



**APPROVED TRAINING ORGANIZATION  
PROCEDURES FOR THE APPROVAL &  
RE-APPROVAL OF AVIATION TRAINING  
ORGANIZATIONS (ATO's)**

---

**AIR NAVIGATION ORDER**

**VERSION :** 2.0  
**DATE OF IMPLEMENTATION :** 01-10-2020  
**OFFICE OF PRIME INTEREST :** Personnel Licensing Directorate,

	NAME	DESIGNATION	SIGNATURE
<b>PREPARED BY</b>	PEL TEAM	VARIOUS	VARIOUS
<b>REVIEWED BY</b>	KHALID MEHMOOD	Additional Director Licensing Scrutiny & Processing	
	MUHAMMAD NAEEM IQBAL QURESHI	Director Personnel Licensing	
<b>VERIFIED BY</b>	NADIR SHAFI DAR	Dy. Director General (Regulatory)	
<b>APPROVED BY</b>	HASSAN NASIR JAMY	Director General Civil Aviation Authority	
<b>TYPE OF DOCUMENT</b>	AIR NAVIGATION ORDER (ANO)		
<b>STATUS OF DOCUMENT</b>	CONTROLLED		

## Table of Contents

A. AUTHORITY:	1
B. PURPOSE:	1
C. INTRODUCTION:	1
D. DESCRIPTION:	2
D1. DEFINITIONS:	2
D2. APPROVED TRAINING ORGANIZATION (ATO) – GENERAL	6
D2.1 CHARACTERISTICS OF AN ATO:	6
D2.2 ORGANIZATIONAL STRUCTURE:	6
D2.3 DESIGNATED MANAGEMENT:	6
D2.4 TRAINING SERVICES:	6
D3. ATO APPROVAL PROCESS:	6
D3.1 OBTAINING APPROVAL:	6
D3.2 LICENSING AUTHORITY REVIEW AND APPROVAL PROCESS:	6
D3.3 NATURE OF THE APPROVAL:	7
D3.4 RENEWAL OF THE APPROVAL:	7
D3.5 CHANGE IN THE SCOPE OF THE APPROVAL:	7
D3.6 CONTINUED SURVEILLANCE AFTER THE APPROVAL:	7
D4. TRAINING AND PROCEDURES MANUAL:	7
D4.1 INTRODUCTION:	7
D4.2 DOCUMENTATION MANAGEMENT:	8
D4.3 CONTENT:	8
D4.4 ORGANIZATION:	8
D4.5 STRUCTURE:	8
D4.6 VALIDATION:	8
D4.7 IMPLEMENTATION AND REVIEW:	9
D4.8 AMENDMENT:	9
D5. QUALITY ASSURANCE:	9
D6. MANAGEMENT & STAFFING:	10
D7. RECORDS:	12
D8. TRAINING RESOURCES:	13
D9. TRAINING PROGRAMME:	13
D9.7 MCC TRAINING:	14
D9.8 MODULAR THEORETICAL KNOWLEDGE DISTANCE LEARNING COURSE:	14
D10. ATO's ACCOMMODATION / FACILITY:	15
D11. OPERATIONAL PUBLICATIONS:	16
D12. REQUIREMENTS FOR ENTRY INTO TRAINING:	16

D13.	OPERATIONS MANUAL: .....	16
D14.	TRAINING MANUAL: .....	17
D15.	SAFETY MANAGEMENT SYSTEM MANUAL: .....	17
D16.	QUALITY SYSTEM: .....	17
D17.	FINANCIAL RESOURCES: .....	19
D18.	APPROVAL OF A TRAINING ORGANISATION AND CONTINUED VALIDITY: 20	
D19.	APPLICATION PROCESS – GENERAL INFORMATION:.....	20
D19.3	APPLICATION PROCESS – PRE APPLICATION PHASE: .....	20
D19.3.1	PRE-APPLICATION STATEMENT OF INTENT .....	21
D19.3.2	PRE-APPLICATION PROCESS.....	21
D19.4	APPLICATION PROCESS – FORMAL APPLICATION PHASE: .....	21
D19.5	APPLICATION PROCESS – DOCUMENT EVALUATION PHASE: .....	22
D19.6	APPLICATION PROCESS – INSPECTION PHASE: .....	22
D19.7	APPLICATION PROCESS – CERTIFICATION PHASE: .....	22
D20.	RE-APPROVAL PROCESS .....	22
D21.	ADVERTISING: .....	23
D22.	REVOCATION, SUSPENSION OR VARIATION OF APPROVAL .....	23
D23.	INSPECTION: .....	23
D24.	ADDITIONAL REQUIREMENTS FOR ATO'S OUTSIDE PAKISTAN:.....	24
D25.	SATELLITE ATO: .....	24
D26.	ATO'S APPROVAL FOR TESTING:.....	25
E.	EVIDENCES (ACRONYMS / RECORDS / REFERENCES):.....	25
E1.	ACRONYMS:.....	25
E2.	RECORDS:.....	26
E3.	REFERENCES:.....	26

**A. AUTHORITY:**

A1. This Air Navigation Order (ANO) is issued by the Director General, Civil Aviation Authority in pursuance of the powers vested in him under Rules 4(3), 35 to 44, 52 to 58, 340, 342, 347,348,354,355,357,359, 360 and all other enabling provisions of the Civil Aviation Rules, 1994 (CARs, 94).

**B. PURPOSE:**

B1. This CAA Air Navigation Order (ANO) provides guidance for the approval, continued surveillance and re-approval of Aviation Training Organizations (ATO's) offering integrated and modular courses of training for pilots licenses and those applicable licenses and ratings specified in ICAO Annex-1, whose principle place of business and registered offices are located within the Pakistan. Where organizations are not located within the Pakistan, additional requirements are outlined in this document. This document should be read in conjunction with CAR's 94, specific category of Licensing ANOs.

**C. INTRODUCTION:**

C1. This Air Navigation Order (ANO) contains supplemental guidance material and information for the benefit of organizations seeking approval from the Pakistan Civil Aviation Authority (PCAA). It is intended to serve two purposes: to help organizations ensure that an application made for approval will satisfy the PCAA requirements and that the applicable minimum standards have been met and thereafter will continue to be met; and also to specify the acceptable means of compliance for all aspects of the operation of an ATO approved by the PCAA.

C2. No operator or individual is permitted to conduct any type of training related to aviation without authority granted by the PCAA. The Director General of the PCAA must authorize the initial issue of a Training Certificate in respect of an operator, organization or individual who proposes to conduct any type of aviation related training. The training organization must be considered a Pakistan corporate body; that is; A Pakistan registered national company, which has commercial aviation activities stated in the "article of association".

C3. The proposed training activities to be conducted must be clearly defined, such as:

C3.1 Type of Flight Training

C3.2 Type of Theoretical Knowledge Training (e.g. ELP, FOO, ATC, cabin crew etc)

C4. All flight, operational, managerial and airworthiness appointments, manuals, documents and facilities must be approved by the PCAA as outlined later in this ANO. All inspections and processing will be conducted after payment of the appropriate fees.

C5. Required approvals of other Department must be obtained prior to the PCAA being able to commence processing an application. Ownership of the training aircraft must be legally established for inclusion on the certificate of registration. Unless specifically authorized by the PCAA, holders of a PCAA Training Approval Certificate shall not permit the use of their facilities and resources to any other operator or training organization.

C6. Maintenance organizations in Pakistan, that are to be contracted with for the maintenance of the flight training organization's aircraft, must be approved by the PCAA. Any organization supporting a Pakistan registered aircraft or authorized operators shall be required to become a PCAA Approved Maintenance Organization.

**D. DESCRIPTION:**

**D1. DEFINITIONS:**

The following terms shall have the meanings assigned to them here under. Any other term not defined here shall have the same meanings as given in Civil Aviation Ordinance, 1982 and Civil Aviation Rules, 1994 (CARs, 94).

**D1.1 ACCOUNTABLE EXECUTIVE:**

The individual who has corporate authority for ensuring that all training commitments can be financed and carried out to the standard required by the civil aviation authority (CAA), and any additional requirements defined by the approved training organization (ATO).

**Note:** *The accountable executive is normally the head of training and may delegate to another person within the organisation, the day to day management functions but not the overall approval management responsibility.*

**D1.2 ALTERNATE MEANS OF COMPLIANCE:**

A pre-approved manner of achieving regulatory compliance that has been determined to be an acceptable substitute to the regulatory requirements.

**OR**

An approved alternative to prescribed approaches, which has been demonstrated to consistently achieve or exceed the desired outcomes as intended through regulation

**D1.3 APPROVED TRAINING:**

Training conducted under special curricula and supervision approved by Civil Aviation Authority that, in the case of aviation personnel, is conducted in an approved training organisation.

**D1.4 APPROVED TRAINING ORGANISATION (ATO):**

An organisation approved by PCAA in accordance with the requirements of this ANO to conduct approved training courses and operate under the supervision of the PCAA.

**D1.5 AUTHORITY:**

Wherever used in this ANO means Licensing Authority of PCAA. (Authority denotes to Civil Aviation Authority or CAA Board as Civil Aviation Ordinance 1982.

**D1.6 COMPETENCY-BASED TRAINING & ASSESSMENT:**

Training and assessment that are characterized by a performance orientation, emphasis on standards of performance and their measurement, and the development of training to the specified performance standards.

**Note:** This training process is derived from a job and task analysis and is focused on the achievement of well-defined benchmarked standards of performance as opposed to training programs simply focused upon the acquisition of prescribed levels of experience.

**D1.7 COMPETENCY ELEMENT:**

An action that constitutes a task that has a triggering event and a terminating event that clearly defines its limits, and an observable outcome.

D1.8 **COMPETENCY UNIT:**

A discrete function consisting of a number of competency elements.

D1.9 **COMPLIANCE:**

The state of meeting those requirements mandated through regulation

D1.10 **CONFORMITY:**

The state of meeting established criteria, standards, specifications and desired outcomes.

D1.11 **EVALUATOR:**

A generic term used in the context of an ATO to describe a person who is qualified, authorized and assigned to carry out specific assessment, checking, testing and/or auditing duties to determine that all required standards of performance have been satisfactorily achieved.

**Note 1.—** These standards of performance may be obligated as an end-state objective or be required to be met on a continuous basis. In either case, the evaluator is responsible for making a determination of the actual standards attained and any recommendations for immediate remediation.

**Note 2.—** Evaluator functions may be assigned to suitable ATO instructors for the continuous evaluation of students in a competency-based training program and for progress checks at the end of a phase of training. Evaluator functions, associated with the role of an examiner for the Licensing Authority, may also be assigned to ATO instructors for the final examination at the completion of the training program, either through a CAA designation or under an ATO process approved by the CAA.

D1.12 **FINDING:**

A finding is a conclusion that demonstrates non-conformity with a specific standard.

D1.13 **HAZARD:**

A condition or an object with the potential to cause injuries to personnel, damage to equipment or structures, loss of material, or reduction of ability to perform a prescribed function.

D1.14 **HEAD OF TRAINING:**

The individual responsible for the organization's activities, policies, practices and procedures while ensuring the continued maintenance of the training organization's approval status.

**Note.—** The head of training is normally the accountable executive; however, in complex corporate structures it may be possible that the accountable executive is located at company headquarters and oversees the operation of several different ATOs.

D1.15 **KNOWLEDGE, SKILL & ATTITUDE:**

The three performance domains that are under constant evaluation and form the basis for the performance criteria statements.

D1.16 **PERFORMANCE CRITERIA:**

Simple, evaluative statements on the required outcome of the competency element and a description of the criteria used to judge whether the required level of performance has been achieved.

D1.17 **POLICY:**

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

D1.18 **PROCESS:**

A set of interrelated or interactive activities which transform inputs into outputs.

D1.19 **QUALITY:**

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

D1.20 **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.

D1.21 **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.

D1.22 **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.

D1.23 **QUALITY MANAGER:**

The manager responsible for the quality monitoring function and for requesting remedial action.

D1.24 **QUALITY MANAGEMENT:**

A management approach focused on the means to achieve product or service quality objectives through the use of its four key components: quality planning; quality control; quality assurance; and quality improvement.

D1.25 **QUALITY MANUAL:**

The document containing the relevant information pertaining to the approved training organisation's quality system and quality assurance program.

D1.26 **QUALITY OF TRAINING:**

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

D1.27 **QUALITY SYSTEM:**

The aggregate of all the organization's activities, plans, policies, processes, procedures, resources, incentives and infrastructure working in unison towards a total quality management approach. It requires an organizational construct complete with documented policies, processes, procedures and resources that underpins a commitment by all employees to achieve excellence in product and service delivery through the implementation of best practices in quality management.



**D1.28 SAFETY MANAGEMENT SYSTEM (SMS):**

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

**Note 1.—** A safety management system, consisting of documented policies, processes and procedures designed to manage risks, integrates operations and technical systems with the management of financial and human resources to ensure aviation safety and the safety of the public.

**Note 2.—** The requirement to adopt SMS practices is restricted to only those entities whose activities directly impact upon the safe operation of aircraft.

**D1.29 SATELLITE AVIATION TRAINING ORGANISATION:**

An aviation training organisation at a location other than the aviation training organisation's principal place of business.

**D1.30 TESTING:**

The comparison of the knowledge about a task, or the skill or the ability to perform a task against an established set of criteria to determine that the knowledge, skill or ability observed meets or exceeds, or does not meet, those criteria.

**Note.—** The use of the words testing or checking depends on the CAA's preference because they are very similar in meaning, and their use may be dependent on the outcome of the event, e.g. a step towards a license issuance, a recurrent evaluation of competency.

**D1.31 TRAINING MANUAL:**

A manual containing the training goals, objectives, standard syllabi, and curriculum for each phase of the approved training course.

**D1.32 TRAINING SPECIFICATIONS:**

A document issued to an ATO approval holder by the Authority that specifies training program requirements and authorises the conduct of training, checking, and testing with any limitations thereof.

## **D2. APPROVED TRAINING ORGANIZATION (ATO) – GENERAL**

### **D2.1 CHARACTERISTICS OF AN ATO:**

D2.1.1 An ATO is an organization that is approved by the Licensing Authority to deliver specific approved training programs to aviation personnel for licensing purposes. As a pre-requisite to the approval process prospective organization will have demonstrated that it is staffed, equipped, financially resourced, and operated in a manner conducive to achieving the required standards.

D2.1.2 ATOs are distinguished from non-approved training organizations by the approval process and the ongoing oversight provided by the Licensing Authority.

### **D2.2 ORGANIZATIONAL STRUCTURE:**

**D2.2.1** The organizational structure of an ATO will vary depending upon the scope and complexity of its business model. The design and make-up of its structure should ensure that the delivery of training meets the client's needs and expectations while maintaining compliance with the applicable regulatory requirements. Therefore, ATOs need to have a management structure that is designed around best quality management practices. D 4, 4.1, defines the objective of those practices.

D2.2.2 In all cases, ATOs require an accountable executive who is the final corporate authority on decisions that may impact upon the continued suitability of the organization to deliver training to aviation personnel for licensing purposes. Since the accountable executive may not have a day-to-day awareness of the training activity, that person must rely heavily upon the performance and advice of key personnel within the organization. As a result, the qualifications and competencies of ATO personnel must be maintained to a very high standard. D 7, 7.1, for additional information on ATO staffing requirements.

### **D2.3 DESIGNATED MANAGEMENT:**

D2.3.1 The composition of the management team will be dependent upon the organizational needs and the applicable ANOs. The ATOs may be approved to provide training to aviation personnel from multiple occupations within the industry.

D2.3.2 In all cases, the Licensing Authority should expect the head of training to receive, from the ATO management team, candid and complete information on operational and quality issues. To that end, ATOs should establish separate and distinct managerial positions, each of which reports directly to the head of training, which have overall authority.

### **D2.4 TRAINING SERVICES:**

D2.4.1 *This ANO obligates ATO to have all their services authorized under the terms of their organization's approval. The content of each approved training program including the courseware and equipment used needs to be documented. Paragraph 2 of Appendix 2 to Annex 1 details this requirement while describing the content of the training and procedures manual.*

## **D3. ATO APPROVAL PROCESS:**

### **D3.1 OBTAINING APPROVAL:**

D3.1.1 The Licensing Authority published procedures (ANO-007-RGLC-3.0) for obtaining approval, describing the application process and how the Licensing office will verify that an applicant meets the approval requirements.

D3.1.2 With the application for the approval, a draft copy of the proposed ATO's training and procedures manual must be submitted to the licensing office. The requirements for the contents of this manual are stipulated in (Appendix 2 Annex 1), and detailed guidance on this subject is provided in [Appendix A](#).

### **D3.2 LICENSING AUTHORITY REVIEW AND APPROVAL PROCESS:**

D3.2.1 The Licensing Authority review the application for approval. Once it is assessed as satisfactory, the Licensing office normally conducts a site inspection prior to final approval. Upon successful completion of the

process, the Licensing Authority issues the approval. This consists of an approval certificate and additional documentation specifying the terms of the approval.

D3.2.2 PCAA may decide to delegate the approval process to a regional safety oversight organization (RSOO).

### D3.3 **NATURE OF THE APPROVAL:**

D3.3.1 The granting of approval by the Licensing Authority authorizes the ATO to conduct the training courses specified in the terms of the approval document.

D3.3.2 Under the Convention of International Civil Aviation, PCAA have an obligation to ensure the validity of the documents that they issue and the competency of the document holders. Consequently, Licensing Authority may impose restrictions on where holders of their PCAA-issued licences can train and what programs are considered acceptable for the purposes of gaining or maintaining the privileges attached to a license.

D3.3.3 To ensure the integrity of their aviation documents, Licensing Authority may require foreign-based training organizations to meet PCAA licensing standards prior to crediting any training provided to their licence holders. The approval of foreign-based ATOs is discussed further in paras below.

### D3.4 **RENEWAL OF THE APPROVAL:**

D3.4.1 PCAA normally issued a training organization approval that contains an explicit period of validity while in some cases issued an open-ended approval that remains valid as long as the conditions under which the approval has been granted are fulfilled.

### D3.5 **CHANGE IN THE SCOPE OF THE APPROVAL:**

D3.5.1 Aviation training is a dynamic activity, and it is likely that ATOs will ask regularly for a change in the scope of their approval; for instance, they may want to provide new training or change a training program to take advantage of new training equipment or facilities. In such a case, the applicant should provide supporting information to the Licensing Authority that will assess it using the applicable Standards of Appendix 2 to Annex 1, its ANO requirements and the relevant parts of this guidance material. An amendment to the approval document should be issued after a satisfactory assessment.

D3.5.2 Changes or modifications in equipment, software, facilities, or key managerial personnel should be reported to the Licensing Authority to ensure that any required approvals are obtained without delay.

### D3.6 **CONTINUED SURVEILLANCE AFTER THE APPROVAL:**

D3.6.1 After receiving an approval, the ATO will be subjected to continued surveillance by the Licensing Authority to ensure that the ATO is operating within the terms of its approval.

D3.6.2 Guidance on the continued surveillance to be conducted by the Licensing Authority is provided in D10.

## D4. **TRAINING AND PROCEDURES MANUAL:**

### D4.1 **INTRODUCTION:**

D4.1.1 The training and procedures manual describes the training programs being offered and the way in which the training organization conducts its activities. As such, it is an essential document for the organization because it provides the management and line personnel with clear guidance on the policy of the organization as well as the procedures and processes which are used to provide training. It is also an essential document for the Licensing Authority. During the approval process, it allows the Authority to assess whether the way in which an organization is planning to operate is in line with existing requirements and accepted practices. Once the training organization is functioning, a large part of the surveillance activities of the Licensing Authority is to ensure that the organization is following the training and procedures manual.

D4.1.2 It is important that the contents of all operational documents, including the training and procedures manual, be consistent with each other and consistent with regulations, manufacturer's requirements and

Human Factors principles. It is also necessary to ensure that the manual is used consistently across all departments within the organization. An integrated approach, recognizing operational documents as a complete system, is the key to success.

#### D4.2 **DOCUMENTATION MANAGEMENT:**

D4.2.1 Appendix 2 to Annex 1 provides the training and procedures manual may be issued in separate parts should the ATO find it too cumbersome to have all the required content appear in one single document. It also mandates that these documents be maintained to ensure their continued relevancy and compliance with applicable regulations.

D4.2.2 Appendix B to this manual details the elements of an effective quality system, a system that requires robust policies, processes and procedures for documentation management and record-keeping. Since shortcomings in documentation management eventually lead to poor standardization and a diminished quality of training.

#### D4.3 **CONTENT:**

D4.3.1 The content of the training and procedures manual is spelled out in general terms in Appendix 2 to Annex 1. Appendix A to this manual provides a more detailed breakdown of the content of the manual and includes additional requirements for ATOs that are engaged in flight training utilizing aircraft. Depending on the size, complexity and scope of the training provided by the organization, some of the elements contained in the list can be reduced, combined or expanded further.

#### D4.4 **ORGANIZATION:**

D4.4.1 The training and procedures manual should be organized according to criteria relating to the information, its importance and use. The information should be structured and sequenced so that operational personnel can access it easily. These principles will help determine whether to issue the manual as a single document or in separate parts. When the training and procedures manual is organized in separate parts, it should include a master index to help readers locate information included in more than one part. The master index should be placed in the front of each document.

D4.4.2 The manual should be consistent with the training organization's philosophies, policies, processes and procedures.

#### D4.5 **STRUCTURE:**

D4.5.1 The structure of the manual should be easy to understand, appropriate for the information documented and clearly identified through headings and other formatting devices. An explanation of the document structure should be provided at the beginning of the document, explaining organizational elements such as the headings, numbering scheme, main parts of the document and other sources of coding or groupings.

D4.5.2 Precise language should be used wherever possible. Terms for common items and actions should be consistent throughout the manual and must be clear and easily understood.

D4.5.3 Writing style, terminology, formatting and use of graphics and symbols should be consistent throughout the document, including the location of specific types of information and use of units of measurement and codes.

D4.5.4 The manual should contain a glossary of definitions and significant terms including a list of acronyms and/or abbreviations. The glossary should be updated on a regular basis to ensure access to the most recent terminology.

D4.5.5 For ease of amendment and distribution, an appropriate revision process should be defined and set up when designing the manual.

D4.5.6 The training and procedures manual should comply with the requirements of the training organization's quality assurance practices.

#### D4.6 **VALIDATION:**

D4.6.1 The training and procedures manual should be reviewed and tested under realistic conditions before its operational release. The validation process should include using the critical aspects of the information contained in the manual to verify its effectiveness. Routine interaction among groups within the organization should be included in the validation process.

D4.6.2 A final review of the manual should ensure that all required topics have been addressed with an appropriate level of detail for users. The final review should also confirm compliance with safety regulations, manufacturers' recommendations and the organization's philosophy, policies, procedures and processes.

#### D4.7 **IMPLEMENTATION AND REVIEW:**

D4.7.1 The training organization should monitor the use of the training and procedures manual after its release. This will ensure appropriate and realistic use of the manual, based on the operational environment, in a way that is operationally relevant and beneficial to the personnel for whom it is intended.

D4.7.2 Monitoring should include a formal feedback system to obtain input from principal users of the manual and other persons who would be affected by a new or revised policy, procedure or process.

#### D4.8 **AMENDMENT:**

D4.8.1 The training organization should develop an effective information gathering and review system to process information obtained from all sources relevant to the organization, such as the Licensing Authority, safety regulators, training customers, manufacturers and equipment vendors, as well as a distribution and revision control system.

D4.8.2 The training organization should also develop an information review, distribution and revision control system to process information resulting from changes that originate within the organization. This includes changes to:

- a) The organization's policies, processes, procedures and practices;
- b) Respond to operating experience;
- c) The scope of training provided;
- d) The content of training programs;
- e) Results stemming from the installation of new equipment;
- f) An approval document or certificate; and
- g) Maintain standardization.

D4.8.3 The training and procedures manual should be reviewed in association with other operational documents that form the organization's document control system:

- a) On a regular basis ;
- b) After major events such as mergers, acquisitions, rapid growth or downsizing;
- c) After technology changes, e.g. the introduction of new equipment; and
- d) After changes to safety regulations.

D4.8.4 Permanent changes to the training and procedures manual should be communicated through a formal amendment process. The manual should be amended or revised as necessary to ensure that the information contained is kept up to date.

D4.8.5 Distribution of amendments and revisions should have a tracking system. The tracking system should include some form of log combined with a procedure to ensure that all amendments are furnished promptly to all organizations or persons to whom the manual has been issued.

### D5. **QUALITY ASSURANCE:**

#### D5.1 **OBJECTIVE:**

D5.1.1 The objective of Quality Assurance is to ensure the achievement of results that conform to the standards set out in the ATO's manuals and in those requirements and documents issued by the Licensing Authority. The effective application of QA principles will aid the ATO in meeting all regulatory requirements.

D5.1.2 The PCAA requires that an ATO seeking approval shall establish procedures acceptable to the PCAA to ensure compliance with all relevant regulatory requirements and that these procedures shall include a

quality system within the ATO to readily detect any deficiencies for self-remedial action. Details of this system are outlined below:

D5.1.3 The ATO shall submit for approval a Quality Manual describing the quality system and the processes to be adopted to the Directorate of Personnel Licensing. The ATO is required to submit to the Directorate of Personnel Licensing a copy of all audit reports and remedial action taken during the past 12 months before or during the annual audit if so required by the of the Directorate of Personnel Licensing.

D5.1.4 The rationale for the requirements of quality systems is the need to establish a distinct assignment of roles between Authority and training organizations by creating an evident division between the regulatory and surveillance responsibility on the one hand, and responsibility of the training activities in itself on the other. Therefore, the training organizations must establish a system whereby they can monitor their activities, be able to detect deviations from set rules and standards, take the necessary corrective actions and thus ensure compliance with Authority regulations and their own requirements.

D5.1.5 A well established and functioning quality system will make it possible for the supervising Authority to perform inspections and surveillance efficiently and with a reasonable amount of resources.

D5.1.6 The instructions and information contained in the following paragraphs provide guidance on the QA that each ATO shall establish in accordance with Appendix 2 to Annex 1:

D5.1.7 The following QA elements should be clearly identifiable in the training and procedures manual:

- a) The organization's training policy (for clients as well as for its own personnel);
- b) Training standards;
- c) Allocation of responsibility;
- d) Resources, organization and operational processes;
- e) Procedures to ensure conformity of training with the policy;
- f) Procedures for identifying deviations from policy and standards and taking corrective action; and
- g) The evaluation and analysis of experiences and trends concerning policy and training standards, in order to provide feedback into the system for the continual improvement of the quality of training

## **D6. MANAGEMENT & STAFFING:**

D6.1 The PCAA require that an adequate number of qualified, competent staff is to be employed and that the management structure ensures supervision of all grades of staff by persons having the necessary experience and qualities.

D6.2 The PCAA will place particular emphasis on the qualifications and competence of all training staff in their specialization and in training techniques.

D6.3 All training staff must be acceptable to and approved by the PCAA. The posts of Accountable Manager (AM), Head of Training (HT), Chief Flying Instructor (CFI), Chief Synthetic Flight Instructor (CSFI), Quality Manager (QAM), Chief Ground Instructor (CGI) Facility Training Officer (FTO), Chief Operating Officer(COO) and Chief Instructors at an ATO offering modular and or integrated courses of training shall all be filled by persons who are qualified in accordance with CAR's 94 and this ANO, and who are subsequently approved by the PCAA.

D6.4 At ATO's offering integrated courses of training, one person shall not hold two or more of the named posts simultaneously unless specifically approved to do so by the PCAA for a limited period not to exceed the limit specified by PCAA.

D6.5 ATO's offering modular courses of training only, may combine posts; however, approval must be obtained from the PCAA. This approval will be based on the number of instructors employed, trainee numbers (actual & forecast) and the scope (number of different course approvals) of the organization. In general, at ATO's employing less than five instructors, the positions of HT & CFI or CFI & CGI may be combined.

D6.6 Where posts are combined, the post holder shall meet the qualification requirement for each of the posts held. At least one of the nominated post holders shall be employed full time. For the purposes of modular courses, this shall be taken to mean that the full time staff member shall be available for the duration of the approved course without interruption from any other employment.

D6.7 Sufficient instructors must be employed at all times in order to ensure the proper continuity of training for all students attending the courses. Instructional staff shall not act in any capacity at more than one



training organization approved by the PCAA except with the express permission of the Head of Licensing for the PCAA.

D6.8 Sufficient Theoretical Knowledge Instructors must be employed to ensure the proper continuity of theoretical knowledge instruction for all students attending the courses. The maximum class numbers in subject involving a high degree of supervision or practical work shall not exceed 20 students theoretical knowledge instructors shall not exceed 25 teaching hours in any one-week. These figures shall be taken to include all classroom contact time, whether on PCAA approved courses or other courses in which the theoretical knowledge instructor takes part.

D6.9 Theoretical knowledge instructions may be carried out by FI's or by other instructors having appropriate experience in aviation and knowledge of the subject. Personnel nominated as theoretical knowledge instructor must be acceptable to the PCAA. Competence of instructional personnel shall be in accordance with procedures and to a level acceptable to the Authority.

D6.10 Theoretical knowledge instructors shall have appropriate experience in aviation and shall, before appointment, give proof of their competence by giving a test lecture based on material they have developed for the subjects that they are to teach.

D6.11 The ATO shall ensure that all instructional personnel receive initial and re-current training appropriate to their assigned tasks and responsibilities.

D6.12 The Head of Training / Chief Instructor is responsible to evaluate each instructor and submit a recommendation to PCAA for renewal of Approval Certificate.

**Note:** *Guidance material to design training programs to develop knowledge and skills in human performance can be found in ICAO doc 9683, human factors training manual.*

**D7. RECORDS:**

D7.1 Administrative staff shall be provided to deal with the routine administration of courses. The Head of Training or other nominated person acceptable to the PCAA shall be responsible for flight, theoretical knowledge and synthetic flight instruction records of students. Records shall be maintained for synthetic flight and theoretical knowledge instruction. The form and content of student training records is to be specified in the Training Manual and be acceptable to the PCAA appropriate to the courses conducted. The records are to include:

D7.2 The personal details of each student, including name, address, telephone contact number(s), PCAA reference number, next of kin details, previous experience and evidence of all pre-entry requirements and qualifications including a summary of any credit to which the student may be entitled and an assessment of his suitability to undertake the course;

D7.3 A cumulative record of theoretical knowledge lessons attended by subject;

D7.4 Regular reports by subject with the instructor's name and written comments by the instructor on the student's performance and progress and other factors such as attitude and manner during individual lessons and during the course as a whole. Students should be invited to sign each report acknowledging its contents;

D7.5 Cumulative flying training achieved; and if applicable synthetic flight training achieved;

D7.6 For each training flight or synthetic flight training detail, the date, the aircraft registration or synthetic training device identification, the flight time, the instructor's name in full, the syllabus exercise number and written comments by the instructor on the students performance, progress and other factors such as attitude and manner during the detail and during the course as a whole. The record must indicate the standard achieved and any deviations from the syllabus including incomplete items. Students should be invited to sign each report acknowledging the debrief;

D7.7 Relating to the students progress and separate from the above, a summary of flying exercises completed with the date on which each exercise was carried out in the air or in a synthetic training device;

D7.8 Relating to the student's progress, summary reports and the result of progress / phase tests, skill tests and theoretical knowledge examinations including arrangements for remedial training after failed tests / examinations;

D7.9 Training in aircraft emergency procedures, to be recorded separately and displayed prominently.

D7.10 All records shall indicate the date training commenced and the date of completion. Where students do not complete the course the record shall indicate the circumstances under which training ceased. The students overall performance and attitude to training on the course shall be summarized on completion or termination of the course.

D7.11 All training records, regardless of type, are to be retained for a minimum of 2 years from the date of course completion.

**D7.12 COMPUTER BASED RECORDS:**

D7.12.1 If computer based records are used they must be backed up daily. The arrangements for safeguarding such records against loss, corruption and unauthorized changes are to be noted in the Training Records section of the Training Manual. Paper copies of records may be requested.

D7.12.2 These records shall be kept for a minimum period of two years after completion of the training.

**D7.13 ATO STAFF RECORDS:**

D7.13.1 The ATO shall maintain a system for recording the qualifications and training of instructional and examining staff, where appropriate.

D7.13.2 These records shall be kept for a minimum period of two years after the instructor or examiner ceases to perform a function for the ATO.

**D7.14 TRANSFER OF STUDENT RECORDS:**



D7.14.1 Training courses should be completed as a continuous course of training at a single ATO. However, where there are sound reasons for a student to transfer from one approved training provider to another during a course, credit will be given for training completed. It should be noted that where courses are interrupted in this manner, the student might not necessarily completed the approved course with in the minimum hours.

D7.14.2 The Head of Training of the new ATO must therefore make an arrangement of the further training required to ensure that the full approved course is completed to a satisfactory standard. To allow the Head of Training of the new ATO to review the training completed and therefore assess the further training required, copies (not original) of a student's training records are to be made available to the new ATO. Copies must be certified as correct by the originating ATO and should be forwarded directly to the Head of Training of the new ATO with notification of the transfer sent to the PCAA Personnel Licensing Office.

#### D7.15 **LOGBOOKS:**

D7.15.1 Student's pilot and controller logbooks must be kept in accordance with the provisions of CAR's 94. All approved course flying and synthetic flight training is to be clearly identified as such and include details of the exercises carried out.

D7.15.2 Student's logbooks are to be certified as being correct at the end of each course by the Head of Training or CFI.

D7.15.3 The logbooks of instructors who conduct flight instruction on an approved course must be maintained in accordance with the provisions of the CAR's 94 as , and include a monthly summary of all flight time which clearly distinguishes approved course instructional flying from other flying.

#### D8. **TRAINING RESOURCES:**

D8.1 All training aircraft will meet the requirements set forth in the PCAA regulations as well as any additional requirements outlined by the PCAA. An adequate fleet of training aircraft appropriate to the courses shall be provided. Only aircraft approved by the PCAA for training purposes shall be used and the number of aircraft shall also be acceptable to the authority.

D8.2 All synthetic training devices (STD, FSTD, ATC simulators) when being substituted , are to be device qualified and user approved by the PCAA for the exercises to be conducted.

#### D9. **TRAINING PROGRAMME:**

D9.1 A training program shall be developed for each type of course offered. This program shall include a breakdown of flying and theoretical knowledge instruction in either a week-by-week or phase presentation, a list of standard exercises and a syllabus summary. In particular, synthetic training and theoretical knowledge instruction shall be phased in such a manner as to ensure that students shall be able to apply to flying exercises the knowledge gained on the ground. Arrangements should be made so that problems encountered in instruction can be resolved during subsequent training. The content and sequence of the training program shall be acceptable to the Authority.

D9.2 PCAA Personnel Licensing Office may approve any technical ground based training program, that allows an alternative means of compliance with the experience requirements established, provided that the approved training organization demonstrates to the satisfaction of the Licensing Authority that the training provides a level of competency at least equivalent to that provided by the minimum experience requirements for personnel not receiving such approved training.

D9.3 Each lesson plan shall identify the goal of the particular lesson with defined and documented required knowledge, skill and attitude. In case an organization intends to conduct the on job training, PCAA approval shall be required before any such OJT is conducted.

D9.4 All theoretical knowledge instruction is to include sufficient experience to meet the relevant course requirements as specified in this ANO and other relevant ANO's of personnel licensing.

D9.5 A reference library containing publications giving coverage of the syllabus shall be immediately available to staff and students when in attendance at the ATO and, where applicable, kept current by amendments. Distance learning (study by correspondence) will not be approved as part of an integrated course of training. Computer Based Training (CBT) may form part of the theoretical knowledge instruction but

must not exceed 25% of the total theoretical knowledge course length. The integration of theoretical knowledge instruction with the flying and synthetic training must be acceptable to the PCAA and must be clearly identified in the course manual.

D9.6 ATO's are responsible for the preparation and conduct of the examinations required by the courses of training for which approval is sought, excluding the final certification examination (unless otherwise authorized). The specific training manual is to include the arrangements for conducting the examinations and maintaining the confidentiality of examination papers; the procedure for examination paper preparation including types of question to be asked and awarding a pass; the procedure for question analysis and review and the raising of replacement papers and re-sit procedures. Copies of examination papers are to be submitted to the PCAA in electronic format for review and approval—when required by the Directorate of Personnel Licensing. Use of electronic examinations is permitted, however the system must be approved for use by the PCAA. On satisfactory completion of a course of theoretical knowledge instruction within a PCAA approved course, a student is to be given a certificate of satisfactory course completion signed by the HT, CGI, or nominated deputy. The form of the certificate is to be included in the training manual.

#### D9.7 **MCC TRAINING:**

D9.7.1 ATO's seeking approval for an Integrated ATPL course of training must include a Multi Crew Cooperation component within the course. Details of the theoretical knowledge syllabus shall be included in the training manual. Students will receive theoretical knowledge instruction in and pass an examination in Human Factors and Performance within an ATPL integrated course. The main emphasis of the theoretical knowledge instruction component of the MCC training should be concentrated on the practicalities of working as part of a team to provide a sound footing on which subsequent CRM training may be built. Practical training may take place in either a flight simulator or an aircraft.

D9.7.2 Reference material for the student shall be produced. This material should cover the minimal technical and performance knowledge requirements and standard operating procedures needed to successfully operate the flight simulator and accomplish the required exercises. Practical training sessions are to be of suitable length to meet the objectives of the course but no more than a 4 hour session in the flight simulator training, comprising 2 hours pilot flying (PF) and 2 hours pilot not flying (PNF), should be completed during a single working day. Appropriate provision for pre session briefing and post session de-briefing is to be included in the training program. On completion of the MCC course component of an ATPL integrated course, the student shall be given a Certificate of Course Completion, signed by the HT. An example of the certificate, including a sample of the HT signature, is to be provided to PCAA Licensing Office for verification purposes as part of the documentation submitted for approval.

#### D9.8 **MODULAR THEORETICAL KNOWLEDGE DISTANCE LEARNING COURSE:**

D9.8.1 Distance learning may be offered as part of a modular course of theoretical knowledge instruction at the discretion of the PCAA. Classroom accommodation shall be available at the principal place of registration of the training organization. Both classrooms and all associated teaching facilities shall conform to the requirements for organization approval. Before training commences, approval will be obtained from the Authority to conduct a modular course program using distance learning.

D9.8.2 ATO's delivering only theoretical knowledge training will be subject to the same approval and audit requirements as are applied to ATO's offering flying and theory courses in accordance with applicable portions of PCAA CAR's and the provisions of this ANO.

D9.8.3 It is open to the approved ATO to provide some or all of these courses either on a full time attendance basis, or by distance learning. An element of classroom instruction shall be included in all subjects of modular distance learning courses. The amount of time spent in actual classroom instruction shall be not less than 10% of the total duration of the course.

D9.8.4 All instructors shall be fully conversant in the requirements of the distance learning program, including the quality assurance system. Their initial training shall take place at the principal place of registration; all subsequent training shall be to the same standard as for resident instructors. Wherever instructors are located, the Quality System shall provide a satisfactory means of monitoring individual performance and adhere to approved training programs.

D9.8.5 Distance Learning will only be approved as a component of a course of theoretical knowledge instruction.

D9.8.6 The following section outlines the guidelines that shall be used by ATO's looking to run/start developing a distance learning course:

D9.8.7 An assumption that a student will study for at least 15 hours per week;

D9.8.8 An indication throughout the course material of what constitutes a week's study;

D9.8.9 A recommended course structure and order of teaching acceptable to the Authority;

D9.8.10 One progress test for each subject for every 15 hours of study, which shall be submitted to the ATO for assessment. Additional self-assessed progress tests should be completed at intervals of 5 to 10 study hours;

D9.8.11 Appropriate contact times throughout the course when a student can have access to an instructor by telephone, fax, e-mail or Internet;

D9.8.12 Measurement criteria to determine whether a student has satisfactorily completed the appropriate elements of the course to a standard that, in the judgment of the Head of Training, or CGI, will enable them to be entered for the PCAA theoretical examinations with a good prospect of success; and

D9.8.13 If the FTO provides the distance learning via the Internet, instructors should monitor student's progress by appropriate means acceptable to the authority.

#### **D10. ATO's ACCOMMODATION / FACILITY:**

D10.1 The facilities and working environment of the ATO shall be appropriate for the task to be performed and acceptable to the Authority.

D10.2 The operational accommodation for course approval shall be of a scale appropriate to the population of instructors and of pilots / students under training. All accommodation must be sited within permanent structures, not shared with the public. All rooms are to be suitably equipped and furnished with provision for light and ventilation and are not to be combined with any accommodation used continuously for administering the ATO, or for non-approved courses of training. Offices separate from the accommodation provided for instructional staff and students shall be provided for the Head of Training, CFI and CGI. Enclosed briefing rooms/cubicles and lecture rooms of adequate size relative to the maximum student capacity, each including a black or white board shall also be available. Temporary partitions and cubicles with walls that do not extend from the floor to ceiling are not acceptable.

D10.3 Model aeroplanes with working controls or model helicopters, as appropriate, shall also be available for use in briefing rooms/cubicles. A quiet room for self-study purposes is to be available for students. Where a dedicated room is not available, specific times must be allocated to other rooms where self-study can occur at specific times and this must be acceptable to the PCAA. A separate room or rooms shall be provided where synthetic training devices are used. Subject to local regulations emergency exits and evacuation routes, particularly in simulator bays, should be clearly marked and kept free from obstruction whenever training is taking place. Lavatory and washroom facilities are to be provided as well as facilities for rest and refreshment. Facilities for theoretical knowledge instruction shall ideally be co-located with the flying and synthetic flight training facilities.

D10.4 The PCAA requires that suitable demonstration equipment be available to support the theoretical knowledge instruction. This should include where appropriate, sectioned components and instruments, appropriate wall diagrams, transparencies, slides, models, systems demonstration equipment, mock ups and can include computer-generated graphics. All classrooms are to be suitably equipped and furnished with provision for light and ventilation and must be protected from external noise and distractions and sufficiently spacious to allow individual students room within which to work without disturbing others. A room suitable for the conduct of theoretical knowledge examinations must be provided, free from noise or other distractions. This may be the same room as used for instruction but any wall-mounted diagrams, photographs or other training aids relating to the course must be removed or covered prior to commencement of the examination.

D10.5 The ATO shall have the necessary information, technical data, equipment, training devices and material to conduct the courses for which it has the approval.

D10.6 Any synthetic 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 that they are appropriate to the task.

D10.7 Approval holder shall not make a substantial change in facilities, equipment or material that have been approved for a particular training program, unless that change(s) is approved in advance by the Authority.

## **D11. OPERATIONAL PUBLICATIONS:**

The following operational publications shall be immediately available to students and staff and, where applicable, kept current by amendments.

D11.1 A full set of PCAA regulations to include at a minimum:

D11.1.1 PCAA Civil Aviation Rules;

D11.1.2 PCAA Civil Aviation Advisory Publications;

D11.1.3 PCAA Information Bulletins and Directives

D11.2 PCAA Aeronautical Information Publication (AIP)

D11.3 Flight Manuals for the aircraft used on the course(s) on offer

D11.4 ATC Flight Plan and explanatory material/guide

D11.5 Standard meteorology reports and forecasts (in document or computer based formats)

D11.6 Flight planning documents including flight guide supplements, radio navigation charts, TMA/CTR arrival/departure charts, SID/STAR and aerodrome Instrument Approach Procedure charts. These may be in proprietary flight guides acceptable to the PCAA, e.g. Jeppesen

D11.7 NOTAM's

D11.8 A current copy of the ATO's Operations Manual, Training Manual(s), SMS Manual.

D11.9 Where documents are maintained in electronic format they shall be provided on one or more computers dedicated for this purpose. The number of computers shall reflect the number of students. They shall be located in such a manner that students have access without having to enter staff offices. A form of electronic document control shall be employed that identifies the documents held in electronic format and the current amendment state of each document. Web-based documentation is acceptable providing backups are available in hard copy and that the number of computers reflects the number of students.

## **D12. REQUIREMENTS FOR ENTRY INTO TRAINING:**

D12.1 A student accepted for training shall possess the appropriate medical certificate for the license required and shall meet the entrance requirements set by the ATO, as approved by the Authority. Additionally applicants should pass to a satisfactory standard a cognitive screening assessment. Meeting the minimum standard of education required for a student attending a course.

D12.2 It is the responsibility of the ATO to advise applicants, who do not meet admission requirements on their inadmissibility to the course.

## **D13. OPERATIONS MANUAL:**

D13.1 An ATO shall provide an Operations Manual containing the information and instructions to enable staff to perform their duties and to give guidance to trainees on how to comply with the course requirements. The

ATO shall make available to staff and students a copy of the Operations Manual. Contained within the manual shall be an amendment procedure acceptable to the PCAA.

#### **D14. TRAINING MANUAL:**

D14.1 ATO's are required to produce separate Training Manuals for each course of a distinctive training program. The training manual will state the Aim for each course, the entry requirements for that course, the objectives and training goals for each phase of training and the standards required at the end of each exercise so that the students are in no doubt about what is required of them at any stage.

D14.2 A Training Manual should not include flight exercise briefing material or lesson plan. Its primary purpose is to advise the student WHAT they will be doing and WHEN; rather than HOW. There should be a clearly defined Aim for each exercise / lesson directed at the student not the instructor. "To teach" is an instructor aim; "to learn" or "to be able to" are student aims.

#### **D15. SAFETY MANAGEMENT SYSTEM MANUAL:**

D15.1 The ATO service provider shall establish an SMS:

D15.1.1 In accordance with the framework elements and will write SMS Manual contained in Appendix C of this ANO; and

D15.1.2 Be commensurate with the size of the ATO and the complexity of its aviation products or services. The SMS of an approved training organization, that is exposed to safety risks related to aircraft operations during the provision of its services shall be made acceptable to the State (PCAA Personnel Licensing Office) responsible for the organization's approval.

**Note 1:** The framework for the implementation and maintenance of a safety management system is contained in Annex – 1 appendix 4, Annex – 19 amendment 1 and guidance on safety management system is contained in the safety management manual (SMM) (Doc 9859).

**Note 2:** In the context of this appendix as it relates to ATO, an "accountability" refers to an "obligation" that may not be delegated, and "responsibilities" refers to functions and activities that may be delegated.

D15.2 The ATO shall develop an SMS implementation plan, formally endorsed by the organization that defines the organization's approach to the management of safety in a manner that meets the organization's safety objectives.

D15.2.1 The ATO shall develop and maintain SMS documentation that describes:

D.15.2.1.1 The safety policy and objectives;

D.15.2.1.2 SMS requirements;

D.15.2.1.3 SMS processes and procedures;

D.15.2.1.4 Accountabilities, responsibilities & authorities for SMS processes & procedures; and

D.15.2.1.5 SMS outputs.

#### **D16. QUALITY SYSTEM:**

##### **D16.1 QUALITY POLICY AND STRATEGY:**

It is of vital importance that the ATO describes how the organization formulates, deploys, reviews its policy and strategy and turns it into plans and actions. The Head of Training as to what the Quality System is intended to achieve should establish a formal written Quality Policy Statement that is a commitment. The Quality Policy should reflect the achievement and continued compliance with relevant parts of the PCAA regulations together with any additional standards specified by the ATO. The Accountable Manager will have overall responsibility for the Quality System including the frequency, format and structure of the internal management evaluation activities.

**D16.2 PURPOSE OF A QUALITY SYSTEM:**

The implementation and employment of a Quality System will enable the ATO to monitor compliance with relevant parts of the PCAA Regulations, the Operations Manual, the Training Manual, and any other standards as established by that ATO, or the Authority, to ensure safe and efficient training.

**D16.3 QUALITY SYSTEM:**

The Quality System of the ATO should ensure compliance with and adequacy of training activities requirements, standards and procedures. The ATO should specify the basic structure of the Quality System applicable to all training activities conducted. The Quality System should be structured according to the size of the ATO and the complexity of the training to be monitored.

**D16.4 QUALITY FEEDBACK SYSTEM:**

The quality system should include a feedback system to ensure that corrective actions are both identified and promptly addressed. The feedback system should also specify who is required to rectify discrepancies and non-compliance in each particular case, and the procedure to be followed if corrective action is not completed within an appropriate timescale.

**D16.5 QUALITY ASSURANCE PROGRAM:**

The Quality Assurance Program should include all planned and systematic actions necessary to provide confidence that all training is conducted in accordance with all applicable requirements, standards and procedures.

**D16.6 QUALITY INSPECTION:**

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



## **D17. FINANCIAL RESOURCES:**

D17.1 This section sets out the means of compliance for the PCAA to be satisfied that ATO's have sufficient funding available to conduct training to the approved standards and to address the maintenance of acceptable training standards throughout the duration of a course. The grant and revalidation of an approval cannot therefore be construed as a guarantee of the underlying financial soundness of the organization. It is an indication, on the basis of financial information provided, that the approved organization can provide sufficient facilities and qualified staff such that training can be, or can continue to be, provided in accordance with relevant PCAA regulations, training requirements and standards.

D17.2 Any application for initial approval or revalidation is to be supported by a plan, covering the period of approval that is five years, which includes at least the following information:

D17.2.1 Training facilities and number of students

D17.2.2 Details, as appropriate, of:

D.17.2.2.1 The number and types of training aircraft that will be used;

D.17.2.2.2 The number of flight and ground instructors that will be employed;

D.17.2.2.3 The number of classrooms and other types of training facilities (synthetic training devices, etc.) intended for use;

D.17.2.2.4 The supporting infrastructure (staff offices, operations room, briefing rooms, rest rooms, hangars, etc.);

D.17.2.2.5 The planned number of students (by month and course);

D17.2.3 Financial Details:

D.17.2.3.1 Capital expenditure necessary to provide the planned facilities;

D.17.2.3.2 Costs associated with running each of the courses for which approval is sought;

D.17.2.3.3 Income forecasts for the period of approval;

D.17.2.3.4 A forecast financial operating statement for the business for which approval is sought;

D.17.2.3.5 Details of any other financial trading arrangement on which the viability of the approved organization may be dependent.

D17.3 The plan submitted in support of an application for initial approval or revalidation is to be accompanied by a financial statement from the applicant's bankers or auditors, which certifies that the applicant has, or has recourse to, sufficient financial resources to meet the applicant's proposals as described in the plan to conduct PCAA approved courses.

D17.4 An appropriately revised financial statement will be required whenever the applicants wish to expand their activities in addition to those described in the plan, in order to satisfy the requirements of the PCAA regulations.

D17.5 After approval has been granted, if the Authority has reason to believe that the necessary standards of compliance with the PCAA regulations are not being met or may not be met due to a lack or apparent lack of financial resources, the Authority may require the organization to demonstrate in a written submission that sufficient funds can and will be made available to continue to meet the terms of approval, or such modifications to it as may have been agreed with the Authority.

D17.6 Any such submission is to be accompanied by a further financial statement signed by the approved organization's bankers or auditors. The Authority may also require a financial statement if it appears to the Authority that operation of the approved course(s) is significantly at variance with the proposals contained in the business plan.

#### **D18. APPROVAL OF A TRAINING ORGANISATION AND CONTINUED VALIDITY:**

D18.1 No person may operate an ATO without, or in violation of, an approval, ratings or training specifications issued under this ANO.

D18.2 The ATO shall display the Approval in a place accessible to the public in the principle place of business of the training organization.

D18.3 The approval and training specifications issued to an ATO shall be available on the premises for inspection by the public and the Authority.

D18.4 The ATO approval will consist of two documents:

D18.4.1 A one page approval signed by the Authority; and

D18.4.2 A multi-page training specifications signed by the Director Personnel Licensing , containing the terms, conditions, and authorizations.

D18.5 An ATO shall perform training, checking and testing, or part thereof, only for which it is authorized / approved and within the terms, conditions, and authorizations placed in its training specifications.

#### **D19. APPLICATION PROCESS – GENERAL INFORMATION:**

D19.1 The application process for approval of an ATO consists of five distinct phases:

D19.1.1 Pre-Application Phase

D19.1.2 Formal Application Phase

D19.1.3 Document Evaluation Phase

D19.1.4 Inspection and Proving Training Flights Evaluation Phase

D19.1.5 Certification Phase

D19.2 It is the PCAA's experience that considerable resources and effort are required to prepare an initial application for approval to conduct integrated courses of training, particularly in relation to the development of the required documentation. Equally, the review of such material is both demanding of staff effort within the CAA Offices and must take its place beside other work undertaken. In other words, it is not given special priority against other tasks. Therefore, organizations should make realistic assumptions from the outset as to how long it will take to obtain approval, and are strongly recommended to inform the PCAA of their intentions to start an ATO at an early stage of planning (as outlined in the Pre-Application Phase of this ANO).

#### **D19.3 APPLICATION PROCESS – PRE APPLICATION PHASE:**

The pre-application phase occurs when the applicant meets with the Director Personnel Licensing and selected Inspectors from the appropriate specialty and discusses generally the initial plans and the viability of different proposals. The applicant shall contact the PCAA office and bring a pre-application statement of intent to this meeting regarding the proposed operations and types of training and sequence of events. The arrangement for the pre-application meeting is made by contacting the Director Personnel Licensing in



PCAA. This meeting is to be requested when details of the training operations/activities are known and will be attended by the PCAA assigned inspectors from Licensing, Flight Standards and Airworthiness (if required).

#### **D19.3.1 PRE-APPLICATION STATEMENT OF INTENT**

The pre-application statement of intent is reviewed by the Director General of the Pakistan Civil Aviation Authority or his Designated, and this statement shall be in the form of a letter from the owner and, or sponsor. It shall contain at least the following information:

- D.19.3.1.1 Type(s) of Training
- D.19.3.1.2 Type(s) of aircraft
- D.19.3.1.3 Proposed areas for training
- D.19.3.1.4 Nature of aircraft (owned or leased)
- D.19.3.1.5 Nature of simulator (owned or leased)
- D.19.3.1.6 Location of main base of training and other facilities
- D.19.3.1.7 Management, organizational structure and the qualifications of the proposed Accountable Manager, Head of Training, Chief Instructors and Quality Manager.
- D.19.3.1.8 Proposed training organization name and corporate body sponsor
- D.19.3.1.9 Approximate date of commencement
- D.19.3.1.10 ATO License from DAT&ER CAA (if applicable)
- D.19.3.1.11 Security Clearance (if required)

#### **D19.3.2 PRE-APPLICATION PROCESS**

On the basis of the information provided by the ATO, as outlined above, the PCAA will provide the applicant with the following information:

- D.19.3.2.1 Application procedures including required forms
- D.19.3.2.2 Required Documents (as outlined in this ANO and the CAR's)
- D.19.3.2.3 Approval requirements for other government authorities (if required)
- D.19.3.2.4 Regulatory feasibility
- D.19.3.2.5 Required PCAA fees

#### **D19.4 APPLICATION PROCESS – FORMAL APPLICATION PHASE:**

D19.4.1 The application process cannot commence unless the Director General CAA gives his approval to proceed. Based on the information provided, a preliminary assessment will be made to ensure that the proposed training activities / operations are in the national and aviation interest. formal application phase commences when the applicant lodges a formal application for a Training / Approval Certificate, accompanied by various documents intended to prove or describe the manner in which he intends to conduct the training.

D19.4.2 The formal application must be submitted to the PCAA at least 90 working days prior to the proposed commencement date of the training activities / operations. The Operations Manual of the training organization may be submitted later but not less than 60 working days before the date of intended training operations. From experience. The application for the renewal of a Training / Approval Certificate must be submitted at least 60 days, or otherwise agreed, before the end of the existing period of validity of the Training / Approval Certificate . (The PCAA must be given at least 10 working days prior notice of a proposed change of a nominated post holder of the training organization such as the Head of Training, Chief Flying Instructor, the Chief Ground Instructor and the Director / Head of Maintenance.

D19.5 Submission of the formal application is associated with a meeting attended by the Accountable Manager, nominated post holders or key personnel from both the applicant and the PCAA. The formal application must be signed by the corporate body or sponsor. An accompanying letter shall include the full name and address of the applicant and contact numbers for the applicant's coordinator. The letter must contain particulars of the proposed operations / training including details of desired training areas to confirm the pre application information.

**D19.6 APPLICATION PROCESS – DOCUMENT EVALUATION PHASE:**

D19.7 The document evaluation phase involves detailed study of the manuals and other documents, which accompanied the formal application, for content and compliance. The set of documents and manuals should be complete and the detailed evaluation of them must satisfy the PCAA's requirements before the inspection phase can begin.. The documents and manuals should be presented for consideration not less than 60 working days prior to the commencement of the proposed operations to avoid delay.

**D19.8 APPLICATION PROCESS – INSPECTION PHASE:**

D19.8.1 The inspection phase is the phase in which the physical facilities and equipment proposed for use by the applicant are assessed for acceptability. The applicant is required to demonstrate his ability to comply with regulations and safe operating practices before actual training revenue operations can begin

D19.8.2 During this phase, the PCAA Licensing, Airworthiness and Flight Standards Directorates will conduct audit/inspection of the training organization under process subject to suitability of their specialized inspectors.

D19.8.3 The PCAA will also observe ground, flight and synthetic flight instruction rooms including pre flight briefing, actual flight post flight debriefing and demonstration lectures.

**D19.9 APPLICATION PROCESS – CERTIFICATION PHASE:**

D19.9.1 The certification phase follows the satisfactory completion of all the previous phases. It begins when the PCAA takes the necessary administrative action to actually issue a Training / Approval Certificate with associated training specifications. The certification requirements of this phase are also checked during the renewal of Training / Approval Certificate and its associated Training Specifications.

D19.9.2 An approval once issued is not transferable. An application must be made for a new approval to be issued if there is going to be a change in circumstances, for example, where an ATO changes its name or ownership or enters into an arrangement to move an approval to another ATO. The PCAA Personnel Licensing Office shall be notified at the earliest possible opportunity if such a change is going to take place, in order that advice can be given on what needs to be done to facilitate the issue of a new approval as expeditiously as possible.

D19.9.3 The PCAA will monitor an approved ATO to determine the proportion of graduates who obtain a first time pass in their theoretical knowledge examinations and their skill tests. Where the rate falls below 50%, this will be deemed unsatisfactory; and ATOs will be required to instigate remedial action. This action shall be detailed in the Training Manual under the heading Training Effectiveness and approved by the PCAA.

D19.9.4 This does not however preclude the PCAA from taking immediate action if they deem the standards of training to have fallen to such a point as to be detrimental to the cadets or contravene safety. It will be a condition of the approval that the PCAA may re-inspect the organization at any time during the period of approval. Continuation of an approval is not automatic but depends upon the outcome of inspections. Reports will be provided to the ATO following inspection visits by PCAA staff.

**D20. RE-APPROVAL PROCESS**

D20.1 Applications for re-approval must be submitted least 60 working days prior to the expiry of the existing approval. If no application for re-approval is received. The approval will lapse and no further training

will be permitted until all of the requirements for an initial approval have been met or permitted by personnel Licensing directorate.

D20.2 An inspection will follow receipt of the application and the prescribed charge and will focus on the organization's maintenance of the necessary training standards and its compliance with the provisions of this ANO. They will pay particular attention to:

- D20.2.1 Action taken on any non-conformances raised at the last inspection
- D20.2.2 The operation of the organization's quality system
- D20.2.3 Any changes to the training management team and the current numbers of training staff
- D20.2.4 The training task since the last inspection and forecasts for the next approval period
- D20.2.5 Changes to the location of training facilities
- D20.2.6 Course structure and training aids
- D20.2.7 Training records which must be comprehensive and show that the approved course is being fully covered.
- D20.2.8 Examination results and analysis
- D20.2.9 Plans

D20.3 An organization may not commence, conduct or continue training courses requiring approval unless it has the relevant approval documentation in its possession, except with the express consent in writing of the Licensing for the PCAA.

D20.4 A Training / Approval Certificate remains valid for a period of one year, or as stated on the certificate and will only be renewed provided there is a demonstrated compliance with the applicable PCAA regulations and the provisions of this ANO.

## **D21. ADVERTISING:**

D21.1 Approved Training Organization may not advertise as an approved training organization until an approved training organization approval has been issued and valid, to that facility.

D21.2 Approved Training Organization may not make any statement either in writing or orally, about itself that is false or is designed to mislead any person.

D21.3 Whenever the advertising of an ATO indicates that it is an approved organization, the advertisement must clearly state the ATO approval number.

## **D22. REVOCAION, SUSPENSION OR VARIATION OF APPROVAL**

The PCAA may at any time in accordance with its procedures take action to limit, suspend or revoke, authorizations and approvals, if it is established that an applicant has not met or no longer meets, the requirements of the applicable CAR's and or the provisions set forth in this ANO. In accordance with PCAA Rules, an approval issued by the PCAA may be revoked, suspended or varied if the requirements cease to be met in part or in whole, or if the standards on which approval was granted are not maintained.

### **INSPECTION:**

D22.1 Beside inspections outlined in above Para, the Licensing Authority may at any time, inspect an ATO holder on the ATO holder's premises to determine the ATO compliance with this part.

D22.2 Inspections will be conducted at least annually.

D22.3 After an inspection is made; the approval holder will be notified in writing, of any deficiencies found during the inspection.

D22.4 Inspection will also be performed on the applicant for, or the holder of an ATO approval held outside the authorizing [state] at no cost to PCAA. This inspection may be delegated to the [Authority] of the state where the ATO is located, provided an arrangement exists between the two authorities for mutual recognition of facilities.

### **D23. ADDITIONAL REQUIREMENTS FOR ATO'S OUTSIDE PAKISTAN:**

D23.1 ATO's whose principal place of business, registered offices are located outside Pakistan and wishing to train for PCAA licenses and associated ratings shall apply for approval of such courses to the PCAA as described in this ANO as if they were located in Pakistan. Approval will be subject to the following:

D23.2 The ATO shall meet the requirements of the applicable provisions of the Pakistan PCAA Civil Aviation regulations and the provision outlined in this ANO.

D23.3 The PCAA considers it possible to discharge its regulatory responsibilities for the approval process and an adequate level of supervision as required by the PCAA.

D23.4 The PCAA can ensure adequate jurisdiction over the ATO during the approval process and the conduct of subsequent training courses.

D23.5 Subject to satisfactory inspection, the approval of the ATO will be granted for a period of one year, revalidation of the approval may be granted for further periods of one year.

D23.6 The PCAA must be able to ensure 'adequate jurisdiction' over the ATO in another country and this shall mean that the PCAA shall be able to:

D23.7 Conduct initial and routine inspections of the ATO located in foreign country to ensure compliance with the requirements of the PCAA regulations.

D23.8 Conduct flight tests and other standardization checks as deemed necessary by the PCAA.

D23.9 Discharge its legal responsibilities for the grant, variation, suspension or revocation of approvals.

D23.10 If the requirements set out in this ANO are met, approval may be granted if the PCAA considers adequate supervision in accordance with the Pakistani regulations and associated procedures is possible.

D23.11 An ATO or a satellite of an ATO approved by [State] may be located in a country outside [State] and is subject to all the applicable requirements of this ANO.

### **D24. SATELLITE ATO:**

The holder of an ATO approval may conduct training in accordance with a training program approved by the Authority at a satellite ATO if:

- D24.1 The facilities, equipment, personnel and course content of the satellite ATO meet the applicable requirements; and
- D24.2 The instructors at the satellite ATO are under the direct supervision of management personnel of the principal ATO, and
- D24.3 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.

**D25. ATO'S APPROVAL FOR TESTING:**

- D25.1 The Authority may approve an ATO to conduct the testing required for the issuance of a license or rating.
- D25.2 The Authority shall approve the ATO personnel authorized to conduct the testing.

**E. EVIDENCES (ACRONYMS / RECORDS / REFERENCES):**

**E1. ACRONYMS:**

AM	:	ACCOUNTABLE MANAGER
AME-LWTR	:	AIRCRAFT MAINTENANCE ENGINEER- (LICENCE W/O TYPE RATING)
ANO	:	AIR NAVIGATION ORDER
ASC	:	AIR SAFETY CIRCULAR
ATC	:	AIR TRAFFIC CONTROL
ATCL	:	AIR TRAFFIC CONTROLLER LICENCE
ATO	:	APPROVED TRAINING ORGANIZATION
ATPL	:	AIRLINE TRANSPORT PILOT LICENSE
CARs	:	CIVIL AVIATION RULES
CAAF	:	CAA FORMS
CBT	:	COMPUTER BASED TRAINING
CFI	:	CHIEF FLYING INSTRUCTOR
CGI	:	CHIEF GROUND INSTRUCTOR
CPL	:	COMMERCIAL PILOT LICENSE
CSFI	:	CHIEF SYNTHETIC FLYING INSTRUCTOR
DAT&ER	:	DIRECTOR AIR TRANSPORT & ECONOMIC REGULATION
DOC	:	DOCUMENT
FOO	:	FLIGHT OPERATIONS OFFICER
FRTOL	:	FLIGHT RADIO TELEPHONIC OPERATOR LICENCE
FSTD	:	FLIGHT SIMULATION TRAINING DEVICE
FTO	:	FLYING TRAINING ORGANIZATION
GTO	:	GROUND TRAINING ORGANIZATION
HT	:	HEAD OF TRAINING
ICAO	:	INTERNATIONAL CIVIL AVIATION ORGANIZATION
IR(A)	:	INSTRUMENT RATING (AIRCRAFT)
LA	:	LICENSING AUTHORITY
MCC	:	MULTI-CREW COOPERATION
MMEL	:	MASTER MINIMUM EQUIPMENT LIST
NOTAM	:	NOTICE TO AIRMEN
OJT	:	ON THE JOB TRAINING
PCAA	:	PAKISTAN CIVIL AVIATION AUTHORITY
PF	:	PILOT FLYING
PNF	:	PILOT NOT FLYING (PILOT MONITORING)
PPL	:	PRIVATE PILOT LICENSE
QAM	:	QUALITY ASSURANCE MANAGER
SMM	:	SAFETY MANAGEMENT MANUAL
SMS	:	SAFETY MANAGEMENT SYSTEM
SOP	:	STANDARD OPERATING PROCEDURES
STD	:	SYNTHETIC TRAINING DEVICES
VFR	:	VISUAL FLIGHT RULES

**E2. RECORDS:**

- ATO Audit Checklist (CAAF-025-LCXX)

**E3. REFERENCES:**

- E3.1 ICAO Annex – 1.
- E3.2 ICAO Annex - 19
- E3.3 ICAO Guidance Manual 7192
- E3.4 ICAO Guidance Manual 9841

**IMPLEMENTATION:**

This Air Navigation Order shall be implemented with effect from 1<sup>ST</sup> OCTOBER 2020 and supersedes ANO-007-XXLC-1.0.

**(HASSAN NASIR JAMY)**  
Director General,  
Civil Aviation Authority

Dated: SEPTEMBER, 2020

**(MUHAMMAD NAEEM IQBAL QURESHI)**

Additional Director Licensing

Dated: SEPTEMBER, 2020

**APPENDIX – ‘A’**

**OPERATIONS MANUAL**

1. ATO shall provide an Operations Manual containing the information and instructions to enable staff to perform their duties and to give guidance to trainees on how to comply with the course requirements. The ATO shall make available to staff and students a copy of the Operations Manual. Contained within the manual shall be an amendment procedure acceptable to the PCAA. The Operations Manual shall provide relevant information to particular groups of staff, e.g. instructors, operations and maintenance staff; and shall include the following parts:

- 1.1 General
- 1.2 Technical
- 1.3 Route
- 1.4 Staff Training

Note: The Operations manual for an ATO will include at a minimum the following information within each of the above-mentioned Sections. However, ATO's conducting theoretical knowledge training only will, for example, not be required to supply information within their manual relating to "restriction of numbers of aero planes in poor weather" and other flying specific items:

**1.1 General**

- 1.1.1 Introduction
- 1.1.2 A list and description of all volumes in the Operations Manual & System of amendments and revisions
- 1.1.3 Organizational Structure (function & management)
- 1.1.4 Responsibilities (all management & administrative staff)

- 1.1.5 Student discipline and disciplinary action
- 1.1.6 Approval / authorization of flights
- 1.1.7 Preparation of flying program
- 1.1.8 Command of aeroplane
- 1.1.9 Responsibilities of pilot-in-command
- 1.1.10 Carriage of passengers
- 1.1.11 Aeroplane documentation
- 1.1.12 Retention of documents
- 1.1.13 Flight crew qualification records (licences & ratings)
- 1.1.14 Revalidation (medical certificates & ratings)
- 1.1.15 Flying duty period and flight time limitations (flying instructors)
- 1.1.16 Flying duty period and flight time limitations (students)
- 1.1.17 Rest periods (flying instructors)
- 1.1.18 Rest periods (students)
- 1.1.19 Pilots' log books
- 1.1.20 Flight planning (general)
- 1.1.21 Safety (general) – equipment, radio listening watch, hazards, accidents and incidents (including reports), safety pilots etc.
- 1.1.22 Minimum Flight Altitudes
- 1.1.23 Aerodrome Operating Minima
- 1.1.24 En-route VFR requirements
- 1.1.25 Fuelling Procedures
- 1.1.26 Hot weather Procedures
- 1.1.27 De-Icing & Anti-Icing Procedures
- 1.1.28 Wake Turbulence
- 1.1.29 Use of Safety belts for crew and passengers
- 1.1.30 Passenger briefing procedures

## 1.2 Technical

- 1.2.1 Aircraft descriptive notes
- 1.2.2 Aircraft handling (including checklists, SOP's, limitations, aircraft maintenance & technical logs, in accordance with relevant CAR's, etc.)
- 1.2.3 Emergency procedures
- 1.2.4 Radio and radio navigation aids
- 1.2.5 Allowable deficiencies (based on MMEL, if available)

## 1.3 Route

- 1.3.1 Performance (legislation, take-off, route, landing etc.)
- 1.3.2 Flight planning (fuel, oil, minimum safe altitude, navigation equipment etc.)
- 1.3.3 Loading (load-sheets, mass, balance, limitations)
- 1.3.4 Weather minima (flying instructors)
- 1.3.5 Weather minima (students – at various stages of training)
- 1.3.6 Training routes/areas

## 1.4 Staff Training

- 1.4.1 Appointments of persons responsible for standards / competence of flying staff
- 1.4.2 Initial training
- 1.4.3 Refresher training
- 1.4.4 Standardization training
- 1.4.5 Differences training (including same fleet type differences)
- 1.4.6 Proficiency checks
- 1.4.7 Upgrade training
- 1.4.8 ATO staff standards evaluation
- 1.4.9 Training Records



**APPENDIX – 'B'**

**TRAINING MANUAL**

1. ATO's are required to produce separate Training Manuals for each course of training which are distinctive in scope and nature . The training manual will state the Aim for each course, the entry requirements for that course, the objectives and training goals for each phase of training and the standards required at the end of each exercise so that the students are in no doubt about what is required of them at any stage. The Training Manual will include the following parts:

- 1.1 PART ONE – The Training Plan
- 1.2 PART TWO – Briefing and Air Exercises
- 1.3 PART THREE – Synthetic Flight Training
- 1.4 PART FOUR – Theoretical Knowledge Instruction

2. A Training Manual should not include flight exercise briefing material. Its primary purpose is to advise the student WHAT they will be doing and WHEN; rather than HOW. There should be a clearly defined Aim for each exercise directed at the student not the instructor. "To teach is an instructor aim; "to learn" or "to be able to" are student aims. The purpose of the Skill Test is to determine if the Aim has been achieved; the test should not form part of the aim. Exercise content should list the specific skill items that will be taught or practice during an exercise. Each exercise brief should have a concise statement of what standard the

student is expected to achieve on completion of the exercise. This should be a measurable quantity against which the student may be judged.

3. The Training Manual for an ATO will include at a minimum the following information within each of the above-mentioned Parts. For example, ATO's conducting theoretical knowledge training only will not be required to supply information within their manual relating to "bad weather constraints":

### 1.1 PART ONE – The Training Plan

The aim of the course (ATPL(A), CPL/IR(A), CPL(A) etc, as applicable)	<ul style="list-style-type: none"> <li>A statement of what the student is expected to do as a result of the training, the level of performance, and the training constraints to be observed.</li> </ul>
Pre-entry requirements	<ul style="list-style-type: none"> <li>Minimum age, educational requirements (including language), medical requirements.</li> <li>Any individual PCAA requirements.</li> </ul>
Credits for previous Experience	<ul style="list-style-type: none"> <li>To be obtained from the Authority before training begins.</li> </ul>
Training Syllabi	<ul style="list-style-type: none"> <li>The flying syllabus (single-engine), the flying syllabus (multi-engine), the synthetic flight training syllabus and the theoretical knowledge training syllabus.</li> </ul>
The time scale and scale, in weeks, for each syllabus	<ul style="list-style-type: none"> <li>Arrangements of the course and the integration of syllabi time.</li> </ul>
Training programs	<ul style="list-style-type: none"> <li>The general arrangements of daily and weekly programs for flying, ground and synthetic flight training.</li> <li>Bad weather constraints.</li> <li>Program constraints in terms of maximum student training times, (flying, theoretical knowledge, synthetic) e.g. per day/week/month.</li> <li>Restrictions in respect of duty periods for students.</li> <li>Duration of dual and solo flights at various stages.</li> <li>Maximum flying hours in any day/night; maximum number of training flights in any day/night.</li> <li>Minimum rest period between duty periods.</li> </ul>
Training records	<ul style="list-style-type: none"> <li>Rules for security of records and documents.</li> <li>Attendance records.</li> <li>The form of training records to be kept.</li> <li>Persons responsible for checking records and students' logbooks.</li> <li>The nature and frequency of record checks.</li> <li>Standardization of entries in training records.</li> <li>Rules concerning log book entries.</li> </ul>
Safety training	<ul style="list-style-type: none"> <li>Individual responsibilities.</li> <li>Essential exercises.</li> <li>Emergency drills (frequency).</li> <li>Dual checks (frequency at various stages).</li> <li>Requirement before first solo day/night/navigation etc.</li> </ul>
Tests and examinations	<ul style="list-style-type: none"> <li>Flying <ul style="list-style-type: none"> <li>Progress checks</li> <li>Skill tests</li> </ul> </li> <li>Theoretical Knowledge <ul style="list-style-type: none"> <li>Progress tests</li> <li>Theoretical knowledge examinations</li> </ul> </li> <li>Authorisation for test.</li> <li>Rules concerning refresher training before retest.</li> <li>Test reports and records.</li> <li>Procedures for examination paper preparation, type of question and assessment, standard required for 'Pass'.</li> </ul>

	<ul style="list-style-type: none"> <li>• Procedure for question analysis and review and for raising replacement papers.</li> <li>• Examination re-sits procedures.</li> </ul>
Training effectiveness	<ul style="list-style-type: none"> <li>• Individual responsibilities.</li> <li>• General assessment.</li> <li>• Liaison between departments.</li> <li>• Identification of unsatisfactory progress (individual students).</li> <li>• Actions to correct unsatisfactory progress.</li> <li>• Procedure for changing instructors.</li> <li>• Maximum number of instructor changes per student.</li> <li>• Internal feedback system for detecting training deficiencies.</li> <li>• Procedure for suspending a student from training.</li> <li>• Discipline.</li> <li>• Reporting and documentation.</li> </ul>
Standards and Level of performance at various stages	<ul style="list-style-type: none"> <li>• Individual responsibilities.</li> <li>• Standardization.</li> <li>• Standardisation requirements and procedures.</li> <li>• Application of test criteria.</li> </ul>

## 1.2 PART TWO – Briefing & Air Exercises

Air Exercise	<ul style="list-style-type: none"> <li>• A detailed statement of the content specification of all the air exercises to be taught, arranged in the sequence to be flown with main and sub-titles. This should normally be the same as the air exercise specification for the flight instructor rating course.</li> </ul>
Air exercise reference list	<ul style="list-style-type: none"> <li>• An abbreviated list of the above exercises giving only main and sub-titles for quick reference, and preferably in flip-card form to facilitate daily use by flight instructors.</li> </ul>
Course structure – Phase of training	<ul style="list-style-type: none"> <li>• A statement of how the course will be divided into phases, indication of how the above air exercises will be divided between the phases and how they will be arranged to ensure that they are completed in the most suitable learning sequence and that essential (emergency) exercises are repeated at the correct frequency.</li> <li>• The syllabus hours for each phase and for groups of exercises within each phase shall be stated and when progress tests are to be conducted, etc.</li> </ul>
Course structure integration of syllabi	<ul style="list-style-type: none"> <li>• The manner in which theoretical knowledge, synthetic flight training and flying training will be integrated so that as the flying training exercises are carried out students will be able to apply the knowledge gained from the associated theoretical knowledge instruction and synthetic flight training.</li> </ul>
Student progress	<ul style="list-style-type: none"> <li>• The requirement for student progress and include a brief but specific statement of what a student is expected to be able to do and the standard of proficiency he must achieve before progressing from one phase of air exercise training to the next.</li> <li>• Minimum experience requirements in terms of hours, satisfactory exercise completion, etc. as necessary before significant exercises, e.g. night flying.</li> </ul>
Instructional methods	<ul style="list-style-type: none"> <li>• The ATO requirements, particularly in respect of pre- and post-flying briefing, adherence to syllabi and training specifications, authorisation of solo flights, etc.</li> </ul>

Progress tests	<ul style="list-style-type: none"> <li>The instructions given to examining staff in respect of the conduct and documentation of all progress tests.</li> </ul>
Glossary of terms	<ul style="list-style-type: none"> <li>Definition of significant terms as necessary.</li> </ul>
Appendices	<ul style="list-style-type: none"> <li>Progress test report forms.</li> <li>Skill test report forms.</li> <li>ATO certificates of experience, competence, etc. as required.</li> </ul>

### 1.3 PART THREE – Synthetic Flight Training

The structure shall generally be the same as for PART TWO - Briefing & Air Exercises, as above. Alternatively, the STD Exercises may be included in Part TWO especially if the exercises may be conducted in a STD or aircraft. Where the STD training is conducted (such as in the case of an ATO subcontracting the MCC phase of an Integrates ATPL (A) course) as a block or Subcontracted PART THREE – Synthetic Flight Training, is more appropriate.

### 1.4 PART FOUR – Theoretical Knowledge Instruction

Structure of the theoretical knowledge course	<ul style="list-style-type: none"> <li>A statement of the structure of the course, including the general sequence of the topics to be taught in each subject, the time allocated to each topic, the breakdown per subject and an example of a course schedule.</li> <li>Distance Learning courses should include instructions of the material to be studied for individual elements of the course.</li> </ul>
Lesson Plans	<ul style="list-style-type: none"> <li>A description of each lesson or group of lessons including teaching materials, training aids, progress test organisation and inter-connection of topics with other subjects.</li> </ul>
Teaching materials	<ul style="list-style-type: none"> <li>Specification of the training aids to be used (e.g. study materials, course manual references, exercises, self-study materials, demonstration equipment).</li> </ul>
Student progress	<ul style="list-style-type: none"> <li>The requirement for student progress, including a brief but specific statement of the standard that must be achieved and the mechanism for achieving this, before application for theoretical knowledge examinations.</li> </ul>
Progress testing	<ul style="list-style-type: none"> <li>The organisation of progress testing in each subject, including topics covered, evaluation methods used and documentation.</li> </ul>
Review procedure	<ul style="list-style-type: none"> <li>The procedure to be followed if the standard required at any stage of the course is not achieved, including an agreed action plan with remedial training if required.</li> </ul>

## 4. Training Manual of GTO's (Training of Licensed Personnel other than Pilots)

The training organization (GTO) shall provide a PCAA approved training and procedures manual for the use, compliance and guidance of personnel concerned. Training for Licensed Personnel other than Pilots shall not be allowed to commence unless the PCAA Personnel Licensing Office has approved this manual. This manual may be issued in separate parts and shall contain at least the following information:

- 4.1 A general description of the scope of training authorized under the organization's terms of approval;
- 4.2 The contents of the training programs offered including the courseware and equipment to be used;
- 4.3 A description of the organization's quality assurance system;

- 4.4 A description of the organization's facilities;
- 4.5 The name, duties and qualification of the person designated as responsible for compliance with the requirements of the approval;
- 4.6 A description of the duties and qualification of the personnel designated as responsible for planning, performing and supervising the training;
- 4.7 A description of the procedures used to establish and maintain the competence of instructional personnel;
- 4.8 A description of the method used for the completion and retention of the training records;
- 4.9 A description, when applicable, of additional training needed to comply with an operator's procedures and requirements; and
- 4.10 When PCAA has authorized an approved training organization to conduct the testing required for the issuance of the license or certificate. A description of the selection, role and duties of the authorized personnel, as well as the applicable requirements established by the Licensing Authority in its relevant regulations.
- 4.11 The training organization shall ensure that the training and procedures manual is amended as necessary to keep the information contained therein up to date. Copies of all amendments to the training and procedures manual shall be furnished promptly to all organizations or persons to whom the manual has been issued.

## **APPENDIX – 'C'**

### **SAFETY MANAGEMENT SYSTEM MANUAL**

1. The SMS Manual shall include the following chapters / sections:
  - 1.1. Document control;
  - 1.2. SMS regulatory requirements;
  - 1.3. Scope and integration of the safety management system;
  - 1.4. Safety policy;
  - 1.5. Safety objectives;
  - 1.6. Safety accountabilities and key personnel;
  - 1.7. Safety reporting and remedial measures;
  - 1.8. Hazard identification and risk assessment;
  - 1.9. Safety performance monitoring and measurement;
  - 1.10. Safety related investigations and remedial actions;
  - 1.11. Safety training and communication;
  - 1.12. Continuous improvement and SMS audit;

- 1.13. SMS records management;
- 1.14. Management of change; and
- 1.15. Emergency / contingency response plan.

## 2. Framework For A Safety Management System (SMS)

This appendix specifies the framework for the implementation and maintenance of an SMS. The framework comprises four components and twelve elements as the minimum requirements for SMS implementation:

### 2.1 Safety policy and objectives

- 2.1.1 Management commitment
- 2.1.2 Safety accountability and responsibilities
- 2.1.3 Appointment of key safety personnel
- 2.1.4 Coordination of emergency response planning
- 2.1.5 SMS documentation

### 2.2 Safety risk management

- 2.2.1 Hazard identification
- 2.2.2 Safety risk assessment and mitigation

### 2.3 Safety assurance

- 2.3.1 Safety performance monitoring and measurement
- 2.3.2 The management of change
- 2.3.3 Continuous improvement of the SMS

### 2.4 Safety promotion

- 2.4.1 Training and education
- 2.4.2 Safety communication

## 3. Format Of The SMS Manual

The SMS Manual shall be formatted in the following manner:

- 3.1 Section heading;
- 3.2 Objective;
- 3.3 Criteria;
- 3.4 Cross-reference documents.