



सत्यमेव जयते

GOVERNMENT OF INDIA

OFFICE OF THE DIRECTOR GENERAL OF CIVIL AVIATION

TECHNICAL CENTRE, OPP-SAFDURJUNG AIRPORT, NEW DELHI

**CIVIL AVIATION REQUIREMENTS
SECTION 9 – AIRSPACE AND AIR
NAVIGATION SERVICES STANDARDS
SERIES L PART IX
ISSUE I, DATED 17th DECEMBER 2018**

EFFECTIVE: FORTHWITH

F. No. DGCA-21048/13/2018-ANS

Subject: Approval, Renewal and Oversight of Training Organization for personnel of Air Traffic Services.

1. Introduction

Rule 93 of Aircraft Rules, 1937 requires that no person shall engage himself in the provision of air traffic services in the Indian airspace or in any airspace outside the Indian territory for which India has, in pursuance of any international arrangement, undertaken to provide air traffic services, unless he holds a valid air traffic controller license issued under these rules. Rule 114, of Aircraft Rules 1937, prescribe the regulations relating to approval of training organization in respect of Personnel of Air Traffic Services.

This CAR is issued under provisions of Rule 114 and Rule 133A of the Aircraft Rules 1937. The CAR contains the requirements related to approval, renewal and oversight of Training Organization.

2. Applicability and Scope

- 2.1 Provisions of this CAR are applicable to all training organizations for conducting an approved training course for students to enable them to attain the level of competency required for obtaining a licence or rating specified in rule 95. All such organizations will be named as Air Traffic Services Training Organization (ATSTO).
- 2.2 Air Navigation Service Provider providing air traffic services shall apply for grant of approval of ATSTO.

3. Approval of ATSTO

3.1 Application for Approval.

Applicant shall make an application in prescribed proforma, provided in Appendix I to this CAR, to DGCA along with prescribed fee as mentioned in Rule 114 of Aircraft Rules 1937, through <https://bharatkosh.gov.in> along with the following:

- 3.1.1 A statement showing that the minimum qualification requirements for each management position are met or exceeded;
- 3.1.2 The proposed training authorizations and training specifications requested by the applicant;
- 3.1.3 The proposed location of each training facility and any satellite facility location, the proposed courses to be taught at each location, and the infrastructure at each location.
- 3.1.4 Two copies of its proposed Training and Procedures Manual (TPM) along with Quality Assurance (QA) Manual (if QA Manual not integral part of TPM);
- 3.1.5 Two copies of each proposed training course curriculum, including syllabi, outlines, training programme, procedures, and documentation to support the curriculum for which approval is sought; documentation of the training organization's quality assurance system;
- 3.1.6 A statement of the maximum number of students/ trainees it expects to teach at any one time;
- 3.1.7 Copy of contract arrangement for outsourced facility or equipment.
- 3.1.8 A statement of compliance to all applicable CARs for the proposed training, including pertinent subparts and each relevant section of the regulation, which should be identified and accompanied by a brief description.
- 3.1.9 Any additional information the DGCA requires the applicant to submit.

3.2 All requirements shall be supported by the supplementary documents.

3.3 Process of Approval of ATSTO

- 3.3.1 After scrutiny of submitted application completed in all respect, the ATSTO shall be informed of the inspection/ audit, which will be conducted by a DGCA team along with ATSTO's post holders.
- 3.3.2 The inspection/ audit team shall follow the five phase approval process and cover the entire areas using standard checklists as specified in this CAR. DGCA team shall assess; the ATSTO's compliance with qualification and competence requirements in respect of instructors, adequacy of facilities, training system, syllabi and documents including Quality Assurance System.
- 3.3.3 Upon satisfactory compliance of all requirements, DGCA may grant an approval. No provisional or part approval will be granted except in cases of exceptional circumstances at the discretion of the Director General under the

conditions specified therein.

3.4 Certificate of Approval

3.4.1 The Certificate of Approval will contain the following elements:

- 3.4.1.1 Organization's name and location;
- 3.4.1.2 Date of issue and period of validity; and
- 3.4.1.3 Terms of Approval.

3.4.2 The approval certificate of a training organisation shall, unless suspended or cancelled, remain valid for a period not exceeding five years, which may be renewed for a period not exceeding five years at a time subject to the terms and conditions specified by the Director-General.

3.4.3 The ATSTO shall display the ATSTO approval certificate in a place accessible to the public in the principal place of business of the training organization.

3.4.4 The approval certificate and scope of training issued to an ATSTO shall be available on the premises for inspection by the public and the DGCA.

4 Training and Procedures Manual

4.1 ATSTO shall prepare and submit a Training and Procedure Manual for the use and guidance of their personnel concerned. This manual may be issued in separate parts and shall contain at least the following information:

- 4.1.1 a general description of the scope of training authorized under the organization's terms of approval;
- 4.1.2 The content of the training programmes offered including the courseware and equipment to be used;
- 4.1.3 a description of the organization's quality assurance system
- 4.1.4 a description of the organization's facilities;
- 4.1.5 The name, duties and qualification of the person designated as responsible for compliance with the requirements of the approval;
- 4.1.6 a description of the duties and qualification of the personnel designated as responsible for planning, performing and supervising the training;
- 4.1.7 a description of the procedures used to establish and maintain the competence of instructional personnel;
- 4.1.8 a description, when applicable, of additional training needed to comply with an operator's procedures and requirements; and
- 4.1.9 a description of the method used for the completion and retention of the training records required;

- 4.1.10 a description of the selection, role and duties of the personnel within the ATSTO, authorised by DGCA to conduct the tests/ assessment required in the training in accordance with para 14 of this CAR
- 4.2 The training and procedures manual shall be amended as necessary to keep the information contained therein up to date. The ATSTO shall promptly furnish amendments to the training and procedures manual for approval.

5 Training Programme

- 5.1 The ATSTO shall develop a training programme appropriate to the size and scope of the training, covering all aspects of the course and obtain approval for the programme prior to implementation. The programme shall include a breakdown of theory and simulator training in a week-by-week or phase presentation, a list of standard exercises, and a syllabus summary.
- 5.2 The ATSTO shall conduct the training in accordance with the approved training programme. The ATSTO shall obtain the approval for any changes to the approved training programme prior to implementing the changes

6 Quality Assurance System

- 6.1 The ATSTO shall establish a Quality Assurance (QA) system, which ensures that training and instructional practices comply with all relevant requirements.
- 6.2 The objective of Quality Assurance (QA) is to ensure the achievement of results that conform to the standards set out in the ATSTO's manuals and in those requirements and documents issued by the Director General. The effective application of QA principles will aid the ATSTO in meeting all regulatory requirements.
- 6.3 Appendix III describes proactive processes and provides guidance on how to institutionalize a quality system that incorporates QA and assists ATSTO in reaching their full potential.

7 Facilities

- 7.1 Training organization shall establish facility appropriate to the size and scope of the training and it shall provide physical environment conducive to the learning. These shall include:
- 7.1.1 General:
- 7.1.1.1 Sufficient Office Space and facilities for instructional and administrative staff.
- 7.1.1.2 Storage area including secure area for training, examination and personnel records.

7.1.2 Classrooms, Library and training aids:

7.1.2.1 Sufficient and well equipped class rooms. The classrooms shall be properly lighted and furnished. The size of the rooms shall be appropriate to accommodate the batch of students/ trainees.

7.1.2.2 Library with adequate number of text books/ e-books on various aviation related subjects, regulations, ICAO Annexes, DGCA circulars, CARs, AICs, Aircraft Manual; AIP and its supplement and route maps for training.

7.1.2.3 Training aids like simulator, computer, projector/suitable monitor, multimedia etc. including its maintenance arrangements.

7.1.3 Practical training areas:

7.1.3.1 Sufficient and well equipped lab for Simulation and briefing purposes.

7.2 An approved ATSTO shall not make a substantial change in the facilities, equipment or material that have been approved for a particular training programme, unless that change is approved in advance by the DGCA.

8 **Personnel**

8.1 Management Personnel

8.1.1 Accountable Manager: The organization shall appoint an accountable manager who has corporate authority for ensuring that training can be financed and carried out up to the standards required by Aircraft Rules and relevant regulations and this CAR. The accountable manager shall ensure that all necessary resources are available to accomplish training in accordance with laid down standards and establish and promote the quality standards for the training.

8.1.2 Post Holders: The Accountable Manager shall nominate a person or group of personnel for acceptance as post holder(s) for key positions. Depending upon the size and scope of the organization, a post holder may perform a combination of key roles and the same shall be described in the training and procedures manual. The nominated key positions are:-

- a) Head of the training/Chief Instructor (CI)*
- b) Chief Instructor*
- c) Instructors
- d) Quality Assurance Manager

**Note: Accountable Manager may identify the need of key positions at Satellite station and nominate person/s depending upon its size and scope.]*

8.1.3 Duties and responsibilities of the post holders shall be clearly defined in the Training and Procedures Manual. The ATSTO shall ensure that the key personnel meet the eligibility requirements set forth in the manual.

8.2 Head of the training/ Chief Instructor (CI)

ATSTO shall appoint a Head of the training/ Chief Instructor (CI) depending on the size of organization.

8.3 Instructors

ATSTO shall employ/ engage sufficient number of qualified and competent Instructors for procedural control training and surveillance control training to ensure proper training in accordance with the scope of approval.

8.4 Instructors and their qualifications

ATSTO shall ensure that all instructional personnel receive initial and continuation training appropriate to their assigned tasks and responsibilities. To teach specific subjects, theory class instructor shall have acquired the sufficient experience to cover the subjects specified in the Schedule -III of the Aircraft Rules 1937.

8.5 Student/Trainee of ATSTO

8.5.1 The intake of students/trainee in the ATSTO shall be commensurate with the number of instructors

8.5.2 ATSTO shall have a system of induction of students/trainees and a process of their training in compliance with the provisions of relevant regulations.

8.5.3 Security clearance in respect of foreign trainees, if applicable, shall be obtained from the concerned authorities prior to commencement of their training.

9. **Completion Certificate**

9.1 An ATSTO shall issue a completion certificate to each student/trainees who successfully completes its approved course of training.

9.2 The completion certificate must be issued to the students/ trainees upon successfully completion of the course of training and contain at least the following information:

- a) The name and certificate number of the ATSTO;
- b) The name of the trainee to whom it was issued;
- c) The course of training for which it was issued;

- d) The date of completion;
- e) Certification of the information contained on the completion certificate by the chief instructor for that course of training.

10. Records

- 10.1 ATSTO shall retain detailed student/trainee records to show that all requirements of the training course have been met and records shall be kept for a minimum period of five years after completion of the training.
- 10.2 ATSTO shall maintain a system for recording the qualifications and training of instructional and examining staff, where appropriate. The records shall be retained for a minimum period of five years after the instructor or examiner ceases to perform a function for the training organization.

11. DGCA Oversight

- 11.1 DGCA will inspect the ATSTO in compliance with Aircraft Rules 1937, applicable Civil Aviation Requirements before and after approval/ renewal of approval. DGCA may carry out inspection/ audit of any ATSTO as per schedule or whenever required.
- 11.2 All the records pertaining to ATSTO shall be provided by accountable manager promptly during inspection/ audit for continuous oversight of the the ATSTO.

12. Renewal of the approval

- 12.1 An approved ATSTO must submit an application for renewal of the approval as provided in Appendix-I along with the following documents at least 60 days before the expiration of approval:
 - 12.1.1 The following documents shall be submitted along with the application for renewal:
 - (a) Prescribed fee under Rule 114 through <https://bharatkosh.gov.in>
 - (b) Copy of latest internal audit report.
 - (c) Compliance of all pending observations in respect of last inspection.
- 12.2 DGCA may renew the approval for a period not exceeding five years on being satisfied that the ATSTO continues to maintain the required capability. An inspection of the ATSTO may be required prior to renewal.

13. Enforcement/ Penal Provision

In case of concealment or misrepresentation of facts to DGCA or during the training activities, if the organization fails to comply with the requirements of

Aircraft Act 1934, Aircraft Rules 1937, applicable CARs or other regulations issued from time to time; or if the standard of training is found to be below the desired level, the approval granted to the organization shall be liable to alteration, suspension or cancellation.


14. Examination

- 14.1 DGCA may authorise ATSTO or the concerned ANSP under the relevant rules to conduct examinations to test the level of knowledge specified in Schedule III, fix examination centres within India, appoint examiners and evaluators and specify the procedure for conducting the examinations for Air Traffic Service Personnel Licensing.
- 14.2 Examination related with the personnel licensing of Air Traffic Services, if delegated to ATSTO/Air Navigation Service Provider, will be subject to proper Surveillance/oversight by DGCA.



(B. S. Bhullar)
Director General of Civil Aviation

Appendix I
Application Form

 सत्यमेव जयते	<p>भारत सरकार नागर विमानन महानिदेशालय GOVERNMENT OF INDIA DIRECTORORATE GENERAL OF CIVIL AVIATION OPP. SAFDARJUNG AIRPORT, NEW DELHI- 110003</p>
<p>APPLICATION FOR APPROVAL/RENEWAL/EXTENSION IN SCOPE OF ATS TRAINING ORGANISATION</p> <p>(Please tick ✓ as appropriate)</p> <p><input type="checkbox"/> Initial Issue <input type="checkbox"/> Renewal <input type="checkbox"/> Extension in Scope <input type="checkbox"/> Change in the scope of approval</p>	
1.	PARTICULARS OF TRAINING ORGANISATION
1.1	Name of Organisation : Address of Organisation : Telephone : Fax : Email :
1.2	Principal base of ATSTO :
1.3	Other bases of ATSTO, if any :
2.	PARTICULARS OF KEY PERSONNEL
2.1	Name of the Accountable Manager : Designation : Telephone : Fax : Email:
2.2	Name of the Head of ATS Training : Designation : Telephone : Fax : Email:
3.	PARTICULARS OF ATS TRAINING COURSES TO BE APPROVED (if insufficient space, please attach a separate list)

3.1	
3.2	
3.3	
3.4	
3.5	
4.	ENCLOSED DOCUMENTS
4.1	Training and Procedure Manual (TPM) along with duly filled in compliance check list as per appendix IIA.
4.2	Quality Assurance Manual along with duly filled in compliance checklist as per appendix IIIA.
4.	DETAILS OF FEE
	Amount of fee : (Attach proof of fee deposited)
5.	OTHER INFORMATION
6.	DECLARATION
	I hereby declare that the above particulars, compliance checklists provided in Appendices and all documents submitted are true to the best of my knowledge. Date: _____ (Accountable Manager) Location: _____ Signature with Stamp

Appendix II

ATSTO's Training and Procedures Manual

1. Introduction

The Training and Procedures Manual describes the way the organisation conducts its activities. As such it is a document which is essential for the organisation as it provides the management with clear guidance on the policy of the organisation as well as the procedures and processes which are used to provide training. It is also an essential document for DGCA. During the approval process, it allows the DGCA to assess whether the way the organisation is planning to operate is in line with the existing requirements and accepted practices. Once the training organisation starts functioning, a large part of the surveillance activities of the DGCA will be to ensure that the organisation is functioning as per procedures laid down in the Training and Procedures Manual.

2. General Consideration

In preparing the Training and Procedures Manual, it is important for the ATSTO to ensure that the Training and Procedures Manual is consistent with regulations, other documents issued by the training organisation and in line with and human factors principles. It is also necessary to ensure consistency across all departments within the organisation as well as consistency in use. An integrated approach, recognizing operational documents as a complete system, is the key to success. The manual should be assessed on same lines by DGCA.

3. Contents

The content of the training and procedures manual spelled out in this Appendix, provides a detailed list which expands on the structure expected for the manual. Depending on the size and scope of training provided by the organisation, some of the elements contained in this Appendix can be combined and subdivided further as determined by ATSTO and acceptable to DGCA.

4. Organizing the Manual -

4.1 A Training and Procedures Manual should be organised as far as practicable in the order as enumerated in the Appendix-II A.

4.2 The manual should be consistent with the training organisation's philosophy, policies, procedures and practices.

5. Design

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.

- 5.2 Precise language should be used wherever possible. Significant terms for common items and actions should be maintained throughout the manual. Terms must be clear and easily understood.
- 5.3 Writing style, terminology, formatting, and use of graphics and symbols should be consistent throughout the document.
- 5.4 The manual should include a glossary of terms, acronyms, abbreviations and associated definitions. The glossary should be updated on a regular basis to ensure access to the most recent terminology.
- 5.5 The revision process should be considered when designing the manual for ease of amendment and distribution.
- 5.6 The training and procedures manual should comply with the requirements of the training organisation's quality assurance system.

6. Validation

- 6.1 The Training and Procedures Manual should be reviewed and tested under realistic conditions before its use. 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 organisation should be included in the validation process.
- 6.2 A final review of the manual should ensure that all required topics have been addressed with an appropriate level of details for users. The final review should also confirm compliance with safety regulations, manufacturers' recommendations and the organisation's philosophy, policies, procedures and practices.

7. Deployment

The training organisation should have a system in place to monitor use of the Training and Procedures Manual after it is published. 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. The monitoring system should include formal feedback to obtain inputs from the principal users of the manual and other persons who would be affected by a new or revised policy, procedure or practice.

8. Amendment

- 8.1 The training organisation should develop an effective information gathering, review,

distribution and revision control system to process information obtained from all sources relevant to the organisation.

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

- 8.2.1 In the organisation's policies, procedures and practices;
- 8.2.2 In response to operating experience;
- 8.2.3 To the scope of training provided;
- 8.2.4 To the content of training programs;
- 8.2.5 Resulting from the installation of new equipment;
- 8.2.6 To an approval document or operating certificate; and
- 8.2.7 For the purpose of maintaining standardisation.

8.3 The training and procedures manual should be reviewed in association with other operational documents :

- 8.3.1 On a regular basis (at least once a year);
- 8.3.2 After major events such as mergers, acquisitions, rapid growth, downsizing, etc.;
- 8.3.3 After technology changes, e.g.: the introduction of new equipment; and
- 8.3.4 After changes in concerned regulations.

8.4 Permanent changes to the training and procedures manual shall 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.

8.5 Distribution of amendments and revisions should include 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 organisations or persons to whom the manual has been issued.

8.6 The compliance checklist for reviewing of an ATSTO's Training and Procedures Manual is given in Appendix- IIA.

9. Contents of the Training and Procedures Manual

9.1 The 'Training and Procedures Manual' should include elements as enumerated in the ICAO Annex-1, Appendix-2, paragraph-2.

9.2 Quality assurance system- Provide a brief description of the quality assurance system, as required by ICAO Annex 1, Appendix 2, paragraph 4, with reference to a separate quality assurance manual or, include the full quality assurance system in the Training and Procedures Manual. Contents of the Quality Assurance Manual are given in Appendix III and checklist to ensure compliance of the contents is given in Appendix

III A.

Appendix II A

Training and Procedures Manual Compliance Checklist

Application form for Approval/Renewal/Extension in scope of ATS Training Organisation shall accompanied this compliance checklist. This Checklist shall be used as ATSTO's compliance statement and DGCA inspector checklist for acceptance of Training and Procedures Manual of ATSTO. The ATSTO shall fill up checklist after ensuring each item.

Name of ATSTO: Date: Address of ATSTO: Website & e-mail of ATSTO: Name of Accountable manager: Name of Head of Training: Contact Numbers: (A = Acceptable, U = Unacceptable) TPM =Training & Procedure Manual
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No.	Subject	To be filled by ATSTO	To be filled by DGCA		
			A	U	Remarks
1.	GENERAL	TPM ref.			
1.1	Preamble relating to use and authority of the Training and Procedures Manual.				
1.2	Table of contents.				
1.3	Amendment, revision and distribution.				
	a) Procedures for amendment;				
	b) Record of amendment page;				
	c) Distribution list; and				
1.4	Glossary of significant terms and definitions, including a list of acronyms and/or abbreviations				
2.	TRAINING ORGANISATION				
2.1	Description of the scope of training courses authorized/ to be authorized under the organisation's terms of approval.				
2.2	Organisational structure of the training organisation, including the names of the post holders.				
2.3	Qualifications, responsibilities and reporting hierarchy of management and key operational personnel, including but not limited to:				
	a) Accountable manager				
	b) Head of training/Chief Instructor				

	c) Chief Instructor				
	d) Quality Manager				
	e) Safety Manager (If available)				
	f) Instructors				
	g) Examiners, evaluators and assessors				
2.4	Policies of training organisation, including the ones dealing with :				
	a) The training organisations objectives.				
	b) The selection of operational personnel (Instructor, Examiners, Evaluators etc.) and the maintenance of their qualifications.				
	c) The training programme design and development, including the need for programme.				
	d) The evaluation, selection and maintenance of training material and devices.				
	e) The maintenance of the training facilities and equipments.				
3.	FACILITIES				
3.1	Office space for operational and admin staff				
3.2	Classrooms and Labs-				
	a) Class rooms to conduct the theory classes				
	b) Labs equipped with training devices and material to conduct the practical classes.				
	c) Training aids such as computer, projector/ suitable monitor, multimedia aids, etc				
	d) Language lab as per the operational and training requirements				
3.3	Library-				
	Sufficient copies of subject wise updated study material, DGCA circulars, CARs, AICs, AIP, ICAO Annexes and Docs etc.				
3.4	Simulators (if insufficient space, please attach a separate list)				
	a) Type of simulator				
	b) Purpose of Simulator				
	c) Number of Simulators				
	d) Age since manufacturing				
	e) General condition of simulators				
4.	TRAINING				
4.1	A statement of what the student is expected to be able to do on successful completion of training,				

4.2	Pre-entry requirements -				
	a) Minimum age				
	b) Educational requirements				
4.3	Training curricula of each course, including -				
	a) Theoretical training (knowledge)				
	b) Practical training (skill)				
	c) Human factors (attitude)				
	d) Assessment and examination methods				
4.4	Content of the training programme(s) offered including the courseware and equipment used -				
	a)				
	b)				
	c)				
	d)				
	e)				
	f)				
	g)				
	h)				
4.5	Training records -				
	a) Procedure for maintaining integrity of record and documents i.e. protection from alteration and removal etc.				
	b) Attendance records.				
	c) Persons responsible for checking records and students' log books and procedure thereof.				
	d) The nature and frequency of records checks.				
	e) Standardization of entries in training records.				
	f) Students log books				
4.7	Checks and tests –				
	a) Knowledge progress tests and knowledge tests.				
	b) Test reports and records.				
	c) Procedures for test paper preparation, type of question and assessment, standard required for passing the test.				
	d) Test/retest procedures.				
4.8	Course structure- training phase				
	The curriculum hours for each phase and number of exercises within each phase shall be stated and when progress tests are to be conducted, etc.				

4.9	Course structure integration of curricula				
	The manner in which theoretical knowledge, and simulation training will be integrated so that as the theoretical training and simulation training exercises are carried out, students will be able to apply the knowledge gained from the associated theoretical knowledge.				
4.10	Student progress				
	a) 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 or she must achieve before progressing from one phase to another phase.				
	b) Include minimum experience requirements in terms of hours of practical training/number of exercises, satisfactory exercise completion, etc as necessary before commencing next phase.				
4.11	Instructional methods -				
	The ATSTO requirements, particularly in respect of pre and post exercise briefing, adherence to curricula and training specifications.				
4.12	Standardised check-lists for basic and emergency procedures?				
5.	STAFF TRAINING				
5.1	Appointments of persons responsible for standards/ competence of instructional staff.				
5.2	Initial training of Instructors				
5.3	Refresher training of Instructors				
5.4	Advance training of Instructors				

The information as mentioned on the page and para column has been verified from the Training and Procedure Manual of ATSTO.

(Head of Training/Accountable Manager)
Signature with Date:

(Chief Instructor)
Signature with Date:

For office use only:
Review by DGCA:-

Remarks:

Actions required:

Name of DGCA Team members conducted the review:

Date:

Appendix III

ATSTO's Quality Assurance System

1. Terminology

- 1.1 **Quality** - The totality of features and characteristics of a product or service that bear on its ability to satisfy stated or implied needs.
- 1.2 **Quality of Training** - The outcome of the training that meets stated or implied needs within the framework of set standards.
- 1.3 **Quality Assurance** - All those planned and systematic actions necessary to provide adequate confidence that all training activities satisfy given standards and requirements, including the ones specified by the ATSTO in relevant manuals.
- 1.4 **Quality Manual**- The document containing the relevant information pertaining to the ATSTO's Quality Assurance System.
- 1.5 **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.

2. Objective of a Quality Assurance System

- 2.1 The objective of a Quality Assurance System is to ensure the achievement of results that conforms to the standards set out in the ATSTO's Training and Procedure Manual for continuous improvement of the quality of training provided.
- 2.2 The basis for quality is to establish standards, to plan activities and procedures to support such standards, to train the personnel involved before implementing the documented procedures, and to measure the outcomes of the activities to ensure that they meet standards and expected results. If any non-conformities are found, corrective actions are taken to improve processes and procedures.

3. Elements of a Quality Assurance System

- 3.1 In a quality assurance system of an ATSTO, the following elements should be clearly identifiable:
 - 3.1.1 Organisation's training policy
 - 3.1.2 Training standards
 - 3.1.3 Allocation of responsibility
 - 3.1.4 Resources, organisation and operational processes
 - 3.1.5 System to ensure conformance of training with the policy and standards

- 3.1.6 System for identifying deviations from policy and standards and taking corrective action and
- 3.1.7 Evaluation and analysis of experiences and trends concerning policy, training and flight safety standards, in order to provide feedback into the system for the continual improvement of the quality of training.

4. Contents of ATSTO's Quality Assurance System

4.1 Quality policy and strategy

- 4.1.1 The ATSTO shall describe how the organisation formulates, deploys, and reviews its policy and strategy and turns it into plans and actions applicable to all levels of the organisation. A formal written quality policy statement should be established that is a commitment by the head of the training organisation, as to what the quality assurance system is intended to achieve. The quality policy should reflect the achievement and continued compliance with the rules and regulations, together with any additional standards specified by the ATSTO.
- 4.1.2 The accountable manager of the training organisation will have overall responsibility for the quality assurance system including the frequency, format and structure of the internal management review and analysis activities and may delegate the responsibility for the tasks, defined under paragraph 4.2 below, to a quality manager.

4.2 Quality manager

- 4.2.1 The primary role of the quality manager is to verify, by monitoring activities in the field of training, that the standards as established by the ATSTO and any additional requirements of the DGCA are being carried out properly.
- 4.2.2 The quality manager should be responsible for ensuring that the quality assurance system is properly implemented, maintained and continuously reviewed and improved.
- 4.2.3 The quality manager should:
 - 4.2.3.1 Have direct access to the accountable manager; and
 - 4.2.3.2 Have access to all parts of the ATSTO's organisation.
- 4.2.4 The quality manager should be responsible for ensuring that training relating to the quality assurance system is being conducted.

4.3 Quality assurance system

- 4.3.1 The quality assurance system of ATSTO should ensure compliance with requirements, conformance to standards and adequacy of training activities conducted.
- 4.3.2 Every process that assists the ATSTO to achieve its results should be identified and activities and procedures documented.
- 4.3.3 The ATSTO should specify the basic structure of the quality assurance system applicable to all training activities conducted.

4.4 Feedback System

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

4.5 Documentation

- 4.5.1 Relevant documentation includes the relevant part(s) of the Training and Procedures Manual, which may be included in a separate quality manual.
- 4.5.2 In addition, relevant documentation should also include the following:
 - 4.5.2.1 Quality policy;
 - 4.5.2.2 Terminology;
 - 4.5.2.3 Specified training standards;
 - 4.5.2.4 A description of the organisation;
 - 4.5.2.5 The allocation of duties and responsibilities; and
 - 4.5.2.6 Training procedures to ensure regulatory compliance.
- 4.5.3 The quality assurance audit programme, reflecting:
 - 4.5.3.1 Schedule of the monitoring process;
 - 4.5.3.2 Audit procedures;
 - 4.5.3.3 Reporting procedures;
 - 4.5.3.4 Follow-up and corrective action procedures;

4.5.3.5 Recording system; and

4.5.3.6 Document control.

4.6 Quality assurance audit programme

The quality assurance audit programme should include all planned and systematic actions necessary to provide confidence that all training are conducted in accordance with all applicable requirements, standards and procedures.

4.6.1 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.

4.6.2 Audit

4.6.2.1 An audit is a systematic and independent comparison of the way in which a training is being conducted against the way in which the published training procedures say it should be conducted.

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

4.6.2.2.1 An explanation of the scope of the audit;

4.6.2.2.2 Planning and preparation;

4.6.2.2.3 Gathering and recording evidence; and

4.6.2.2.4 Analysis of the evidence.

4.6.2.3 The various techniques that make up an effective audit are:

4.6.2.3.1 Interviews or discussions with personnel;

4.6.2.3.2 Review of published documents;

4.6.2.3.3 The examination of an adequate sample of records;

4.6.2.3.4 The witnessing of the activities which make up the training; and

4.6.2.3.5 The preservation of documents and the recording of observations.

4.6.3 Auditors

4.6.3.1 ATSTO should decide, depending on the complexity of the training, whether to make use of a dedicated audit team or a single auditor. In any event, the auditor or audit team should have relevant training and/or operational experience.

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

4.6.4 Auditor's independence

4.6.4.1 Auditors should not have any day-to-day involvement in the area of the operation or maintenance activity that is to be audited. An ATSTO may, in addition to using the services of full-time dedicated personnel belonging to a separate quality department, undertake the monitoring of specific areas or activities by the use of part-time auditors.

4.6.4.2 ATSTO whose structure and size does not justify the establishment of full-time auditors, may undertake the audit function by the use of part-time personnel from within its own organisation or from an external source under the terms of an agreement acceptable to the DGCA.

4.6.4.3 In all cases the ATSTO should develop suitable procedures to ensure that persons directly responsible for the activities to be audited are not selected as part of the auditing team. Where external auditors are used, it is essential that any external specialist is familiar with the type of training conducted by the ATSTO.

4.6.4.4 The quality assurance audit programme of the ATSTO should identify the persons within the company who have the experience, responsibility and authority to:

4.6.4.4.1 Perform quality inspections and audits as part of ongoing quality assurance;

4.6.4.4.2 Identify and record any concerns or findings, and the evidence necessary to substantiate such concerns or findings;

- 4.6.4.4.3 Initiate or recommend solutions to concerns or findings through designated reporting channels;
- 4.6.4.4.4 Verify the implementation of solutions within specific time scales; and
- 4.6.4.4.5 Report directly to the quality manager.

4.6.5 Audit scheduling

- 4.6.5.1 A quality assurance audit programme should include a defined audit schedule and a periodic review cycle. The schedule should be flexible, and allow unscheduled audits when trends are identified. Follow-up audits should be scheduled when necessary to verify that corrective action was carried out and that it was effective.
- 4.6.5.2 ATSTO should establish a schedule of audits to be completed during a specific calendar period. All aspects of the training should be reviewed within a period of twelve months in accordance with the programme.
- 4.6.5.3 When ATSTO defines the audit schedule, significant changes to the management, organisation, training, or technologies should be considered, as well as changes to the standards and requirements.

5. Monitoring and corrective action

- 5.1 The aim of monitoring within the quality system is primarily to investigate and judge its effectiveness and thereby to ensure that defined policy and training standards are continuously complied with. Monitoring activity is based upon quality inspection, audit, corrective action and follow-up. The ATSTO should establish and publish a quality procedure to monitor compliance with requirements and conformance to standards on a continuing basis. This monitoring activity should be aimed at eliminating the causes of unsatisfactory performance.
- 5.2 Any non-conformance identified should be communicated to the manager responsible for taking corrective action or, if appropriate, the head of the training organisation. Such non-conformance should be recorded, for the purpose of further investigation, in order to determine the cause and to enable the recommendation of appropriate corrective and preventive action.
- 5.3 The quality assurance audit programme should include procedures to ensure that corrective and preventive actions are developed in response to findings. These quality

5.4 procedures should monitor such actions to verify their effectiveness and that they have been completed. Organisational responsibility and accountability for the implementation of corrective action resides with the department where the finding was identified. The head of the training organisation will have the ultimate responsibility for ensuring, through the quality manager(s), that corrective action has re-established conformance with the standard required by the ATSTO and any additional requirements established by the DGCA or the ATSTO.

5.5 The ATSTO should identify internal and external customers, and monitor their satisfaction by measuring and analysis of feedback.

6. Management review and analysis

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

6.1.1 The results of quality inspections, audits and any other indicators;

6.1.2 The overall effectiveness of the management organisation in achieving stated objectives; and

6.2 Conclusions and recommendations made as a result of the review and analysis should be submitted in writing to the responsible manager for action. The responsible manager should be an individual who has the authority to resolve issues and take action. The head of the training organisation should decide upon the frequency, format, and structure of internal review and critical analysis meetings.

7. Recording

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

7.2 The following records should be retained at least for the period that may be required by national requirement. In the absence of such requirements, a period of three years is recommended:

7.2.1 Audit schedules;

7.2.2 Quality inspection and audit reports;

7.2.3 Responses to findings;

7.2.4 Corrective and preventive action reports;

7.2.5 Follow-up and closure reports; and

7.2.6 Management review and analysis reports.

8. Quality assurance responsibility for satellite ATSTOs

8.1 An ATSTO may decide to sub-contract certain activities to external organisations subject to the approval of the DGCA.

8.2 The ultimate responsibility for the training provided by the satellite ATSTO always remains with the ATSTO. A written agreement should exist between the ATSTO and the satellite ATSTO clearly defining the quality to be provided. The satellite ATSTO's activities relevant to the agreement should be included in the ATSTO's quality assurance audit programme.

8.3 The ATSTO should ensure that the satellite ATSTO has the necessary authorization/approval when required, and commands the resources and competence to undertake the task. If the ATSTO requires the satellite ATSTO to conduct activity that exceeds the satellite ATSTO's authorization/approval, the ATSTO is responsible for ensuring that the satellite ATSTO's quality assurance takes account of such additional requirements.

9. Quality system training

9.1 Correct and thorough training is essential to optimize quality in every organisation. In order to achieve significant outcomes of such training the ATSTO should ensure that all staff understands the objectives as laid down in the quality manual.

9.2 Those responsible for managing the quality assurance system should receive training covering:

9.2.1 An introduction to the concept of quality assurance system;

9.2.2 Quality management;

9.2.3 Concept of quality assurance;

9.2.4 Quality manuals;

9.2.5 Audit techniques; and

9.2.6 Reporting and recording.

10. The way in which the quality system will function in the ATSTO

Time should be provided to train every individual involved in quality assurance and for briefing the remainder of the employees. The allocation of time and resources should be governed by the size and complexity of the operation concerned.

11. Sources of personnel training

Quality assurance courses are available from the various national or international standards institutions, and an ATSTO should consider whether to offer such courses to those likely to be involved in the management of the Quality Assurance System. Organisations with sufficient appropriately qualified staff should consider whether to carry out in-house training.

Appendix III A

Checklist for review of ATSTO Quality Assurance Manual

Application form for Approval/Renewal/Extension in scope of ATS Training Organisation shall accompanied this compliance checklist. This Checklist shall be used as ATSTO's compliance statement and DGCA inspector checklist for acceptance of Quality Assurance Manual of ATSTO. The ATSTO shall fill up checklist after ensuring each item.

Name of ATSTO: Date: Address of ATSTO: Website & e-mail of ATSTO: Name of Accountable manager: Name of Head of Training/Chief Instructor: Contact Numbers: (A = Acceptable, U = Unacceptable)
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S. No	Subject	Quality Assurance Manual reference To be filled by ATSTO Office	To be filled by DGCA Office		
			A	U	REMARKS
1.	Quality Policy and Strategy – Formal policy statement from head of training? a) Explain what the system is intended to achieve? b) Cite continued compliance with the ATSTO's standards? c) Does accountable manager have overall responsibility for the Quality System?				
2.	Purpose – Statement that quality system will enable the ATSTO to monitor compliance with: a) Relevant sections of CARs? b) Training and procedures manual? c) Any other standards established by the ATSTO?				
3.	Quality Manager, a) Do responsibilities include activities that verify: 1) Standards required by DGCA and ATSTO are being carried out properly under the supervision of head of training/chief instructor?				

	<p>2) Quality assurance programme is properly implemented, maintained and continuously renewed and improved?</p> <p>3) Has access to head of training and all parts of ATSTO?</p> <p>b) Are head of training & quality manager positions combined?</p>				
4.	<p>Quality System – Ensure compliance with and adequacy of training activities conducted?</p> <p>a) Basic structure specified?</p> <p>b) Structured according to size and complexity of ATSTO?</p>				
5.	<p>Terminology – Has the applicant included the required terminology</p>				
6.	<p>Feedback System, a) Corrective action identified and addressed? b) Responsible person identified? c) Procedure for when corrective action not completed within stated time limit?</p>				
7.	<p>Relevant Documentation a) Relevant parts of training and procedures manual? b) Quality policy? c) Terminology? d) Specified training standards? e) A description of the organisation? f) Allocation of duties and responsibilities? g) Training procedures to ensure regulatory ATSTO compliance? h) Schedule of the monitoring process? i) Audit procedures? j) Follow-up and corrective action procedures? k) Recording system? l) The training syllabus? m) Document control?</p>				

8.	Quality Assurance Programme, Ensures that all training is conducted in accordance with all applicable requirements, standards and procedures?				
9.	Quality Inspection – Ensures through observation that established training procedures and requirements are followed during the accomplishment of event and that required standard was met?				
10.	Audit – Procedure for explaining the scope of the audit? a) Procedure for planning and preparation? b) Process for gathering and recording evidence? c) Process for analysis of the evidence?				
11.	Auditor’s Independence a) No day-to-day involvement in the area to be audited? b) Procedures developed to ensure auditor selected has no involvement with the activities to be audited? c) Full time auditor? d) Part time auditor? e) Internal? f) External? g) Persons within company authorized to conduct quality inspections and audits, identify and record findings and concerns, initiate recommended solutions to concerns or findings , verify the implementation of solutions and report directly to the Quality Manager identified?				
12.	Audit Scope – Are the following areas included in the scope of the ATSTO’s audits: a) Organisation b) Plans and objectives c) Training Procedures d) Manuals and records e) Maintenance accomplishment				
13.	Audit Scheduling a) Defined audit schedule? b) Periodic review cycle? c) Allow for unscheduled audits? d) Allow for follow-up audits?				

	<p>e) All aspects of training reviewed in 12-month period? f) 12-month extension period accepted by DGCA?</p>				
14.	<p>Monitoring and Corrective Action – Procedure established to monitor regulatory compliance on a continuing basis? a) Is non-compliance communicated to the relevant manager? b) Is non-compliance recorded? c) Are corrective actions developed in response to findings? d) Are corrective actions monitored to verify that they have been completed? e) Are corrective actions monitored to verify effectiveness?</p>				
15.	<p>Corrective Action – Following each quality inspection/audit, is: a) Immediate need for corrective action established? b) Origin of the finding established? c) Individual/department responsible for implementing corrective action identified? d) Accountable manager allocating resources where appropriate?</p> <p>Is the Quality Manager: a) Verifying that the responsible manager takes corrective action? b) Evaluating the effectiveness of corrective action through follow up?</p>				
16.	<p>Management Evaluation a) Prevention of non-conformities? b) Does the accountable manager determine frequency, format and structure of management evaluation activities?</p>				
17.	<p>Recording – Process established for retaining the following records for 5 years: a) Audit schedules? b) Quality inspection and audit reports? c) Responses to findings? d) Corrective action reports? e) Follow-up and closure reports? f) Management evaluation reports?</p>				

18.	<p>Quality Assurance Responsibility for Satellite ATSTOs</p> <p>Are any ATSTO activities contracted out to external organisations?</p> <p>a) Does a written agreement exist between the ATSTO and the satellite ATSTO?</p> <p>b) Are the satellite ATSTO's quality related activities included in the primary ATSTO's quality assurance programme?</p>				
19.	<p>Quality System Training –</p> <p>For those responsible for managing the quality system, does training cover:</p> <p>a) An introduction to the quality system concept?</p> <p>b) Quality management?</p> <p>c) Concept of quality assurance?</p> <p>d) Quality manuals?</p> <p>e) Audit techniques?</p> <p>f) Reporting and recording?</p> <p>g) The way the quality system will function in the ATSTO?</p> <p>For those not responsible for managing the quality system, does training cover:</p> <p>a) A briefing on the way the quality system will function in the ATSTO?</p>				
20.	<p>Sources of Training</p> <p>a) External?</p> <p>b) Internal?</p>				

The information as mentioned on the page and para column has been verified from the Training and Procedure Manual of ATSTO.

(Accountable Manager)
 Signature with Date:

(Chief Instructor)
 Signature with Date:

For office use only:

Review by DGCA Inspector as under:-
 Remarks:

Actions required:

Name of DGCA Inspector conducted the review:

Date: