, which ensures that training and instructional practices comply with all relevant requirements.*

**3.5** QA plans by themselves are subject to breakdowns in human performance and therefore are in need of robust organisational structures that underpin the QA efforts of individuals. It is for this reason that ATOs and States should embrace the quality system governance model described in this Appendix.

#### **4. Quality system for the ATO**

**4.1** A quality system is the aggregate of all the organisation’s activities, plans, policies, processes, procedures, resources, incentives, and infrastructure working in unison towards a total quality management approach. It requires an organisational construct complete with policies, processes, procedures, and resources that underpins a commitment to achieve excellence in product and service delivery through the implementation of best practices in quality management.

**4.2** An ATO that supports its QA plan with a well-designed, implemented and maintained quality system structure should be able to easily and repeatedly achieve results that exceed both the requirements of the applicable national regulations and the expectations of the ATO’s clients.

**4.3** The basic attributes of an effective quality system should include, but are not necessarily limited to:

- A managerial structure that facilitates and encourages clear and unencumbered access to the decision makers;
- An overarching company commitment to achieve excellence in training service delivery rather than meeting minimum requirements;
- Quality policies, processes, and procedures that are well-designed, consistently applied and subject to formalised review and refinement processes;

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An employee training plan that instils and promotes best practices in quality management efforts;

an organisational risk profile and corresponding risk management plan, which together provide a comprehensive list of hazards that are tied to the ATO's activities and establish mitigating measures to effectively manage those risks, which threaten the achievement of desired standards of performance; and

a strategic review of policies and procedures, which measures the organisation's current assumptions, objectives and plans by applying a relevance test matched to evolving trends in the industry or changes occurring within the ATO.

## **5. Organisational risk profile**

**5.1** An organisational risk profile is an inventory of identified hazards and threats that present risks, which are likely to prevent conformity with the required standards of performance. This 'threat to quality' list is normally derived at by first establishing a directory of those activities that routinely take place in order to deliver and administer a training programme. Once complete, the activity directory is then expanded to identify the hazards and threats associated with each individual activity. Some examples of routine activities that should be examined during this process are:

selection and training of staff;

training programme development, validation, and review;

development and maintenance of training courseware;

administrative staff duties in support of the training programme; instructors and evaluators, and students;

delivery of training;

record keeping;

assessment and examination processes; and

client and Authority feedback.

**5.2** The risks identified through this exercise should not be limited to just those which currently exist, but should also include those potential risks that could arise from a change to existing circumstances or conditions.

## **6. Risk management plan**

**6.1** A risk management plan is designed to mitigate the identified risks, real or potential, which were derived from the organisational risk profile exercise. The plan's objective is not to eliminate risk so much as it is to effectively manage risk by putting in place risk controlling measures.

**6.2** A well developed and implemented risk management plan will substantially aid in accurately scoping out the depth and frequency of planned QA related activities.

**6.3** The plan should be subject to the management review process outlined in paragraph 4.3(f) of this Appendix.

**6.4** The current risk management plan should be readily accessible to all employees so that it can be accurately followed and open to comment for improvement.

## **7. Coherence matrix**

**7.1** A coherence matrix, sometimes known as a correspondence matrix, is a very powerful addition to the ATO's compliance efforts. It is a detailed tabulated document that lists all the applicable regulatory requirements imposed on the ATO. Beside each listed provision there should be at least two descriptive elements that identify:

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the existing process(es) that is (are) designed to ensure continuous compliance with that specific regulatory rule or standard; and  
the individual managerial position responsible for the effective implementation of each process

**7.2** The coherence matrix should indicate the next intended and most recently completed audits designed to validate the functionality of each of the identified process. Any recent audit findings should be listed in the matrix or referred to as being documented in a separate 'register of findings'.

The coherence matrix is developed and managed by the quality manager and is subject to the management review process.

**7.4** The current coherence matrix should be readily accessible to all employees so that it can be accurately followed and open to comment for improvement.

## **8. Corrective and preventive action reports**

**8.1** Quality assurance plans should include a well-structured reporting system to ensure that suggestions by ATO personnel for both corrective and preventive actions are recorded and promptly addressed. Paragraph 3.3 (f) of this Appendix identifies this as a necessary component of QA.

**8.2** After an analysis of the reports submitted, the reporting system should specify who is required to rectify a discrepancy and/or non-conformity in each particular case and the procedure to be followed if corrective action is not completed within an appropriate timescale. Just as important, the reporting system should identify who is required to investigate and act upon any report identifying measures that could prevent a non-conformity from occurring.

**8.3** Corrective and preventive action reports should be able to be submitted anonymously, if individuals so choose, to maximise the opportunity for open and effective reporting.

*Note: Since corrective and preventive action reports, in this instance, represent suggestions for improvement in conformity levels and deal with quality issues, this reporting system and its processes should be managed by the quality manager.*

## **9. Quality-related documentation**

**9.1** Relevant documentation includes part(s) of the Training and Procedures Manual, which may be included in a separate Quality Manual.

**9.2** In addition, the relevant documentation should include the following:

- quality policy and strategy;
- glossary;
- organisational risk profile;
- risk management plan;
- coherence matrix;
- corrective and preventive action procedures and reporting system;
- specified training standards;
- description of the organisation;
- assignment of duties and responsibilities, and
- training procedures related to the quality system to ensure regulatory compliance.

**9.3** The QA audit programme documentation should reflect:

- the schedule of the monitoring process;
- audit procedures;
- reporting procedures;

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follow-up and corrective action procedures;  
the recording system; and  
document control.

## **10. Quality assurance audit programme**

The QA audit programme should include all planned and systematic actions necessary to provide confidence that every training activity is conducted in accordance with all applicable requirements, standards and procedures.

## **11. Quality inspection**

**11.1** The primary purpose of a quality inspection is to review a document or observe a particular event, action, etc., in order to verify whether established training procedures and requirements are followed during the conduct of the inspection and whether the required standard is achieved.

**11.2** Examples of typical subject areas for quality inspections are:

actual training sessions;  
maintenance, if applicable;  
technical standards; and  
training standards.

## **12. Quality audits**

**12.1** An audit is a systematic and independent comparison between the way in which training is being conducted and the way in which it should be conducted according to the published training procedures.

**12.2** Audits should include at least the following quality procedures and processes:

a description of the scope of the audit, which should be explained to the audited personnel;  
planning and preparation;  
gathering and recording evidence; and  
analysis of the evidence.

**12.3** The various techniques that make up an effective audit are:

a review of published documents;  
interviews or discussions with personnel;  
the examination of an adequate sample of records;  
the witnessing of the activities which make up the training; and  
the preservation of documents and the recording of observations.

## **13. Auditors**

**13.1** The ATO should decide, depending on the complexity of the organisation and the training being conducted, whether to make use of a dedicated audit team or a single auditor. In any event, the auditor or audit team should have relevant training and/or operational experience.

**13.2** The responsibilities of the auditors should be clearly defined in the relevant documentation.

## **14. Auditor's independence**

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**14.1** Auditors should not have any day-to-day involvement in the area of the operation or maintenance activity that is to be audited.

**14.2** An ATO may, in addition to using the services of full time dedicated personnel belonging to a separate quality department, undertake the monitoring of specific areas or activities through the use of part-time auditors. An ATO whose structure and size does not justify the establishment of full-time auditors may undertake the audit function using part-time personnel from within its own organisation or from an external source under the terms of an agreement acceptable to the Licensing Authority.

**14.3** In all cases the ATO should develop suitable procedures to ensure that persons directly responsible for the activities to be audited are not selected as part of the auditing team. Where external auditors are used, it is essential that any external specialist has some familiarity with the type of activity conducted by the ATO.

**14.4** The QA audit programme of the ATO should identify the persons within the organisation who have the experience, responsibility and authority to:

identify and record concerns or findings, and the evidence necessary to substantiate such concerns or findings;

initiate or recommend solutions to concerns or findings through designated reporting channels;

verify the implementation of solutions within specific and reasonable timescales; and report directly to the quality manager.

## **15. Audit scheduling**

**15.1** A QA audit programme should include a defined audit schedule and a periodic review cycle. The schedule should be flexible and allow unscheduled audits when negative trends are identified. The quality manager should schedule follow-up audits when necessary to verify that a corrective action resulting from a finding was carried out and that it is effective.

**15.2** An ATO should establish a schedule of audits to be completed during a specific calendar period. This schedule should be influenced by the organisational risk profile and be reflected in both the risk management plan and the coherence matrix documents. As a minimum, all aspects of the training should be reviewed within a period of twelve months in accordance with the audit programme.

**15.3** When an ATO defines the audit schedule, it should take into account significant changes to the management, organisation, training or technologies, as well as changes to the standards and requirements.

## **16. Monitoring and corrective action**

**16.1** The aim of monitoring within the quality system is primarily to investigate and judge its effectiveness and thereby ensure that defined policy and training standards are continuously complied with. Monitoring and corrective action functions fall under the responsibilities of the quality manager. Monitoring activity is based upon:

quality inspections;

quality audits; and

corrective and preventive action reports, and subsequent follow-up.

**16.2** Any non-conformity identified as a result of monitoring should be communicated by the quality manager to the manager responsible for taking corrective action or, if appropriate, to the head of training or, when circumstances warrant, to the accountable executive. Such non conformity should be recorded, for the purpose of further investigation, in order to determine the cause and to enable the recommendation of an appropriate corrective action.

**16.3** The QA audit programme should include procedures to ensure that corrective and preventive actions are developed in response to findings. Personnel implementing these procedures should monitor such actions to ensure that they have been completed and verify their effectiveness. Organisational responsibility and accountability for the implementation of a corrective action resides with the department where the finding was identified. The accountable executive will have the ultimate responsibility for ensuring, through the quality manager, that the corrective action has reestablished conformity with the standard required by the ATO and any additional requirements established by the Licensing Authority or the ATO.

**16.4** As part of its quality system, the ATO should identify internal and external customers and monitor their satisfaction by measurement and analysis of feedback.

## **17. Continuous improvement process**

**17.1** The quality manager should be responsible for the review and continuous improvement of the established quality system's policies, processes and procedures. The following tools, on which the quality manager relies, are essential to the on-going continuous improvement process:

- organisational risk profile;
- risk management plan;
- coherence matrix;
- corrective and preventive action reports; and
- inspection and audit reports.

**17.2** These tools and processes are interrelated and help define the continuous improvement efforts of the organisation. For example, any corrective or preventive action report could identify a deficiency or an opportunity for improvement. As outlined in paragraph 8.2 of this Appendix, the quality manager would then be required to ensure the identified issue was addressed and effectively implemented. The same would be true, if the discovery of an issue was identified during an inspection or audit.

**17.3** The effective implementation of change and the subsequent validation that the change did indeed result in the desired outcome is critical to the continuous improvement process. Simply introducing a well-meaning suggestion for improvement into the organisation without carefully managing that change could have undesirable consequences. It is therefore incumbent upon the quality manager to responsibly introduce, monitor, and validate improvement efforts.

**17.4** A simplistic but effective process to use in managing continuous improvement is known as the plan-do-check-act, or PDCA, approach. The following illustration depicts this continuous improvement process cycle:

Plan. Map out the implementation of the recommended change, identifying at least:

- (a) those people who will be affected by the change
- (b) the required quality control measures necessary to mitigate risk; and
- (c) the desired outcome and its intended consequences.

Do. Execute the implementation plan once all affected groups have accepted the proposal and understand their role in ensuring its success.

Check. Apply sufficient quality control "stage" checks throughout the implementation phase to ensure any unintended deviations in the execution are identified and addressed without delay; and

Act. Analyse the results and take appropriate action as necessary.



## 18. Management review and analysis

18.1 Management should accomplish a comprehensive, systematic and documented review and analysis of the quality system, training policies and procedures, and should consider:

- the results of quality inspections, audits and any other indicators;
- the overall effectiveness of the management organisation in achieving stated objectives; and
- the correction of trends, and prevention, where applicable, of future non-conformities.

18.2 Conclusions and recommendations made as a result of the review and analysis should be submitted in writing to the responsible manager for action. The responsible manager should be an individual who has the authority to resolve relevant issues and take action. The head of training should decide upon the frequency, format and structure of meetings for internal review and analysis, in coordination with the accountable executive, if different, as the accountable executive has the overall responsibility for the quality system including the frequency, format and structure of the internal management review and analysis activities.

## 19. Recording

19.1 Accurate, complete and readily accessible records documenting the result of the QA audit programme should be maintained by the ATO. Records are essential data to enable an ATO to analyse and determine the root causes of non-conformity so that areas of non-compliance can be identified and subsequently addressed.

19.2 Records should be retained at least for the period that may be mandated by national requirements. In the absence of such requirements, a period of three years is recommended. The relevant records include:

- audit schedules;
- quality inspection and audit reports;
- responses to findings;
- corrective and preventive action reports;
- follow-up and closure reports; and
- management review and analysis reports

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**IS: 3.3.3 PERSONNEL FOR FLIGHT CREW TRAINING IN THE ATO**

The Head of Training shall have overall responsibility for ensuring satisfactory integration of flying training, flight simulation training and theoretical knowledge instruction and for supervising the progress of individual students. The Head of Training shall have had extensive experience in training as a flight instructor for professional pilot licences and possess a sound managerial capability.

The CFI shall be responsible for the supervision of flight and synthetic flight instructors and for the standardisation of all flight instruction and synthetic flight instruction. The CFI shall:

- (a) hold the highest professional pilot licence related to the flying training courses conducted;
- (b) hold the rating(s) related to the flying training courses conducted;
- (c) hold a flight instructor rating for at least one of the types of aircraft used on the course; and
- (d) have completed 1,000 hours pilot-in-command flight time of which a minimum of 500 hours shall be on flying instructional duties related to the flying courses conducted, of which 200 hours may be instrument ground time.

Flight instructors shall hold--

- (e) a pilot licence and rating(s) in accordance with Part 2 of the Flight Standards Directives related to the flying training courses they are approved to conduct; and
- (f) an instructor rating or authorisation in accordance with Part 2 of the Flight Standards Directives, relevant to the part of the course being conducted e.g. flight instructor, flight instrument rating instructor, instructor for additional class or type rating(s), instructor for flight simulation training, as appropriate.
- (g) Instructors for flight simulation training shall hold the authorisation in accordance with Part 2 of the Flight Standards Directives related to the flight simulation training courses they are appointed to conduct.

Instructors for flight engineer licences and rating training shall hold:

- (h) the licence and the rating(s) in accordance with Part 2 of the Flight Standards Directives related to the flight engineer licence
- (i) and/or rating training courses they are appointed to conduct; and
- (j) an instructor rating in accordance with Part 2 of the Flight Standards Directives, relevant to the part of the course being conducted.

The Chief Ground Instructor shall --

- (k) Be responsible for the supervision of all ground instructors and for the standardisation of all theoretical knowledge instruction; and
- (l) shall have a practical background in aviation and have the appropriate ground instructor licence in accordance with Part 2 of the Flight Standards Directives.

Ground instructors shall be responsible for conducting ground training in subject areas required for a licence or rating. Ground instructors may have either a licence or be approved by the Authority in accordance with Part 2 of the Flight Standards Directives, depending upon the subject matter to be taught.

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Ground instructors, who are approved by the Authority but not licensed, who teach knowledge subjects for licences and ratings shall have appropriate experience in aviation and shall, before appointment, give proof of their competency by giving a lecture based on material they have developed for the subjects they are to teach.

**IS: 3.3.5.1 TRAINING MANUAL AND PROCEDURES MANUAL FOR ATO CONDUCTING FLIGHT CREW TRAINING**

- (1) The Training and Procedures Manual for use at an ATO conducting approved training courses should include the following:

**Part 1**

**1. General**

**1.1** Preamble relating to the use and applicability of the manual.

**1.2** Table of contents.

**1.3** Amendment, revision and distribution of the manual:

procedures for amendment;  
amendment record page;  
distribution list; and  
list of effective pages.

**1.4** Glossary of definitions and significant terms, including a list of acronyms and/or abbreviations.

**1.5** Description of the structure and layout of the manual, including:

the various parts, sections, as well as their contents and use; and  
the paragraph numbering system.

**1.6** Description of the scope of training authorised under the organisation's terms of approval.

**1.7** Organisation (chart of the ATO's management organisation), and the name of the post holders.

**1.8** Qualifications, responsibilities and succession of command of management and key operational personnel, including but not limited to:

accountable executive;  
head of training;  
instructional services manager;  
quality manager;

maintenance manager, if applicable;  
safety manager, if applicable;  
instructors; and  
examiners, evaluators, and auditors.

**1.9** Policies dealing with:

the training organisation's objectives, including ethics and values;  
the selection of ATO personnel and the maintenance of their qualifications;  
the training programme design and development, including the need for programme validation and review, as well as the outsourcing of training programme development to third-party providers;  
the evaluation, selection, and maintenance of training material and devices;  
the maintenance of the training facilities and equipment;  
developing and maintaining a quality system governance model; and  
developing and maintaining a culture focused on safety in the workplace, including, when applicable, implementing a safety management system governance model.

**1.10** Description of the facilities and equipment available, including:

general use facilities, including offices, stores and archives, library or reference areas);  
the number and size of classrooms, including installed equipment; and  
the type and number of training devices, including their location if other than at the main training site.

**2. Staff training**

**2.1** Identification of persons or positions responsible for the maintenance of performance standards and for ensuring the competency of personnel.

**2.2** Details of the procedures to validate the qualifications and determine the competency of instructional personnel as required by GEAR 3: 3.2.1.14.

**2.3** Details of the initial and recurrent training programmes for all personnel as required by GEAR 3: 3.2.1.14.

**2.4** Procedures for proficiency checks and upgrade training.

**3.0 Client training programmes**

The client training programmes cover each individual training programme conducted by the training organisation for its customers. The training programmes consist of a training plan, a practical training syllabus and a theoretical knowledge syllabus, if applicable, as described in paragraphs 3.1, 3.2 and 3.3 below.

**3.1 Training plan**

**3.1.1** The aim of the course in the form of a statement of what the student is expected to be able to do as a result of the training, the level of performance, and the training constraints to be observed.

**3.1.2** Pre-entry requirements, including:

minimum age;

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education or qualification requirements;  
medical requirements; and  
linguistic requirements.

**3.1.3** Credits for previous knowledge, experience or other qualifications, which should be obtained from the Licensing Authority before the training commences.

**3.1.4** Training curricula, including the:

theoretical training (knowledge);  
practical training (skills);  
training in the domain of human factors (attitudes);  
assessment and examinations; and  
monitoring of the training process, including the assessment and examination activities.

**3.1.5** Training policies in terms of:

restrictions regarding the duration of training periods for students and instructors;  
and  
if applicable, minimum rest periods.

**3.1.6** Policy for the conduct of student evaluation, including the:

procedures for authorisation for tests;  
procedures for remediation training before retest and knowledge test re write procedures;  
test reports and records;  
procedures for skill progress checks and skill tests;  
procedures for knowledge progress tests and knowledge tests, including procedures for knowledge test preparation, type of questions and assessments, and standards required for a pass; and  
procedures for question analysis and review and for issuing replacement exams (applicable to knowledge tests).

**3.1.7** Policy regarding training effectiveness, including:

liaison procedures between training departments;  
requirements for reporting and documentation;  
internal feedback system for detecting training deficiencies;  
completion standards at various stages of training to ensure standardisation;  
individual student responsibilities;  
procedures to correct unsatisfactory progress;  
procedures for changing instructors;  
maximum number of instructor changes per student; and  
procedures for suspending a student from training.

## **3.2 Syllabi for non-competency-based training programmes**

### **3.2.1 Practical training syllabus**

**3.2.1.1** A statement of how the course will be divided into phases, indicating how the phases will be arranged to ensure completion in the most suitable learning sequence and that exercises are repeated at the proper frequency.

**3.2.1.2** The syllabus hours for each phase and for groups of lessons within each phase and when progress tests are to be conducted.

**3.2.1.3** A statement of the standard of proficiency required before progressing from one phase of training to the next. It includes minimum experience requirements and satisfactory exercise completion before undertaking the next phase.

**3.2.1.4** Requirements for instructional methods, particularly with respect to adherence to syllabi and training specifications.

**3.2.1.5** Instruction for the conduct and documentation of all progress checks.

**3.2.1.6** Instruction, where applicable, given to all examining staff regarding the conduct of examinations and tests.

### **3.2.2 Theoretical knowledge syllabus**

The syllabus for theoretical knowledge instruction should be structured generally as in paragraph 3.2 above but with a training specification and objective for each subject.

### **3.3. Syllabus for competency-based training programmes**

**3.3.1** Training programmes focused on achieving desired standards of performance for specific jobs or tasks should be competency-based.

**3.3.2** Competency-based training programmes are based upon a job and task analysis to define the knowledge, skills and attitudes required to perform a job or a task. Such programmes use an integrated approach in which the training of the underlying knowledge to perform a task is followed by practice of the task so that the trainee acquires the underlying knowledge, skills and attitudes related to the task in a more effective way.

**3.3.3** As a result, the syllabus is structured as a single document that is subdivided in modules containing a training objective and the same information as in 3.2.1, but applied to both the theoretical knowledge and practical training delivered by the module.

## **4. Tests and checks conducted by the ATO for the issuance of a licence or a rating**

**4.1** When a State has authorised an ATO to conduct the testing required for the issuance of a licence or rating in accordance with the Training and Procedures Manual, the manual should include:

- the name(s) of the personnel with testing authority and the scope of the authority;
- the role and duties of the authorised personnel;
- if the school has been given authority to appoint personnel to conduct the testing required for the issuance of a licence or rating, the minimum requirements for appointment as well as the selection and appointment procedure; and
- the applicable requirements established by the Licensing Authority, such as:
  - (a) The procedures to be followed in the conduct of checks and tests; and
  - (b) the methods for completion and retention of testing records as required by the Authority

## **5. Records**

**5.1** Policy and procedures regarding:

- attendance records;
- student training records;
- staff training and qualification records;
- person responsible for checking records and student personal logs;
- nature and frequency of record checks;

standardisation of record entries;  
personal log entries; and  
security of records and documents.

## **6. Safety management system (if applicable)**

**6.1** The requirement to adopt SMS practices is intended to be restricted to only those training entities whose activities directly impact upon the safe operation of aircraft. Should that requirement apply to the ATO, the Training and Procedures Manual, as stated in paragraph 1.9 above, must address the ATO's SMS with reference to a separate manual or include the SMS practices within the Training and Procedures Manual.

## **7. Quality assurance**

**7.1** Provide a brief description of the quality assurance practices, as required by paragraph 5 of Appendix 2 to Annex 1, with reference to a separate quality manual or include the QA practices within the Training and Procedures Manual (refer to Appendix B, paragraph 9).

## **8. Appendices**

**8.1** As required:

sample progress test forms;  
sample logs, test reports and records; and  
a copy of the approved training organisation's approval document.

## **Part II – Additional content for flight training organisations (utilising aircraft)**

### **9. Flight training – General**

**9.1** Qualifications, responsibilities and succession of command of management and key operational personnel (in addition to paragraph 1.8 above), including but not limited to:

chief flight instructor; and  
chief ground instructor.

**9.2** Policies and procedures (in addition to paragraph 1.9 above) dealing with:

approval of flights;  
responsibilities of the pilot-in-command;  
flight planning procedures – general;  
carriage of passengers;  
operational control system;  
reporting of safety hazards, incidents and accidents (see Appendix D for more details);  
duty periods and flight time limitations for flying staff members and students; and  
minimum rest periods for flying staff members and students.

**9.3** Description of the facilities and equipment available (in addition to paragraph 1.10 of this Appendix), including:

Flight simulation training devices and training aircraft;  
Maintenance facilities and apron parking areas for training aircraft;  
Computer-based classroom(s); and  
Dispatch control and briefing areas.

### **10. Aircraft operating information**

**10.1** Certification and operating limitations.

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**10.2** Aircraft handling, including:

- a) performance limitations;
- b) use of checklists;
- c) standard operating procedures; and
- d) aircraft maintenance procedures.

**10.3** Instructions for aircraft loading and securing of load.

**10.4** Fuelling procedures.

**10.5** Emergency procedures.

**11. Routes**

**11.1** Performance criteria, e.g. take-off, en route, landing, etc.

**11.2** Flight planning procedures including:

- fuel and oil requirements;
- minimum safe altitudes;
- planning for contingencies (e.g. emergency or diversion scenarios); and
- navigation equipment.

**11.3** Weather minima for all instructional training flights during day, night, VFR and IFR operations.

**11.4** Weather minima for all student training flights at various stages of training.

**11.5** Training routes and practice areas.

**12. Flight training plan**

**12.1** Training curricula (in addition to paragraph 3.1.4 above), including, as applicable, the:

- flying curriculum (single-engine);
- flying curriculum (multi-engine);
- theoretical knowledge curriculum; and
- flight simulation training curriculum.

**12.2** The general arrangements of daily and weekly programmes for flying training, ground training and flight simulation training.

**12.3** Training policies (in addition to paragraph 3.1.5 above) in terms of:

- weather constraints;
- maximum student training times for flight, theoretical knowledge and flight simulation training, per day/week/month;
- restrictions in respect of training periods for students;
- duration of training flights at various stages;
- maximum individual student flying hours in any day or night period;
- maximum number of individual student training flights in any day or night period;
- and
- minimum rest periods between training periods.

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## IS: 3.4.5.1 TRAINING AND PROCEDURES MANUAL FOR ATO CONDUCTING MAINTENANCE TRAINING

The Training and Procedures Manual for use at an ATO conducting approved training courses should include the following:

### Part 1

#### 1. General

- 1.1 Preamble relating to the use and applicability of the manual.
- 1.2 Table of contents.
- 1.3 Amendment, revision and distribution of the manual:
  - procedures for amendment;
  - amendment record page;
  - distribution list; and
  - list of effective pages.
- 1.4 Glossary of definitions and significant terms, including a list of acronyms and/or abbreviations.
- 1.5 Description of the structure and layout of the manual, including:
  - the various parts, sections, as well as their contents and use; and
  - the paragraph numbering system.
- 1.6 Description of the scope of training authorised under the organisation's terms of approval.
- 1.7 Organisation (chart of the ATO's management organisation), and the name of the post holders.
- 1.8 Qualifications, responsibilities and succession of command of management and key operational personnel, including but not limited to:
  - accountable executive;
  - head of training;
  - instructional services manager;
  - quality manager;
  - maintenance manager, if applicable;
  - safety manager, if applicable;
  - instructors; and
  - examiners, evaluators, and auditors.
- 1.9 Policies dealing with:
  - the training organisation's objectives, including ethics and values;
  - the selection of ATO personnel and the maintenance of their qualifications;
  - the training programme design and development, including the need for programme validation and review, as well as the outsourcing of training programme development to third-party providers;
  - the evaluation, selection, and maintenance of training material and devices;
  - the maintenance of the training facilities and equipment;
  - developing and maintaining a quality system governance model and
  - developing and maintaining a culture focused on safety in the workplace, including, when applicable, implementing a safety management system governance model.
- 1.10 Description of the facilities and equipment available, including:

general use facilities, including offices, stores and archives, library or reference areas);  
the number and size of classrooms, including installed equipment; and  
the type and number of training devices, including their location if other than at the main training site.

## **2. Staff training**

**2.1** Identification of persons or positions responsible for the maintenance of performance standards and for ensuring the competency of personnel.

**2.2** Details of the procedures to validate the qualifications and determine the competency of instructional personnel as required by GCAR 3: 3.2.1.14.

**2.3** Details of the initial and recurrent training programmes for all personnel, including awareness training with respect to their responsibilities within the ATO's system governance processes.

**2.4** Procedures for proficiency checks and upgrade training.

## **3.0 Client training programmes**

The client training programmes cover each individual training programme conducted by the training organisation for its customers. The training programmes consist of a training plan, a practical training syllabus and a theoretical knowledge syllabus, if applicable, as described in paragraphs 3.1, 3.2 and 3.3 below.

### **3.1 Training plan**

**3.1.1** The aim of the course in the form of a statement of what the student is expected to be able to do as a result of the training, the level of performance, and the training constraints to be observed.

**3.1.2** Pre-entry requirements, including:

minimum age;  
education or qualification requirements;  
medical requirements; and  
linguistic requirements.

**3.1.3** Credits for previous knowledge, experience or other qualifications, which should be obtained from the Licensing Authority before the training commences.

**3.1.4** Training curricula, including the:

theoretical training (knowledge);  
practical training (skills);  
training in the domain of human factors (attitudes);  
assessment and examinations; and  
monitoring of the training process, including the assessment and examination activities.

**3.1.5** Training policies in terms of:

restrictions regarding the duration of training periods for students and instructors; and  
if applicable, minimum rest periods.

**3.1.6** Policy for the conduct of student evaluation, including the:

procedures for authorisation for tests;  
procedures for remediation training before retest and knowledge test re write procedures;  
test reports and records;  
procedures for skill progress checks and skill tests;  
procedures for knowledge progress tests and knowledge tests, including procedures for knowledge test preparation, type of questions and assessments, and standards required for a pass; and

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procedures for question analysis and review and for issuing replacement exams (applicable to knowledge tests).

**3.1.7** Policy regarding training effectiveness, including:

liaison procedures between training departments;  
requirements for reporting and documentation;  
internal feedback system for detecting training deficiencies;  
completion standards at various stages of training to ensure standardisation;  
individual student responsibilities;  
procedures to correct unsatisfactory progress;  
procedures for changing instructors;  
maximum number of instructor changes per student; and  
procedures for suspending a student from training.

**3.2** Syllabi for non-competency-based training programmes

**3.2.1** Practical training syllabus

**3.2.1.1** A statement of how the course will be divided into phases, indicating how the phases will be arranged to ensure completion in the most suitable learning sequence and that exercises are repeated at the proper frequency.

**3.2.1.2** The syllabus hours for each phase and for groups of lessons within each phase and when progress tests are to be conducted.

**3.2.1.3** A statement of the standard of proficiency required before progressing from one phase of training to the next. It includes minimum experience requirements and satisfactory exercise completion before undertaking the next phase.

**3.2.1.4** Requirements for instructional methods, particularly with respect to adherence to syllabi and training specifications.

**3.2.1.5** Instruction for the conduct and documentation of all progress checks.

**3.2.1.6** Instruction, where applicable, given to all examining staff regarding the conduct of examinations and tests.

**3.2.2** Theoretical knowledge syllabus

The syllabus for theoretical knowledge instruction should be structured generally as in paragraph 3.2 above but with a training specification and objective for each subject.

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**3.3.1** Training programmes focused on achieving desired standards of performance for specific jobs or tasks should be competency-based.

**3.3.2** Competency-based training programmes are based upon a job and task analysis to define the knowledge, skills and attitudes required to perform a job or a task. Such programmes use an integrated approach in which the training of the underlying knowledge to perform a task is followed by practice of the task so that the trainee acquires the underlying knowledge, skills and attitudes related to the task in a more effective way.

**3.3.3** As a result, the syllabus is structured as a single document that is subdivided in modules containing a training objective and the same information as in 3.2.1, but applied to both the theoretical knowledge and practical training delivered by the module.

**4. Tests and checks conducted by the ATO for the issuance of a licence or a rating**

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**4.1** When a State has authorised an ATO to conduct the testing required for the issuance of a licence or rating in accordance with the Training and Procedures Manual, the manual should include:

the name(s) of the personnel with testing authority and the scope of the authority;

the role and duties of the authorised personnel;

if the school has been given authority to appoint personnel to conduct the testing required for the issuance of a licence or rating, the minimum requirements for appointment as well as the selection and appointment procedure; and

the applicable requirements established by the Licensing Authority, such as:

- (a) The procedures to be followed in the conduct of checks and tests; and
- (b) the methods for completion and retention of testing records as required by the Authority

## **5. Records**

**5.1** Policy and procedures regarding:

attendance records;

student training records;

staff training and qualification records;

person responsible for checking records and student personal logs;

nature and frequency of record checks;

standardisation of record entries;

personal log entries; and

security of records and documents.

## **6. Safety management system (if applicable)**

**6.1** The requirement to adopt SMS practices is intended to be restricted to only those training entities whose activities directly impact upon the safe operation of aircraft. Should that requirement apply to the ATO, the Training and Procedures Manual, as stated in paragraph 1.9 above, must address the ATO's SMS with reference to a separate manual or include the SMS practices within the Training and Procedures Manual.

## **7. Quality assurance**

**7.1** Provide a brief description of the quality assurance practices with reference to a separate quality manual or include the QA practices within the Training and Procedures Manual.

## **8. Appendices**

**8.1** As required:

sample progress test forms;

sample logs, test reports and records; and

a copy of the approved training organisation's approval document.

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