



**GOVERNMENT OF INDIA
DIRECTORATE GENERAL OF CIVIL AVIATION
OPP. SAFDARJUNG AIRPORT, NEW DELHI – 110 003**

DRAFT - CAR 147

APPROVED MAINTENANCE TRAINING ORGANISATION

(TYPE TRAINING)

Issue 1, Revision 0

_____, 2011

**APPROVED MAINTENANCE TRAINING ORGANISATION
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GENERAL

FOREWORD

Rule 133B of the Aircraft rule 1937 stipulates the requirements necessary engaged in the Type training for Aircraft maintenance to be approved.

CAR 147 specifies the requirements to be complied by organizations and persons involved in the training of Aircraft maintenance engineering in order to demonstrate the capability and means of discharging the obligation and associated privileges thereof. The CAR 147 also specifies conditions of issuing, renewing, suspending, revoking certificates attached to the approval.

CAR 147 is applicable to all Type/task training organization. CAR 147 is based on EASA part 147 requirements. This CAR is initially made applicable to organizations approved under; CAR 145 to maintain Aircraft not less than 5700 Kg AUW, EASA/FAA under Part 147, manufacturing large aircraft or their engines. The existing approval to type training organization under Category "G" of Section 2, Series 'E' Part VIII remains void.

This CAR is made applicable from 1st January 2012; the time given will provide sufficient time for the industry to adapt the new CAR 147 requirement and shall come into force from 1st January 2012. This CAR provides the technical standards and guidelines for the approval of maintenance training organizations for type/task issued under the provision of 133A of Aircraft rules 1937.

RECORD OF REVISION

Initial Issue (Revision 0)

The CAR 147 provides the common technical standards and guidelines to conduct recognized type training courses, to conduct examinations and to issue training certificates with effective from 1st January 2012. This CAR supersedes the requirements of type training organization under Category “G” of Section 2, Series ‘E’ Part VIII.

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147.1 Applicability

For the purpose of this CAR, the competent authority shall be DGCA.

1. This CAR is applicable for;
 - (i) Maintenance organizations approved under CAR 145 to maintain Aircraft not less than 5700 Kg AUW.
 - (ii) Organizations approved by EASA/FAA under Part 147.
 - (iii) Organization manufacturing large aircraft or their engines.
2. *Reserved*

SECTION A

SUBPART A

GENERAL

147.A.05 Scope

This section establishes the requirements to be met by organizations seeking approval to conduct type training and examination as specified in CAR-66.

147.A.10 General

A training organization shall be an organization or part of an organization registered as a legal entity.

147. A.15 Application

(a) An application for the issue or change of an approval shall be made to DGCA in a form and manner established by DGCA and prescribed in CA Form 12 given in Appendix IV of this CAR. The application shall be accompanied with parawise CAR 147 Compliance Report.

(b) An application for an approval or change to an approval shall include the following information:

1. the registered name and address of the applicant;
2. the address of the organisation requiring the approval or change to the approval;

3. the intended scope of approval or change to the scope of approval;
4. the name and signature of the accountable manager;
5. the date of application;

SUBPART B

ORGANISATIONAL REQUIREMENTS

147.A.100 Facility requirements

(a) The size and structure of facilities shall ensure protection from the prevailing weather elements and proper operation of all planned training and examination on any particular day.

(b) Fully enclosed appropriate accommodation separate from other facilities shall be provided for the instruction of theory and the conduct of knowledge examinations.

1. The maximum number of students undergoing knowledge training during any training course shall not exceed 30.

2. The size of accommodation for examination purposes shall be such that no student can read the paperwork or computer screen of any other student from his/her position during examinations.

(c) The paragraph (b) accommodation environment shall be maintained such that students are able to concentrate on their studies or examination as appropriate, without undue distraction or discomfort.

(d) *Reserved*

(e) In the case of an aircraft type/task training course access, shall be provided to appropriate facilities containing examples of aircraft type as specified in 147.A.115(d).

(f) The maximum number of students undergoing practical training during any training course shall not exceed 15 per supervisor or assessor.

(g) Office accommodation shall be provided for instructors, knowledge examiners and practical assessors of a standard to ensure that they can prepare for their duties without undue distraction or discomfort.

(h) Secure storage facilities shall be provided for examination papers and training records. The storage environment shall be such that documents remain in good condition for the retention period as specified in 147.A.125. The storage facilities and office accommodation may be combined, subject to adequate security.

- (i) A library shall be provided containing all technical material appropriate to the scope and level of training under-taken.

147.A.105 Personnel requirements

- (a) The organization shall appoint an accountable manager who has corporate authority for ensuring that all training commitments can be financed and carried out to the standard required by this CAR.
- (b) A person or group of persons, whose responsibilities include ensuring that the maintenance training organization is in compliance the requirements of this CAR, shall be nominated. Such person(s) must be responsible to the accountable manager. The senior person or one person from the group of persons may also be the accountable manager subject to meeting the requirements for the accountable manager as defined in paragraph (a).
- (c) The maintenance training organization shall contract sufficient staff to plan/perform knowledge and practical training, conduct knowledge examinations and practical assessments in accordance with the approval.
- (d) By derogation to paragraph (c), when another organisation is used to provide practical training and assessments, such other organisation's staff may be nominated to carry out practical training and assessments.
- (e) Any person may carry out any combination of the roles of instructor, examiner and assessor, subject to compliance with paragraph (f).
- (f) The experience and qualifications of instructors, knowledge examiners and practical assessors shall be as per addendum 1 to CAR 147.
- (f) The knowledge examiners and practical assessors shall be specified in the Organization exposition for the acceptance of such staff.
- (g) Instructors and knowledge examiners shall undergo updating training at least every 24 months relevant to current technology, practical skills, human factors and the latest training techniques appropriate to the knowledge being trained or examined.

147.A.110 Records of instructors, examiners and assessors

- (a) The organisation shall maintain a record of all instructors, knowledge examiners and practical assessors. These records shall reflect the experience and qualification, training history and any subsequent training undertaken.
- (b) Terms of reference shall be drawn up for all instructors, knowledge examiners and practical assessors.

147. A.115 Instructional equipment

- (a) Each classroom shall have appropriate presentation equipment of a standard that ensures students can easily read presentation text/drawings/diagrams and figures from any position in the classroom.

Presentation equipment shall include representative synthetic training devices to assist students in their understanding of the particular subject matter where such devices are considered beneficial for such purposes.

(b) *Reserved*

(c) *Reserved.*

(d) The aircraft type training organisation as specified in 147.A.100(e) must have access to the appropriate aircraft type. Synthetic training devices may be used when such synthetic training devices ensure adequate training standards.

147.A.120 Maintenance training material

(a) Maintenance training course material shall be provided to the student and cover as applicable:

1. *Reserved*

2. the type course content required by CAR-66 for the relevant aircraft type and aircraft maintenance licence category or subcategory.

(b) Students shall have access to examples of maintenance documentation and technical information of the library as specified in 147.A.100(i).

147.A. 125 Records

The organisation shall keep all student training, examination and assessment records for at least five years following completion of the particular student's course.

147.A.130 Training procedures and quality system

(a) The organization shall establish procedures acceptable to the DGCA to ensure proper training standards and compliance with all relevant requirements in this CAR.

(b) The organization shall establish a quality system including:

1. an independent audit function to monitor training standards, the integrity of knowledge examinations and practical assessments, compliance with and adequacy of the procedures, and

2. a feedback system of audit findings to the person(s) and ultimately to the accountable manager referred to in 147.A.105(a) to ensure, as necessary, corrective action.

147. A.135 Examinations

(a) The examination staff shall ensure the security of all questions.

(b) Any student found during a type examination to be cheating or in possession of material pertaining to the examination subject other than the

examination papers and associated authorized documentation shall be disqualified from taking the examination and may not take any examination for at least 12 months after the date of the incident. The DGCA shall be informed of any such incident together with the details of any enquiry within one calendar month.

(c) Any examiner found during a type examination to be providing question answers to any student being examined shall be disqualified from acting as an examiner and the examination declared void. The DGCA must be informed of any such occurrence within one calendar month.

147. A.140 Maintenance training organisation exposition

(a) The organization shall provide an exposition for use by the organization describing the organization and its procedures and containing the following information:

1. a statement signed by the accountable manager confirming that the maintenance training organization exposition and any associated manuals define the maintenance training organization's compliance with this Part and shall be complied with at all times.
2. The title(s) and name(s) of the person(s) nominated in accordance with 147.A.105 (b).
3. the duties and responsibilities of the person(s) specified in subparagraph 2, including matters on which they may deal directly with the DGCA on behalf of the maintenance training organization.
4. a maintenance training organization chart showing associated chains of responsibility of the person(s) specified in paragraph (a)(2).
5. a list of the training instructors, knowledge examiners and practical assessors.
6. a general description of the training and examination facilities located at each address specified in the maintenance training organization's approval certificate, and if appropriate any other location, as required by 147.A.145(b).
7. a list of the maintenance training courses which form the extent of the approval.
8. the maintenance training organization's exposition amendment procedure.
9. the maintenance training organization's procedures, as required by 147.A.130(a).
10. the maintenance training organization's control procedure, as required by 147.A.145(c), when authorised to conduct training, examination and assessments in locations different from those specified in 147.A.145(b).

11. a list of the locations pursuant to 147.A.145(b).
 12. a list of organizations, if appropriate, as specified in 47.A.145(d).
- (b) The maintenance training organization's exposition and any subsequent amendments shall be approved by the DGCA / RAO.
- (c) Notwithstanding paragraph (b) minor amendments to the exposition may be approved through an exposition procedure (hereinafter called indirect approval).

147. A.145 Privileges of the maintenance training organisation

- (a) The maintenance training organization may carry out the following as permitted by and in accordance with the maintenance training organization exposition:
1. *Reserved*
 2. aircraft type/task training courses in accordance with CAR-66.
 3. the examinations on behalf of the DGCA.
 4. the issue of certificates in accordance with Appendix VII following successful completion of the approved aircraft type training courses.
- (b) Training, knowledge examinations and practical assessments may only be carried out at the locations identified in the approval certificate and/or at any location specified in sub paragraphs (a)(2) and (a)(3), as applicable.
- (c) *Reserved*
- (d) 1. The maintenance training organisation may subcontract the type training and related examinations to a non maintenance training organisation only when under the control of the maintenance training organisation quality system.
2. *Reserved*
 3. The subcontracting of type training and examination is limited to powerplant and avionic systems.
- (e) An organization may not be approved to conduct only examinations unless approved to conduct training.

147. A.150 Changes to the maintenance training organization

- (a) The maintenance training organization shall notify the DGCA of any proposed changes to the organization that affect the approval before any such change takes place, in order to determine continued compliance with this CAR and to amend if necessary the maintenance training organization approval certificate.

(b) The DGCA may prescribe the conditions under which the maintenance training organization may operate during such changes unless the DGCA determines that the maintenance training organization approval must be suspended.

(c) Failure to inform the DGCA of such changes may result in suspension or revocation of the maintenance training organization approval certificate backdated to the actual date of the changes.

147.A.155 Continued validity

(a) An approval shall be issued for a validity period of one year. It shall remain valid subject to:

1. the organization remaining in compliance with this CAR, in accordance with the provisions related to the hand-ling of findings as specified under 147.B.130; and
2. the DGCA officials being granted access to the organization to determine continued compliance with this CAR and
3. the certificate not being surrendered or revoked.

(b) Upon surrender or revocation, the approval shall be returned to the DGCA.

147. A. 160 Findings

(a) A level 1 finding is one or more of the following:

1. any significant non-compliance with the examination process which would invalidate the examination(s),
2. failure to give the DGCA officials access to the organization's facilities during normal operating hours after two written requests,
3. the lack of an accountable manager,
4. a significant non-compliance with the training process.

(b) A level 2 finding is any non-compliance with the training process other than level 1 finding.

(c) After receipt of notification of findings according to 147.B.130, the holder of the maintenance training organization approval shall define a corrective action plan and demonstrate corrective action to the satisfaction of the DGCA within a period agreed by DGCA.

SUBPART C

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Reserved

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SUBPART D***AIRCRAFT TYPE/TASK TRAINING*****147. A. 300 Aircraft type/task training**

A maintenance training organization shall be approved to carry out CAR-66 aircraft type and/or task training subject to compliance with the standard specified in 66.A.45.

147.A.305 Aircraft type examinations and task assessments

A maintenance training organization approved in accordance with 147.A.300 to conduct aircraft type training shall conduct the aircraft type examinations or aircraft task assessments specified in CAR-66 subject to compliance with the aircraft type and/or task standard specified in CAR-66.A.45.

Acceptable Means of Compliance to CAR 147

SECTION A

AMC 147.A.15 Application

The application form should contain the information required on the CA Form 12.

AMC 147.A.100 (i) Facility requirements

1. *Reserved*
2. *Reserved*

AMC 147.A.105 Personnel requirements

1. The larger maintenance training organization (an organization with the capacity to provide training for 50 students or more) should appoint a training manager with the responsibility of managing the training organization on a day to day basis. Such person could also be the Accountable manager. In addition, the organization should appoint a quality manager with the responsibility of managing the quality system as specified in paragraph 147.A.130 (b) and an examination manager with the responsibility of managing the relevant CAR 147 Subpart D examination system. Such person(s) may also be an instructor and/or examiner.

2. The smaller maintenance training organization (an organization with the capacity to provide training for less than 50 students) may combine any or all of the sub-paragraph (1) positions subject to the DGCA verifying and being satisfied that all functions can be properly carried out in combination.

3. When the organization is also approved against other CARs which contain some similar functions then such functions may be combined.

AMC 147.A.105(b)and (g) Personnel requirements

With the exception of the accountable manager, a CA Form 4 should be completed for each person nominated to hold a position required by 147.A.105 (b). An example of a CA Form 4 is included in Appendix II.

AMC 147.A.105(f) Personnel requirements

Any person currently accepted by the competent authority in accordance with CAR Section 2 SERIES 'E', PART VIII – “Category G” training School, prior to CAR 147 coming into force may continue to be accepted in accordance with 147.A.105(f)..

AMC 147.A.105(h) Personnel requirements

Updating training should normally be of 35 hours duration but may be adjusted to the scope of training of the organization and particular instructor/examiner

AMC 147.A.115(c) Instructional equipment

1. *Reserved*

2. *Reserved*

3. “Access” may be interpreted to mean, in conjunction with the facilities requirement of 147.A.100(d), that there may be an agreement with a maintenance organisation approved under CAR 145 to access such parts, etc

AMC 147.A.120(a) Maintenance training material

Training course notes, diagrams and any other instructional material should be accurate. Where an amendment service is not provided a written warning to this effect should be given.

AMC 147.A.130(b) Training procedures and quality system

1. The independent audit procedure should ensure that all aspects of CAR-147 compliance should be checked at least once in every 12 months and may be carried out as one complete single exercise or subdivided over a 12-month period in accordance with a scheduled plan.
2. In a small maintenance training organization the independent audit function may be contracted to another maintenance training organization approved under CAR -147 or a competent person acceptable to the DGCA. Where the small training organization chooses to contract the audit function it is conditional on the audit being carried out twice in every 12 month period with one such audit being unannounced.
3. Where the maintenance training organization is also approved to another CAR requiring a quality system, then such quality systems may be combined.
4. *Reserved*
5. The independent audit system should be established by always ensuring that audits are carried out by personnel not responsible for the function or procedure being checked.

AMC 147.A.135 Examinations

1. Examinations may be computer or hard copy based or a combination of both.
2. The actual questions to be used in a particular examination should be determined by the examination staff.

AMC 147.A.140 Maintenance training organization exposition

1. A recommended format of the organization exposition is included in Appendix 1.
2. When the maintenance training organisation is approved in accordance with any other CAR which also requires an exposition, the exposition required by the other CAR may form the basis of the maintenance training organisation exposition in a combined document., as long as the other exposition contains the information required by 147.A.140 and a cross reference index is included based upon Appendix I.
3. *Reserved*
4. The DGCA may approve a delegated Organization exposition approval system for all changes other than those affecting the approval.

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AMC 147.A.300 Aircraft type/task training

1. Aircraft type training may be sub-divided in airframe type training, powerplant type training, or avionic systems type training. A maintenance training organization approved under CAR-147 may be approved to conduct airframe type training only, power plant type training only or avionics systems type training

2. Airframe type training means type training including all relevant aircraft structure and systems excluding the power plant.
3. Powerplant type training means type training on the bare engine, including the build-up to a quick engine change unit.
4. The interface of the engine/airframe systems should be addressed by either airframe or powerplant type training
5. Avionic systems type training means type training on avionics systems covered by but not necessarily limited to ATA (Air Transport Association) chapters 22, 23, 25, 27, 31, 33, 34, 45, 46, 73 and 77 or equivalent.

Guidance Material

SECTION A

GM to 147.A.10 General

Such an organization may conduct business from more than one address and may hold more than one CAR approval.

GM to 147.A.100(i) Facility requirements

Where the organization has an existing library of regulations, manuals and documentation required by another CAR it is not necessary to duplicate such a facility subject to student access being under controlled supervision.

GM to 147.A.105 (c) Personnel requirements

The maintenance training organization should have a nucleus of permanently employed staff to undertake the minimum amount of maintenance training proposed but may contract, on a part-time basis, instructors for subjects which are only taught on an occasional basis

It is recommended that potential instructors be trained in instructional techniques

GM to 147.A.105(g) Personnel requirements

Examiners should demonstrate a clear understanding of the examination standard required by CAR-66 and have a responsible attitude to the conduct of examinations such that the highest integrity is ensured.

GM to 147.A.105(h) Personnel requirements

1. Records should show for each instructor/examiner when the updating training was scheduled and when it took place.

2. The updating training may be subdivided during the 24 months into more than one element and may include such activities as attendance at relevant lectures and symposiums.

GM to 147.A.110 Records of instructors, examiners and assessors

Instructors, knowledge examiners and practical assessors should be provided with a copy of their terms of reference.

GM to 147.A.115(a) Instructional equipment

1. Synthetic training devices are working models of a particular system or component and include computer simulations.
2. A synthetic training device is considered beneficial for complex systems and fault diagnostic purposes.

GM to 147.A.130 (b) Training procedures and quality system

1. The primary objective of the quality system is to enable the training organization to satisfy itself that it can deliver properly trained students and that the organization remains in compliance with CAR 147.
2. The independent audit is a process of routine sample checks of all aspects of the training organization's ability to carry out all training and examinations to the required standards. It represents an overview of the complete training system and does not replace the need for instructors to ensure that they carry out training to the required standard
3. A report should be raised each time an audit is carried out describing what was checked and any resulting findings. The report should be sent to the affected department(s) for rectification action giving target rectification dates. Possible rectification dates may be discussed with the affected department(s) before the quality department confirms such dates on the report. The affected

department(s) should rectify any findings and inform the quality department of such rectification

4. A large training organization (an organization with the capacity to provide training for 50 students or more)]should have a dedicated quality audit group whose sole function is to conduct audits, raise finding reports and follow up to ensure that findings are being rectified. For the small training organization (an organization with the capacity to provide training for less than 50 students) it is acceptable to use competent personnel from one section/department not responsible for the function or procedure to check the section/department that is responsible subject to the overall planning and implementation being under the control of the quality manager.

5. The management control and follow up system should not be contracted to outside persons. The principal function is to ensure that all findings resulting from the Quality audit are corrected in a timely manner and to enable the Accountable manager to remain properly informed of the state of compliance. Apart from rectification of findings the Accountable manager should hold routine meetings to check progress on rectification except that in the large training organization such meetings may be delegated on a day to day basis to the quality manager as long as the accountable manager meets at least once per year with the senior staff involved to review the overall performance.

GM to 147.A.135 Examinations

The DGCA will determine when or if the disqualified examiner may be reinstated.

SECTION B – PROCEDURE FOR DGCA

Sub Part A

General

1 Scope (147.B.05)

This section establishes the administrative requirements to be followed by the Directorate General of Civil Aviation (DGCA) for the application and the enforcement of the requirements in Section A, “Technical Requirements” of CAR-147 – Maintenance training organisation approval.

2 Responsible authority – Role of the Directorate General of Civil Aviation (147.B.10)

General

The DGCA is empowered by the Central Government to perform oversight of aircraft related safety functions, including the approval of maintenance training organisations in accordance with CAR-147.

Resources

The DGCA employs administrative and technical staff to administer applications for maintenance training organisation approvals. The staff are deployed in the Airworthiness Directorate Headquarters, Regional Offices and the Central Examination Organisation.

Procedures

The approval process is carried out in accordance with detailed procedures contained in the Airworthiness Procedures Manual and these will be referred to in the applicable paragraphs of this procedure. The procedures are subject to periodic review and revision, as required, to ensure continued compliance with CAR-147.

Qualification and training

All DGCA technical officers in the Airworthiness Directorate are appropriately qualified and trained to enable them to carry out their duties. Staff recruitment policy and training requirements are specified in Chapters 1, 2 and 3 of the Airworthiness Procedures Manual.

3 Acceptable means of compliance (147.B.15)

Acceptable means of compliance (AMC) to Section A of CAR-147 has been published by the DGCA. Where the acceptable means of compliance are complied with, the related requirements of CAR-147 are considered to be met.

4 Record-keeping (147.B.20)

Records pertaining to the approval of maintenance training organisations are kept by the DGCA for traceability and accountability purposes.

The records kept are listed below:

- a) The application for the issue or a change to a maintenance training organisation approval ;
- b) The organisation approval certificate including any changes;
- c) A copy of the audit program listing when audits are due and when audits are carried out.
- d) Continued oversight records including all audit records
- e) Copies of all relevant correspondence;
- f) Details of any enforcement actions;
- g) any report from other competent authorities relating to the oversight of the organisation;
- h) Organisation exposition and amendments.

The minimum retention period for the records referred to in a) to h) above shall be ten years.

5 Exemptions (147.B.25)

No exemptions will be issued by the DGCA against the requirements of CAR-147.

Sub part B

Issue of an approval

6 Procedure for approval and changes to the approval (147.B.110)

- a) An application for an initial approval or change to an approval is made on DGCA CA Form 02.

Applications for organisations located in India shall be made to the relevant DGCA Regional or Sub Regional Office.

Applications for organisations located in foreign countries shall be made to DGCA Headquarters.

The application shall include the following:

- i) The requisite fee as prescribed in the Aircraft Rules 1937 Rule 133C
 - ii) A copy of the Maintenance Training Organisation Exposition as prescribed in CAR-147.A.140
 - iii) Completed DGCA CA Form 04 for each person nominated to hold a position required by CAR-147.A.105(b).
- b) Upon receipt of an application the DGCA will:
- 1 Review the maintenance training organisation exposition; and
 - 2 Verify the organisation's compliance with the requirements of CAR-147
- The detailed procedures for the approval are specified in the Airworthiness Procedures Manual Chapter 21.
- c) The DGCA will record all findings of non compliance identified during their investigation and these will be notified in writing to the applicant.
 - d) All findings are required to be closed to the satisfaction of the DGCA before approval is issued.
 - e) When satisfied the DGCA will issue an approval certificate with the approval number to the organisation. The Regional/Sub Regional Office will forward details of approvals issued to DGCA Headquarters.

7 Continued validity procedure (147.B.120)

- a) CAR-147 approvals issued by the DGCA are valid for a period of 12 months.
- b) Approval holders are required to apply for the continuation of their approval using DGCA CA Form 02 together with requisite fee as prescribed in the Aircraft Rules 1937 Rule 133C.
- c) The DGCA procedure for revalidation of the approval will follow the procedures for initial approval. The organisation will be inspected to verify compliance with all of the requirements of CAR-147

8 Maintenance training organisation approval certificate (147.B.125)

The format of the approval certificate is specified in Appendix VI.

9 Findings (147.B.130)

- a) Findings of non-compliance with the requirements of CAR-147 will be recorded as level 1 or level 2 findings. The classification of findings will be made in

accordance with Enforcement Circular No 1/2009 and Airworthiness Advisory Circular No 2 of 2011.

- b) Failure to complete the rectification of any level 1 finding within three days of written notification shall entail revocation, suspension or limitation by the DGCA of the maintenance training organisation approval in whole or in part.
- c) Failure to complete the rectification of a level 2 finding within the timescale agreed with the DGCA shall entail revocation, suspension or limitation by the DGCA of the maintenance training organisation approval in whole or in part.

Sub part C

Enforcement Action

10 Revocation, suspension and limitation of the maintenance training organisation approval. (147.B.200)

- a) The DGCA shall suspend an approval on reasonable grounds in the case of a potential safety threat or suspend, revoke or limit an approval pursuant to Paragraph 9.
- b) The procedures to be followed for enforcement action are specified in Chapter 10 of the Airworthiness Procedures Manual.

Appendix– I**MAINTENANCE TRAINING ORGANISATION EXPOSITION****Maintenance training organisation exposition (MTOE)**

1. The following subject headings form the basis of the MTOE required by CAR 147.A.140.
2. Whilst this format is recommended it is not mandatory to prepare the MTOE in this manner as long as a cross-reference index is included in the MTOE and the Part 1 items remain in Part1.
3. Part 2, 3 and 4 materials may be produced as separate detailed manuals subject to the main exposition containing the part 2, 3 and 4 fundamental principles and policy on each item. It is then permitted to delegate the approval of these separate manuals to the senior person but this fact and the procedure should be specified in paragraph 1.10.
4. Where an organisation is approved in accordance with any other Civil Aviation Requirements, which require an exposition it is acceptable to combine the exposition requirements by merging the Part 1 items and adding the parts 2, 3 and 4. When this method is used it is essential to include the cross reference index of Part 4 item 4.3.

PART 1 – MANAGEMENT

- 1.1 Corporate commitment by accountable manager
- 1.2 Management personnel
- 1.3 Duties and responsibilities of management personnel, instructors, knowledge examiners and practical assessor
- 1.4 Management personnel organisation chart
- 1.5 List of instructional and examination staff
Note: A separate document may be referenced
- 1.5 List of approved addresses
- 1.6 Reserved
- 1.7 Reserved
- 1.8 General description of facilities at paragraph 1.6 addresses

- 1.9 Specific list of courses approved by the DGCA
- 1.10 Notification procedures regarding changes to organization
- 1.11 Exposition and associated manuals amendment procedure

PART 2 – TRAINING AND EXAMINATION PROCEDURES

- 2.1 Organisation of courses
- 2.2 Preparation of course material
- 2.3 Preparation of classrooms and equipment
- 2.4 Preparation of Workshops/Maintenance facilities and equipment
- 2.5 *Reserved*
- 2.6 Records of training carried out
- 2.7 Storage of training records
- 2.8 Training at locations not listed in paragraph 1.6
- 2.9 Organisation of examinations
- 2.10 Security and preparation of examination material
- 2.11 Preparation of examination rooms
- 2.12 Conduct of examinations
- 2.13 Control of basic practical assessments
- 2.14 Marking and record of examinations
- 2.15 Storage of examination records
- 2.16 *Reserved*
- 2.17 *Reserved*

PART 3 – TRAINING SYSTEM QUALITY PROCEDURES

- 3.1 Audit of training
- 3.2 Audit of examinations

- 3.3 Analysis of examination results
- 3.4 Audit and analysis remedial action
- 3.5 Accountable manager annual review
- 3.6 Qualifying the instructors
- 3.7 Qualifying the examiners
- 3.8 Records of qualified instructors & examiners

PART 4 – APPENDICES

- 4.1 Example of documents and form used
- 4.2 Syllabus of each training course
- 4.3 Cross reference Index - if applicable

DRAFT

Directorate General of Civil Aviation

Details of Management Personnel required to be accepted as specified in CAR-147

1. Name :

2. Position :

3. Qualification relevant to the item(2) position :

4. Work experience relevant to the item(2) position :

5. Signature :

6. Date :

On completion, please send this form under confidential cover to DGCA

For DGCA use only

Name and signature of authorized DGCA Staff member accepting this person:

Signature	:		Date	:	
Name	:		Office	:	

APPENDIX- III

DRAFT

CAR -147 APPROVAL RECOMMENDATION REPORT		CA- FORM 22
Initial ()		Change ()
Name of Organisation:		
Approval Reference:		
CA-Form 22 Reference:		
Part 1 : General		
Name of Organisation:		
Approval Reference:		
Requested Approval Rating/		
CA-Form 11 dated :		
Other approvals held. (If app.)		
Address of Facility Audited:		
Audit period: From to:		
Date(s) of Audit(s):		
Audit reference(s):		
Persons interviewed:		
DGCA surveyor:	Signature(s):	
DGCA office:		
Date of CA-Form 22 Part 1 completion		

CAR-147 APPROVAL RECOMMENDATION REPORT
CA-FORM 22

Part 2: CAR-147 Compliance Audit Review;

The five columns may be labeled and used as necessary to record the approved training/examinations, facility, including subcontractor's, reviewed. Against each column used of the following CAR-147 subparagraphs please either tick (✓) the box if satisfied with compliance or cross (X) the box if not satisfied with compliance and specify the reference of the Part 4 finding next to the box or enter *NIA* where an item is not applicable, or *NIR* when applicable but not reviewed.

Para :	Subject :	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
147.A.100	Facility requirements	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
147.A.105	Personnel requirements	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
147.A.110	Records of instructors, examiners and assessors	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
147.A.115	Instructional equipment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
147.A.120	Maintenance Training Material	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
147.A.125	Records	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
147.A.130	Training procedures and quality system	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
147.A.135	Examinations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
147.A.145	Privileges of the maintenance training organisation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
147.A.150	Changes to the maintenance training organisation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
147.A.160	Findings	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
147.A.300	Aircraft type/task training	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
147.A.305	Aircraft type examinations and task assessments	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

DGCA surveyor(s):

Signature(s):

DGCA office:

Date of CA-Form 22 Part 2 completion:

CAR 147 APPROVAL RECOMMENDATION REPORT

CA-FORM 22

PART 1: COMPLIANCE RECOMMENDATION REPORT Training organisation CA-FORM 22 (MTOE)

PART 3: Compliance WITH CAR 147 Maintenance training organisation exposition (MTOE)

2.10		Security and preparation of examinable material
2.21		Management of personnel in rooms
2.32		Duties and responsibilities of management personnel, instructors, knowledge examiners and practical assessor
2.13		Marking and record of examinations
1.4		Management personnel organisation chart
2.14		Storage of examination records
1.5		List of instructional and examination staff
2.15		Examinations at location not listed in paragraph 1.6 Note: A separate document may be referenced
2.16		Control of subcontractors
1.7		List of sub-contractors as per 147.A.145(d)
Part 3	Training	General Description of facilities at paragraph 1.6 addresses
3.9		Specific list of courses approved by the competent authority
3.10		Notification procedures regarding changes to organisation
3.11		Exposition and associated manuals amendment procedure
3.4		Analysis of examination results
3.4	PART 2 TRAINING AND EXAMINATION PROCEDURES	Audit and analysis remedial action
3.5		Organisation of courses
3.6		Accountable manager annual review
3.6		Preparation of course material
3.7		Quantifying the instructors
3.7		Preparation of classrooms and equipment
3.8		Quantifying the examiners
3.8		Preparation of workshops/maintenance facilities and equipment
3.8		Records of qualified instructors & examiners
Part 4	Appendix	Reserved
4.6		Example of training cards and forms used.
4.7		Style of training and course
4.8		Training facilities notified in paragraph 1.6
2.9		Organisation of examinations
MTOE Reference:		MTOE Amendment:
MTOE Reference:		MTOE Amendment:
DGCA audit staff:		Signature(s):
DGCA audit staff:		Signature(s):
DGCA office:		Date of CA- Form 22 Part 3 completion
DGCA office:		

Part 4: Findings CAR-147 Compliance Status

Each level 1 and 2 findings should be recorded whether it has been rectified or not and should be identified by a simple cross reference to the Part 2 requirement. All non-rectified findings should be copied in writing to the organisation for the necessary corrective action.

Part 2 or 3 ref	Audit reference(s): Findings	L e v e l	Corrective action		
			Date Due	Date Closed	
					Reference

PART 5: CAR 147 approval or continued approval or change recommendation

Name of Organisation :

Approval Reference :

Audit reference(s) :

Applicable CAR-147
amendment status:

The following CAR 147 scope of approval is recommended for this organisation:

Or, it is recommended that the CAR 147 scope of approval specified in CA Form 11 referenced
..... be continued.

Name of recommending DGCA surveyor :

Signature of recommending DGCA Surveyor:

DGCA office:

Date of Recommendation:

CA-Form 22 review (quality check)

Date :

CA FORM 12		Appendix IV	
		APPLICATION FOR CAR 147 APPROVAL INITIAL / CHANGE OF APPROVAL	
1.	Registered Name of the Applicant	:	
2.	Trading name (if different)	:	
3.	Address(es) requiring approval	:	
4.	Contact Details		
	Telephone	:	
	Fax No	:	
	E Mail	:	
5.	Scope of CAR-147 Approval Relevant to this Initial */ Change of * application Type Training: Does the organisation hold approval under CAR-21 * / CAR-145 * / CAR-M * * Cross out whichever is not applicable.		
6.	Name and Position of Accountable Manager	:	
7.	Signature of Accountable Manager	:	
8.	Date of Application	:	
<u>This form should be sent with any required fee to be paid to DGCA</u>			
Space for Official Use:			

Appendix V

Reserved

Maintenance Training Organisation Approval Certificate (147.B.125)

Government of India
Directorate General of Civil Aviation

MAINTENANCE TRAINING AND EXAMINATION ORGANISATION APPROVAL CERTIFICATE

Reference No:xxxxxxx

Pursuant to CAR-147 and subject to the conditions specified below, the Directorate General of Civil Aviation hereby certifies:

[COMPANY NAME AND ADDRESS]

As a maintenance training organisation in compliance with Section A of CAR-147 approved to provide training and conduct examinations listed in the attached approval schedule and issue related certificates of recognition to students using the above reference.

CONDITIONS

- 1 This approval is limited to that specified in the scope of work section of the approved maintenance training organisation exposition as referred to in Section A of CAR-147, and
- 2 This approval requires compliance with the procedures specified in the approved maintenance training organisation exposition, and
- 3 This approval is valid whilst the approved maintenance training organisation remains in compliance with CAR-147
- 4 Subject to compliance with the foregoing conditions, this approval shall remain valid for a period of 12 months unless the approval has previously been surrendered, superseded, suspended or revoked.

Date of original issue

Date of this revision.....

Date of expiry

Signed

For the Directorate General of Civil Aviation

Page 1 of 2

MAINTENANCE TRAINING AND EXAMINATION APPROVAL SCHEDULE

Reference No:xxxxxxx

[COMPANY NAME AND ADDRESS]

Class	Rating	Limitation	
Type/Task	A *	T1 *	[Quote aircraft type] **
	B1 *	T2 *	[Quote aircraft type] **
	B2 *	T3 *	[Quote aircraft type] **
	C *	T4 *	[Quote aircraft type] **

Date of original issue

Date of this revision.....

Date of expiry

Signed

For the Directorate General of Civil Aviation

Page 2 of 2

* Delete as appropriate if the organisation is not approved

** Complete with the appropriate rating and limitation

Example of Training Certificate

Certificate of Recognition
CAR-147 Approved Aircraft Type Maintenance Training Course

This certificate of recognition covers the theoretical/practical elements of the type training course and is issued to:

Name

Date, Place of Birth

By (may be pre printed).....

An organisation approved to the requirements of CAR-147 by
 The Directorate General of Civil Aviation

Under approval reference XXXXXX. This certificate confirms that the above named person either successfully passed the approved type training course or aircraft type examination stated below:

Specify the aircraft type course or aircraft type examination and date completed or passed Specify whether the training covered part 147 theoretical elements only or theoretical and practical elements

Signed..... Certificate No.....

For: (may be pre printed)..... Date

Note:-

The CAR -147 training certificate as detailed above may be used for recognition of completion of either the theoretical element or both the theoretical and practical elements.

The appropriate references should be deleted as applicable and the course type box should detail whether only the theoretical elements were covered or whether theoretical and practical elements were covered.

The training certificate must clearly identify if the course is a complete course or a reduced course based upon the applicant previous experience (e.g. A340 course for A320 technicians).