STATE OF LIBYA MINISTRY OF TRANSPORT CIVIL AVIATION AUTHORITY



دولة ليبيا وزارة المواصلات مصلحة الطيران المدني

# LYCAR Part-147

# **Libyan Civil Aviation Regulation**

Part 147 - Approved Maintenance Training Organizations

Second issue, May 2023

Approved by and published under the authority of the Director General of LYCAA.

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# **RECORD OF REVISIONS**

No.	Date	Description / Highlights
lssue 1	August 2016	Initial issue
Issue 2	May 2023	<ul> <li>Completing missing parts</li> <li>Adding Section B: Authority requirements</li> <li>Integrating AMCs &amp; GMs</li> <li>Applying e-regulation linking</li> </ul>

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# FOREWORD

- 1. The regulation contained herein is adopted under the provision of Article N5 of Libyan Civil Aviation Law N6 of 2005 and issued and signed up by the Director General of Libyan Civil Aviation by virtue of powers vested from the Minister of Transport under the resolution N154 issued on 13.05.2015.
- 2. The Libyan Civil Aviation Regulation of Continuing Airworthiness establishes technical requirements and administrative procedures to ensure the continuing airworthiness of aircraft, components, parts and appliances as well as the approval of organizations and personnel involved in these tasks.
- 3. This regulation is in compliance with ICAO Annexes and SARPs and it has also adapted regulation, associated compliance or interpretative material issued by EASA as Acceptable Means of Compliance (AMCs) and Guidance Materials (GMs) whenever possible.
- 4. The information contained herein is subject to constant review in the light of changing regulations and requirements. No subscriber or other reader should act on the basis of any such information without taking appropriate professional advice when/as indicated/required. Although, every effort has been made to ensure accuracy, the Libyan Civil Aviation Authority (LYCAA) shall not be held responsible for loss or damage caused by errors, omissions, misprints or misinterpretation of the content hereof.
- 5. The use of the male gender implies the female gender and vice versa.
- 6. Copies of this regulation can be obtained from the Safety Department of the LYCAA or can be downloaded on the official website: www.caa.gov.ly
- 7. Transition Period: The Libyan civil aviation industry is required to meet the compliancy requirements of this regulation within three months after its official publication. All new applications, after the publication of this regulation, will meet the requirements of this issue of regulation.

Dr. Mohamed Shlibek Director General of LYCAA 31<sup>st</sup> of May 2023

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# Definitions

- (a) A complex motor-powered aircraft means:
  - (1) An airplane
    - (i) Above 5700 Kg MTOM, or
    - (ii) Certificated for more than 19 seated passengers, or
    - (iii) Certificated for operation with at least 2 pilots, or
    - (iv) Equipped with turbojet engine(s) or more than 1 turboprop engine.
  - (2) A helicopter
    - (i) Above 3175 Kg MTOM, or
    - (ii) Certificated for more than 9 seated passengers, or
    - (iii) Certificated for operation with at least 2 pilots, or
  - (3) A tilt rotor aircraft.

(b) For the purpose of LYCAR, Category 1 "Light Aircraft" (LA1) means the following aircrafts:

- i. an airplane, sailplane or powered sailplane with a Maximum Take-off Mass (MTOM) less than 1000 kg that is not classified as complex motor-powered aircraft;
- a balloon with a maximum design lifting gas or hot air volume of not more than 3400 m<sup>3</sup> for hot air balloons, 1050 m<sup>3</sup> for gas balloons, 300 m<sup>3</sup> for tethered gas balloons;
- iii. an airship designed for not more than two occupants and a maximum design lifting gas or hot air volume of not more than 2500 m<sup>3</sup> for hot air airships and 1000 m<sup>3</sup> for gas airships.
- (c) For the purpose of LYCAR, Category 2 "Light Aircraft "(LA2) means the following aircraft:
  - i. an airplane with a Maximum Take-off Mass (MTOM) of 2 000 kg or less that is not classified as complex motor-powered aircraft;
  - ii. a sailplane or powered sailplane of 2.000 kg MTOM or less;
  - iii. a balloon;
  - iv. a hot air ship;
  - v. a gas airship complying with all of the following characteristics:
    - 3 % maximum static heaviness,
    - non-vectored thrust (except reverse thrust),
    - conventional and simple design of structure, control system and ballonet system, and
    - non-power assisted controls;
  - vi. a very Light Rotorcraft.

(d) For the purpose of LYCAR, 'LSA aircraft' means a light sport airplane which has all of the following characteristics:

- i. a Maximum Take-off Mass (MTOM) of not more than 600 kg;
- a maximum stalling speed in the landing configuration (VSO) of not more than 45 knots Calibrated Airspeed (CAS) at the aircraft's maximum certificated takeoff mass and most critical center of gravity;
- iii. a maximum seating capacity of no more than two persons, including the pilot;
- iv. a single, non-turbine engine fitted with a propeller;
- v. a non-pressurized cabin;

'**Certifying staff**' means personnel responsible for the release of an aircraft or a component after maintenance;

'**Commercial specialized operations**' means those operations subject to the requirements of in LYCAR-OPS;

'**Component'** means any engine, propeller, part or appliance;

'Critical maintenance task' means a maintenance task that involves the assembly or any disturbance of a system or any part on an aircraft, engine or propeller that, if an error occurred during its performance, could directly endanger the flight safety;

'Large Aircraft' means an aircraft, classified as an airplane with a maximum takeoff mass of more than 5700 kg, or a multi-engined helicopter.

'Limited operations' means the operations of other-than-complex motor-powered aircraft for:

(a) cost-shared flights by private individuals, on the condition that the direct cost is shared by all the occupants of the aircraft, pilot included and the number of persons sharing the direct costs is limited to six;

(b) competition flights or flying displays, on the condition that the remuneration or any valuable consideration given for such flights is limited to recovery of direct costs and a proportionate contribution to annual costs, as well as prizes of no more than a value specified by LYCAA;

(c) introductory flights, parachute dropping, sailplane towing or aerobatic flights performed either by an approved training organization having its principal place of business in Libya, or by an organization created with the aim of promoting aerial sport or leisure aviation, on the condition that the aircraft is operated by the organization on the basis of ownership or dry lease, that the flight does not generate profits distributed outside of the organization, and that whenever non-members of the organization are involved, such flights represent only a marginal activity of the organization;

For the purpose of LYCAR, "limited operations" are not considered as CAT operations or commercial specialized operations;

'**Maintenance**' means any one or combination of overhaul, repair, inspection, replacement, modification or defect rectification of an aircraft or component, with the exception of preflight inspection;

'Organization' means a natural person, a legal person or part of a legal person.

**'Pre-flight inspection'** means the inspection carried out before flight to ensure that the aircraft is fit for the intended flight;

'**Principal place of business**' means the head office or the registered office of the undertaking within which the principal financial functions and operational control of the activities referred to in this Regulation are exercised.

# **SECTION A: TECHNICAL REQUIREMENTS**

# Subpart A - General

#### 147.A.05 Scope

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

# 147.A.10 General

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

#### GM TO 147.A.10 General

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

# 147.A.15 Application

- (a) An application for an approval or for the change of an existing approval shall be made on a form and in a manner established by the LYCAA.
- (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 organization 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 - Organizational 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 28.
  - (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 point (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) In the case of a basic training course, basic training workshops and/or maintenance facilities separate from training classrooms shall be provided for practical instruction appropriate to the planned training course. If, however, the organization is unable to provide such facilities, arrangements may be made with another organization to provide such workshops and/or maintenance facilities, in which case a written agreement shall be made with such organization specifying the conditions of access and use thereof. The LYCAA shall require access to any such contracted organization and the written agreement shall specify this access.
- (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 point <u>147.A.115(d)</u>.
- (f) The maximum number of students undergoing practical training during any training course shall not exceed fifteen (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 point <u>147.A.125</u>. 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 undertaken.

# AMC TO 147.A.100(i) Facility requirements

- For approved basic maintenance training courses, this means holding and ensuring reasonable access to copies of all Parts and national aviation legislation, examples of typical aircraft maintenance manuals and service bulletins, Airworthiness Directives, aircraft and component records, release documentation, procedures manuals and aircraft maintenance programs.
- 2. Except for the Parts and national aviation regulations, the remainder of the documentation should represent typical examples for both large and small aircraft and cover both airplanes and helicopters as appropriate. Avionic documentation should cover a representative range of available equipment. All documentation should be reviewed and updated on a regular basis.

#### GM TO 147.A.100(i) Facility requirements

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

# 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 Part.
- (b) A person or group of persons, whose responsibilities include ensuring that the maintenance training organization is in compliance the requirements of this Part, 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 point (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 point (c), when another organization is used to provide practical training and assessments, such other organization'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 point (f).
- (f) The experience and qualifications of instructors, knowledge examiners and practical assessors shall be established in accordance with criteria published or in accordance with a procedure and to a standard agreed by the LYCAA.

- (g) The knowledge examiners and practical assessors shall be specified in the organization exposition for the acceptance of such staff.
- (h) 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.

# AMC TO 147.A.105 Personnel requirements

- 1. The larger maintenance training organization (an organization with the capacity to provide training for fifty (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 <u>147.A.130(b)</u> and an examination manager with the responsibility of managing the relevant Part-147 Subpart C or 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 fifty (50) students) may combine any or all of the subparagraph (1) positions subject to the competent authority verifying and being satisfied that all functions can be properly carried out in combination.
- 3. When the organization is also approved against other Parts which contain some similar functions then such functions may be combined.

# AMC TO 147.A.105(b) Personnel requirements

With the exception of the accountable manager, an LYCAA Form 4 should be completed for each person nominated to hold a position required by <u>147.A.105(b)</u>. An example of an LYCAA Form 4 is included in <u>Appendix II to AMCs to Part-147</u>.

# 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.

# AMC TO 147.A.105(f) Personnel requirements

Any person currently accepted by the LYCAA in accordance with the regulations in force prior to this issue of Part-147 coming into force may continue to be accepted in accordance with <u>147.A.105(f)</u>.

Part-66 provides criteria to establish the qualification of assessors.

### GM TO 147.A.105(f) Personnel requirements

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 Part-66 and have a responsible attitude to the conduct of examinations such that the highest integrity is ensured.

### AMC TO 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.

### 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.

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

- (a) The organization 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.

#### AMC TO 147.A.110 Records of instructors, examiners and assessors

- 1. The following minimum information relevant to the scope of activity should be kept on record in respect of each instructor, knowledge examiner and practical assessor:
  - (a) Name
  - (b) Date of Birth
  - (c) Personnel Number
  - (d) Experience
  - (e) Qualifications
  - (f) Training history (before entry)
  - (g) Subsequent Training
  - (h) Scope of activity

- (i) Starting date of employment/contract
- (j) If appropriate ending date of employment/contract.
- 2. The record may be kept in any format but should be under the control of the organizations quality system.
- 3. Persons authorized to access the system should be maintained at a minimum to ensure that records cannot be altered in an unauthorized manner or that such confidential records become accessible to unauthorized persons.
- 4. The LYCAA is an authorized person when investigating the records system for initial and continued approval or when the competent authority has cause to doubt the competence of a particular person.

# 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.

# 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.
- (b) 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.
- (c) The basic training workshops and/or maintenance facilities as specified in point <u>147.A.100(d)</u> must have all tools and equipment necessary to perform the approved scope of training.
- (d) The basic training workshops and/or maintenance facilities as specified in point <u>147.A.100(d)</u> must have an appropriate selection of aircraft, engines, aircraft parts and avionics equipment.
- (e) The aircraft type training organization as specified in point <u>147.A.100(e)</u> must have access to the appropriate aircraft type. Synthetic training devices may be used when such synthetic training devices ensure adequate training standards.

#### 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.

# AMC TO 147.A.115(c) Instructional equipment

- An appropriate selection of aircraft parts means appropriate in relation to the particular subject module or sub-module of Part-66 being instructed. For example, the turbine engine module should require the provision of sufficient parts from different types of turbine engine to show what such parts look like, what the critical areas are from a maintenance viewpoint and to enable disassembly/assembly exercises to be completed.
- 2. Appropriate aircraft, engines, aircraft parts and avionics equipment mean appropriate in relation to the particular subject module or sub-module of Part-66 being instructed. For example, category B2 avionic training should require amongst other equipment, access to at least one type of installed autopilot and flight director system such that maintenance and system functioning can be observed and therefore more fully understood by the student in the working environment.
- 3. 'Access' may be interpreted to mean, in conjunction with the facilities requirement of <u>147.A.100(d)</u>, that there may be an agreement with a maintenance organization approved under Part-145 to access such parts, etc.

#### 147.A.120 Maintenance training material

- (a) Maintenance training course material shall be provided to the student and cover as applicable:
  - (1) the basic knowledge syllabus specified in Part-66 for the relevant aircraft maintenance license category or subcategory, and,
  - (2) the type course content required by Part-66 for the relevant aircraft type and aircraft maintenance license category or subcategory.
- (b) Students shall have access to examples of maintenance documentation and technical information of the library as specified in point <u>147.A.100(i)</u>.

# AMC TO 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.

# 147.A.125 Records

The organization shall keep all student training, examination and assessment records for an unlimited period.

# 147.A.130 Training procedures and quality system

- (a) The organization shall establish procedures acceptable to the LYCAA to ensure proper training standards and compliance with all relevant requirements in this Part.
- (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 point <u>147.A.105(a)</u> to ensure, as necessary, corrective action.

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

- The independent audit procedure should ensure that all aspects of Part-147 compliance should be checked at least once in every twelve (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 Part-147 or a competent person acceptable to the LYCAA. 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 Part requiring a quality system, then such quality systems may be combined.
- 4. When training or examination is carried out under the sub-contract control system:
  - (i) a pre-audit procedure should be established whereby the Part-147 approved maintenance training organization' should audit a prospective sub-contractor to determine whether the services of the sub-contractor meet the intent of Part-147.
  - (ii) a renewal audit of the subcontractor should be performed at least once every 12 months to ensure continuous compliance with the Part-147 standard.
  - (iii) the sub-contract control procedure should record audits of the sub-contractor and to have a corrective action follow-up plan.
- 5. The independence of the audit system should be established by always ensuring that audits are carried out by personnel not responsible for the function or procedure being checked.

### 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 Part-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 independent 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.

# 147.A.135 Examinations

- (a) The examination staff shall ensure the security of all questions.
- (b) Any student found during a knowledge 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 LYCAA shall be informed of any such incident together with the details of any enquiry within one calendar month.

(c) Any examiner found during a knowledge 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 LYCAA must be informed of any such occurrence within one calendar month.

# AMC TO 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 examiners.

### GM TO 147.A.135 Examinations

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

147.A.140 Maintenance Training Organization 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 point <u>147.A.105(b)</u>.
  - (3) the duties and responsibilities of the person(s) specified in point 2, including matters on which they may deal directly with the LYCAA on behalf of the maintenance training organization.
  - (4) a maintenance training organization chart showing associated chains of responsibility of the person(s) specified in point (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 point <u>147.A.145(b)</u>.
  - (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 point <u>147.A.130(a)</u>.
- (10) the maintenance training organization's control procedure, as required by <u>147.A.145(c)</u>, when authorized to conduct training, examination and assessments in locations different from those specified in point <u>147.A.145(b)</u>.
- (11) a list of the locations pursuant to point <u>147.A.145(b)</u>.
- (12) a list of organizations, if appropriate, as specified in point <u>147.A.145(d)</u>.
- (b) The maintenance training organization's exposition and any subsequent amendments shall be approved by the LYCAA.
- (c) Notwithstanding point (b), minor amendments to the exposition may be approved through an exposition procedure (hereinafter called indirect approval).

# AMC TO 147.A.140 Maintenance Training Organization Exposition

- 1. A recommended format of the exposition is included in Appendix I.
- 2. When the maintenance training organization is approved in accordance with any other Part which also requires an exposition, the exposition required by the other Part may form the basis of the maintenance training organization exposition in a combined document, as long as the other exposition contains the information required by <u>147.A.140</u> and a cross reference index is included based upon <u>Appendix I of this Part-147</u>.
- When training or examination is carried out under the sub-contract control system, the maintenance training organization exposition should contain a specific procedure on the control of sub-contractors as per <u>Appendix I</u> plus a list of sub-contractors as required by <u>147.A.140(a)12</u> and detailed in <u>Appendix I</u>.
- 4. The LYCAA may approve a delegated exposition approval system for all changes other than those affecting the approval.

# 147.A.145 Privileges of the Maintenance Training Organization

- (a) The maintenance training organization may carry out the following as permitted by and in accordance with the maintenance training organization exposition:
  - (1) basic training courses to the Part-66 syllabus, or part thereof;
  - (2) aircraft type/task training courses in accordance with Part-66;
  - (3) the examination of students who attended the basic or aircraft type training course at the maintenance training organization;
  - (4) the examination of students who did not attend the aircraft type training course at the maintenance training organization;
  - (5) the issue of certificates in accordance with Appendix III following successful completion of the approved basic or aircraft type training courses and examinations specified in points (a)(i), (a)(ii), (a)(ii), (a)(iv) and (a)(v), as applicable.
- (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 the maintenance training organization exposition.
- (c) By derogation to point (b), the maintenance training organization may only conduct training, knowledge examinations and practical assessments in locations different from the point (b) locations in accordance with a control procedure specified in the maintenance training organization exposition. Such locations need not be listed in the maintenance training organization exposition.
- (d) 1. The maintenance training organization may subcontract the conduct of basic theoretical training, type training and related examinations to a non-maintenance training organization only when under the control of the maintenance training organization quality system.

2. The subcontracting of basic theoretical training and examination is limited to Part-66, Appendix I, Modules 1, 2, 3, 4, 5, 6, 8, 9 and 10.

3. The subcontracting of type training and examination is limited to powerplant and avionics systems.

- (e) An organization may not be approved to conduct examinations unless approved to conduct the corresponding training.
- (f) By derogation from point (e), an organization approved to provide basic knowledge training or type training may also be approved to provide type examination in the cases where type training is not required.

# AMC TO 147.A.145(d) Privileges of the Maintenance Training Organization

- 1. When training or examination is carried out under the sub-contract control system, it means that for the duration of such training or examination, the Part-147 approval has been temporarily extended to include the sub-contractor. It therefore follows that those parts of the sub-contractor's facilities, personnel and procedures involved with the Part-147 approved maintenance training organization's students should meet requirements of Part-147 for the duration of that training or examination and it remains the Part-147 organization's responsibility to ensure such requirements are satisfied.
- 2. The maintenance training organization approved under Part-147 is not required to have complete facilities and personnel for training that it needs to sub-contract but it should have its own expertise to determine that the sub-contractor meets the Part-147 standards. Particular attention should be given to ensuring that the training that is delivered also meets the requirements of Part-66 and the aircraft technologies are appropriate.
- 3. The contract between the maintenance training organization approved under Part-147 and the sub-contractor should contain:
  - a provision for the LYCAA to have right of access to the sub-contractor;
  - a provision for the sub-contractor to inform the Part-147 approved maintenance training organization of any change that may affect its Part-147 approval, before any such change takes place.

# GM TO 147.A.145(d) Privileges of the Maintenance Training Organization

- 1. The pre-audit procedure should focus on establishing compliance with the training and examination standards set out in Part-147 and Part-66.
- 2. The fundamental reason for allowing a maintenance training organization approved under Part-147 to sub-contract certain basic theoretical training courses is to permit the approval of maintenance training organizations, which may not have the capacity to conduct training courses on all Part-66 modules.
- 3. The reason for allowing the subcontracting of training modules 1 to 6 and 8 to 10 only is, most of the related subjects can generally also be taught by training organizations not specialized in aircraft maintenance and the practical training element as specified in <u>147.A.200</u> does not apply to them. On the contrary, training modules 7 and 11 to 17 are specific to aircraft maintenance and include the practical training element as specified in <u>147.A.200</u>. The intent of the 'limited subcontracting' option as specified in <u>147.A.145</u> is to grant Part-147 approvals only to those organizations having themselves at least the capacity to teach on aircraft maintenance specific matters.

#### GM TO 147.A.145(d)3 Privileges of the Maintenance Training Organization

In the case of type training and examination, the reason for allowing only subcontracting to powerplant and avionics systems is that the related subjects can generally also be imparted by certain organizations specialized in these domains such as the Type Certificate Holder of the powerplant or the OEMs of these avionics systems. In such a case, the type training course should make clear how the interfaces with the airframe are addressed and by whom (the subcontracted organization or the Part-147 organization itself).

# AMC TO 147.A.145(f) Privileges of the Maintenance Training Organization

When an organization approved to provide basic knowledge training or type training is also approved to provide type examination in the cases where type training is not required, appropriate procedures in the Maintenance Training Organization Exposition should be developed and approved, including:

- the development and the conduct of the type examination;
- the qualification of the examiners and their currency.

In particular, emphasis should be put when such an examination is not regularly conducted or when the examiners are not normally involved in aircraft or activities with technology corresponding to the aircraft type subject to examination. An example would be the case of an organization providing basic knowledge training only for the B1.1 license. This organization should justify how they run type examinations for single piston-engine helicopters in the case of a B1.4 license.

# 147.A.150 Changes to the Maintenance Training Organization

- (a) The maintenance training organization shall notify the LYCAA of any proposed changes to the organization that affect the approval before any such change takes place in order to enable the LYCAA to determine continued compliance with this Part and to amend, if necessary, the maintenance training organization approval certificate.
- (b) The LYCAA may prescribe the conditions under which the maintenance training organization may operate during such changes unless the competent authority determines that the maintenance training organization approval must be suspended.
- (c) Failure to inform the LYCAA 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 maximum of two-year validity. It shall remain valid subject to:
  - the organization remaining in compliance with this Part, in accordance with the provisions related to the handling of findings as specified in point <u>147.B.130</u>, and;
  - (2) the LYCAA being granted access to the organization to determine continued compliance with this Part-147, and;
  - (3) the certificate not being surrendered or revoked.
- (b) Upon surrender or revocation, the approval shall be returned to the LYCAA.

# 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 LYCAA 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 findings.
- (c) After receipt of notification of findings according to point <u>147.B.130</u>, the holder of the maintenance training organization approval shall define a corrective action plan and demonstrate corrective action to the satisfaction of the LYCAA within a period agreed with this authority.

# Subpart C - Approved basic training course

#### 147.A.200 The approved basic training course

- (a) The approved basic training course shall consist of knowledge training, knowledge examination, practical training and a practical assessment.
- (b) The knowledge training element shall cover the subject matter for a category or subcategory aircraft maintenance license as specified in Part-66.
- (c) The knowledge examination element shall cover a representative cross section of subject matter from the point (b) training element.
- (d) The practical training element shall cover the practical use of common tooling/equipment, the disassembly/assembly of a representative selection of aircraft parts and the participation in representative maintenance activities being carried out relevant to the particular Part-66 complete module.
- (e) The practical assessment element shall cover the practical training and determine whether the student is competent at using tools and equipment and working in accordance with maintenance manuals.
- (f) The duration of basic training courses shall be in accordance with <u>Appendix I of this Part</u>.
- (g) The duration of conversion courses between (sub)categories shall be determined through an assessment of the basic training syllabus and the related practical training needs.

#### AMC TO 147.A.200(b) The approved basic training course

Each license category or subcategory basic training course may be subdivided into modules or sub-modules of knowledge and may be intermixed with the practical training elements subject to the required time elements of <u>147.A.200(f) and (g)</u> being satisfied.

#### AMC 147.A.200(d) THE APPROVED BASIC TRAINING COURSE

- Where the maintenance training organization approved under Part-147 contracts the practical training element either totally or in part to another organization in accordance with <u>147.A.100(d)</u>, the organization in question should ensure that the practical training elements are properly carried out.
- 2. At least 30% of the practical training element should be carried out in an actual maintenance working environment.

# AMC TO 147.A.200(f) The approved basic training course

- In order to follow pedagogical and human factors principles, the maximum number of training hours per day for the theoretical training should not be more than six (6) hours. A training hour means 60 minutes of tuition excluding any breaks, examination, revision, preparation and aircraft visit. In exceptional cases, the LYCAA may allow deviation from this standard when it is properly justified that the proposed number of hours follows pedagogical and human factors principles. These principles are especially important in those cases where:
  - theoretical and practical training are performed at the same time;
  - training and normal maintenance duty/apprenticeship are performed at the same time.
- 2. The minimum participation time for the trainee to meet the objectives of the course should not be less than 90 % of the tuition hours. Additional training may be provided by the training organization in order to meet the minimum participation time. If the minimum participation defined for the course is not met, a certificate of recognition should not be issued.

# AMC TO 147.A.200(g) The approved basic training course

Typical conversion durations are given below:

- (a) The approved basic training course to qualify for conversion from holding a Part-66 aircraft maintenance engineer license in subcategory A1 to subcategory B1.1 or B2 should not be less than 1600 hours and for conversion from holding a Part-66 aircraft maintenance engineer license in subcategory A1 to subcategory B1.1 combined with B2 should not be less than 2200 hours. The course should include between 60% and 70% knowledge training.
- (b) The approved basic training course to qualify for conversion from holding a Part-66 aircraft maintenance engineer license in subcategory B1.1 to B2 or category B2 to B1.1 should not be less than 600 hours, and should include between 80% and 85% knowledge training.
- (c) The approved basic training course to qualify for conversion from holding a Part-66 aircraft maintenance engineer license in subcategory B1.2 to subcategory B1.1 should not be less than 400 hours, and should include between 50% and 60% knowledge training.
- (d) The approved basic training course to qualify for conversion from holding a Part-66 aircraft maintenance engineer license in one subcategory A to another subcategory A should not be less than 70 hours, and should include between 30% and 40% knowledge training.

# 147.A.205 Basic knowledge examinations

Basic knowledge examinations shall:

- (a) be in accordance with the standard defined in Part-66.
- (b) be conducted without the use of training notes.
- (c) cover a representative cross section of subjects from the particular module of training completed in accordance with Part-66.

# AMC TO 147.A.205 Basic Knowledge Examinations

The LYCAA may accept that the maintenance training organization approved under Part-147 can conduct examination of students who did not attend an approved basic course at the organization in question.

# 147.A.210 Basic practical assessment

- (a) Basic practical assessments shall be carried out during the basic maintenance training course by the nominated practical assessors at the completion of each visit period to the practical workshops/maintenance facility.
- (b) The student shall achieve an assessed pass with respect to point <u>147.A.200(e)</u>.

# AMC TO 147.A.210(a) Basic practical assessment

Where the maintenance training organization approved under Part-147 contracts the practical training element either totally or in part to another organization in accordance with 147.A.100(d) and chooses to nominate practical assessors from the other organization, the organization in question should ensure that the basic practical assessments are carried out.

# AMC TO 147.A.210(b) Basic practical assessment

An assessed pass for each student should be granted when the practical assessor is satisfied that the student meets the criteria of <u>147.A.200(e)</u>. This means that the student has demonstrated the capability to use relevant tools/equipment/test equipment as specified by the tool/equipment/test equipment manufacturer and the use of maintenance manuals in that the student can carry out the required inspection/testing without missing any defects, can readily identify the location of components and is capable of correct removal/fitment/adjustment of such components. The student is only required to carry out enough inspection/testing and component removal/fitment/adjustments to prove capability. The student should also show an appreciation of the need to ensure clean working conditions and the observance of safety precautions for the student and the product. In addition, the student should demonstrate a responsible attitude in respect to flight safety and airworthiness of the aircraft.

Appendix to Part-66 provides criteria for the competence assessment performed by the designated assessors (and their qualifications).

# Subpart D - Aircraft Type/Task Training

# 147.A.300 Aircraft Type/Task Training

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

# AMC TO 147.A.300 Aircraft Type/Task Training

Aircraft type training may be sub-divided in airframe and/or powerplant and/or avionics/electrical systems type training courses. A maintenance training organization approved under Part-147 may be approved to conduct airframe type training only, powerplant type training only, avionics/electrical systems type training only or any combination thereof.

- 1. Airframe type training course means a type training course including all relevant aircraft structure and electrical and mechanical systems excluding the powerplant.
- 2. Powerplant type training course means a type training course on the bare engine, including the build-up to a quick engine change unit.
- 3. The interface of the engine/airframe systems should be addressed by either airframe or powerplant type training. In some cases, such as for general aviation, it may be more appropriate to cover the interface during the airframe course due to the large variety of aircraft that can have the same engine type installed.
- 4. Avionics/electrical systems type training course means type training on avionics and electrical systems covered by but not necessarily limited to ATA (Air Transport Association) chapters 22, 23, 24, 25, 27, 31, 33, 34, 42, 44, 45, 46, 73 and 77 or equivalent.

# 147.A.305 Aircraft type examinations and task assessments

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

# **SECTION B - PROCEDURES FOR COMPETENT AUTHORITIES**

# Subpart A - General

#### 147.B.05 Scope

This section establishes the administrative requirements to be followed by the competent authorities in charge of the application and the enforcement of Section A of this Part.

#### 147.B.10 Competent Authority

(a) General

The LYCAA is the competent authority with allocated responsibilities for the issuance, continuation, change, suspension or revocation of certificates under this Part-147. This competent authority shall establish documented procedures and an organizational structure.

(b) Resources

The competent authority shall be appropriately staffed to carry out the requirements of this Part.

(c) Procedures

The competent authority shall establish procedures detailing how compliance with this Part-147 is accomplished.

The procedures shall be reviewed and amended to ensure continued compliance.

(d) Qualification and training

All staff involved in approvals related to this Annex must:

- (1) Be appropriately qualified and have all necessary knowledge, experience and training to perform their allocated tasks.
- (2) Have received training and continuation training on Part-66 and Part-147 where relevant, including its intended meaning and standard.

# AMC TO 147.B.10(a) Competent Authority

 In deciding upon the required organizational structure, the competent authority should review the number of certificates to be issued, the number and size of potential Part-147 approved maintenance training organizations, as well as the level of civil aviation activity, number and complexity of aircraft and the size of the aviation industry.

- 2. The competent authority should retain effective control of important surveillance functions and not delegate them in such a way that Part-147 organizations, in effect, regulate themselves in airworthiness matters.
- 3. The set-up of the organizational structure should ensure that the various tasks and obligations of the competent authority are not relying on individuals. That means that a continuing and undisturbed fulfilment of these tasks and obligations of the competent authority should also be guaranteed in case of illness, accident or leave of individual employees.

# AMC TO 147.B.10(b) Competent Authority

- 1. Competent authority surveyors should have:
  - 1.1. practical experience and expertise in the application of aviation safety standards and safe operating practices;
  - 1.2. comprehensive knowledge of:
    - (a) relevant parts of implementing rules, certification specifications and guidance material;
    - (b) the competent authority's procedures;
    - (c) the rights and obligations of a surveyor;
    - (d) quality systems;
    - (e) continuing airworthiness management.

1.3. training on auditing techniques.

- 2. five years relevant work experience to be allowed to work as a surveyor independently. This may include experience gained during training to obtain the qualification.
- 3. a relevant engineering degree or an aircraft maintenance or training qualification with additional education. 'Relevant engineering degree' means an engineering degree from aeronautical, mechanical, electrical, electronic, avionic or other studies relevant to the maintenance and continuing airworthiness of aircraft/aircraft components.
  - 3.1. knowledge of a relevant sample of aircraft types
  - 3.2. knowledge of maintenance training standards.
- 4. In addition to technical competency, surveyors should have a high degree of integrity, be impartial in carrying out their tasks, be tactful, and have a good understanding of human nature.
- 5. A program for continuation training should be developed that ensures that the surveyors remain competent to perform their allocated tasks.

# AMC TO 147.B.10(c) Competent Authority

The documented procedures should contain the following information:

- (a) The designation of the competent authority.
- (b) The title(s) and name(s) of the manager(s) of the competent authority and their duties and responsibilities.
- (c) Organization chart(s) showing associated chains of responsibility of the senior persons.
- (d) A procedure defining the qualifications for staff together with a list of staff authorized to sign certificates.
- (e) A general description of the facilities.
- (f) Procedures specifying how the competent authority ensures compliance with Part-147.

# 147.B.20 Record-Keeping

- (a) The competent authority shall establish a system of record-keeping that allows adequate traceability of the process to issue, renew, continue, vary, suspend or revoke each approval.
- (b) The records for the oversight of maintenance training organizations shall include as a minimum:
  - (1) the application for an organization approval.
  - (2) the organization approval certificate including any changes.
  - (3) a copy of the audit program listing the dates when audits are due and when audits were carried out.
  - (4) continued oversight records including all audit records.
  - (5) copies of all relevant correspondence.
  - (6) details of any exemption and enforcement actions.
  - (7) any report from other competent authorities relating to the oversight of the organization.
  - (8) organization exposition and amendments.
- (c) The minimum retention period for the point (b) records shall be four (4) years.

# AMC TO 147.B.20 Record-Keeping

- 1. The record-keeping system should ensure that all records are accessible whenever needed within a reasonable time. These records should be organized in a consistent way throughout the competent authority (chronological, alphabetical order, etc.).
- 2. All records containing sensitive data regarding applicants or organizations should be stored in a secure manner with controlled access to ensure confidentiality of this kind of data.
- 3. All computer hardware used to ensure data backup should be stored in a different location from that containing the working data in an environment that ensures they remain in good condition. When hardware or software changes take place special care should be taken that all necessary data continues to be accessible at least through the full period specified in <u>147.B.20</u>.

# 147.B.25 Exemptions

- (a) The competent authority may exempt a State education department school from:
  - (1) being an organization as specified in point <u>147.A.10</u>.
  - (2) having an accountable manager, subject to the limitation that the department appoint a senior person to manage the training organization and such person has a budget sufficient to operate the organization to the standard of this Part-147.
  - (3) having recourse to the independent audit part of a quality system subject to the department operating an independent schools inspectorate to audit the maintenance training organization at the frequency required by this Part.
- (b) All exemptions granted shall be recorded and retained by the competent Authority.

## Subpart B - Issue of an approval

This Subpart provides the requirements to issue or vary the maintenance training organization approval.

#### 147.B.110 Procedure for approval and changes to the approval

- (a) Upon receipt of an application, the competent authority shall:
  - (1) review the maintenance training organization exposition, and;
  - (2) verify the organization's compliance with the requirement of Part-147.
- (b) All findings identified shall be recorded and confirmed in writing to the applicant.
- (c) All findings shall be closed in accordance with point <u>147.B.130</u> before the approval is issued.
- (d) The reference number shall be included on the approval certificate in a manner specified by the LYCAA.

#### GM TO 147.B.110 Procedure for approval and changes to the approval

- A meeting should be arranged between the applicant and the LYCAA to determine if the applicant's training activities justify the investigation for issue of Part-147 approval and to ensure that the applicant understands what needs to be done for Part-147 approval. This meeting is not intended to establish compliance but rather to see if the activity is a Part-147 activity.
- 2. Assuming that the applicant's activities come within the scope of Part-147 approval, instructions should be sent to the LYCAA staff requesting that an audit of the applicant be carried out and when satisfied that compliance has been established, a recommendation for the issue of approval should be submitted to LYCAA staff who grant approval unless these are the same staff. The LYCAA should determine how and by whom the audit shall be conducted. For example, if the applicant is a large training organization, it will be necessary to determine whether one large team audit, a short series of small team audits or a long series of single person audits is most appropriate for the particular situation. A further consideration in the case of a combined Part-145/147 organization is the possibility to combine the audits.
- 3. Where it is intended that the maintenance training organization may conduct training and examinations away from the maintenance training organization address(es) in accordance with <u>147.A.145(c)</u>, then a sample audit should be carried out by the LYCAA from time to time of the process to ensure that procedures are followed. For practical reasons, such sample audits will need to be carried out when training is being conducted away from the maintenance training organization address(es).
- 4. The auditing surveyor should ensure that they are always accompanied throughout the audit by a senior member of the organization making application for Part-147 approval.

Normally this should be the proposed quality manager. The reason for being accompanied is to ensure that the organization is fully aware of any findings during the audit. In any case, the proposed quality manager/senior member of the organization should be debriefed at the end of the audit visit on the findings made during the audit.

- 5. There will be occasions when the auditing surveyor may find situations in the applicant's organization on which he/she is unsure about compliance. In this case, the organization should be informed about possible non-compliance at the time of audit and the fact that the situation will be reviewed before a decision is made. The organization should be informed of the decision within two (2) weeks of the audit visit in writing if the decision is a confirmation of non-compliance. If the decision is a finding of being in compliance, a verbal confirmation to the organization will suffice.
- 6. A change of name of the maintenance training organization requires the organization to submit a new application as a matter of urgency stating that only the name of the organization has changed including a copy of the organization exposition with the new name. Upon receipt of the application and the organization exposition, the LYCAA should reissue the approval certificate valid only up to the current expiry date.
- 7. A name change alone does not require the LYCAA to audit the organization, unless there is evidence that other aspects of the maintenance training organization have changed.
- 8. A change of accountable manager requires the maintenance training organization to submit such fact to the LYCAA as a matter of urgency together with the amendment to the accountable manager exposition statement.
- 9. A change of any of the senior personnel specified in <u>147.A.105(b)</u> requires the maintenance training organization to submit a Form 4 in respect of the particular person. If satisfied that the qualifications and experience meet the standard required by Part-147, the LYCAA should indicate acceptance in writing to the maintenance training organization.
- 10. A change in the maintenance training organization's exposition requires the competent authority to establish that the procedures specified in the exposition are in compliance with Part-147 and then to establish if these are the same procedures intended for use within the training facility.
- 11. Any change of location of the maintenance training organization requires the organization to make a new application to the competent authority together with the submission of an amended exposition. The competent authority should follow the procedure specified in <u>147.B.110(a) and (b)</u> in so far as the change affects such procedure before issuing a new Part-147 approval certificate.
- 12. The complete or partial reorganization of a training organization should require the reaudit of those elements that have changed.
- 13. Any additional basic or aircraft type training courses requires the maintenance training organization to make a new application to the competent authority together with the submission of an amended exposition. For basic training extensions, an additional sample of new examination questions relevant to the modules associated with the extension

being sought will be required to be submitted. The LYCAA should follow the procedure of paragraph 11 in so far as the change affects such procedures unless the LYCAA is satisfied that the maintenance training organization has a well-controlled procedure to qualify such change when it is not necessary to conduct the audit elements of the paragraph 11 procedure.

#### AMC TO 147.B.110(a) Procedure for approval and changes to the approval

The audit should be conducted on the basis of checking the facility for compliance, interviewing personnel and sampling any relevant training course for its conduct and standard.

#### AMC TO 147.B.110(b) Procedure for approval and changes to the approval

The date each finding was rectified should be recorded together with the reference document.

#### 147.B.120 Continued validity procedure

- (a) Each organization shall be completely audited for compliance with this Part-147 at periods not exceeding twenty-four (24) months. This shall include the monitoring of at least one training course and one examination performed by the maintenance training organization.
- (b) Findings shall be processed in accordance with point <u>147.B.130</u>.

#### AMC TO 147.B.120(a) Continued validity procedure

- Audits should be conducted to ensure the continuity of the approval; it is not necessary to sample all basic and type training courses, but the LYCAA should sample, as appropriate, one basic and one type training course to establish that training is conducted in an appropriate manner. Nevertheless, the duration of the sampling for each course should not be less than three (3) hours. Where no training course is being conducted during the audit, arrangements should be made to return at a later date to sample the conduct of a training course.
- 2. It is not necessary to sample all examinations associated with a training course but the competent authority should sample, as appropriate, one basic and one type training course examination.

#### 147.B.125 Maintenance Training Organization approval certificate

The maintenance training organization approval certificate format shall be as detailed in <u>Appendix II of this Part</u>.

### 147.B.130 Findings

- (a) Failure to complete the rectification of any level 1 finding within three (3) days of written notification shall entail revocation, suspension or limitation by the competent authority, of the maintenance training organization approval in whole or in part.
- (b) Action shall be taken by the LYCAA to revoke, limit or suspend in whole or part the approval in case of failure to comply within the time scale granted by the competent authority in the case of a level 2 finding.

#### AMC TO 147.B.130(b) Findings

- 1. In the case of a level 2 finding, the LYCAA may give up to six-month (6) notice of the need for rectification. Dependent upon the seriousness of the level 2 finding(s) the LYCAA may choose a notice period less than six months.
- 2. When the LYCAA chooses to allow six (6) months, the initial notification should be of threemonth duration to the quality manager followed by the final three-month notice to the accountable manager.

# Subpart C - Revocation, suspension and limitation of the maintenance training organization approval

## 147.B.200 Revocation, suspension and limitation of the maintenance training organization approval

The LYCAA shall:

- (a) suspend an approval on reasonable grounds in the case of potential safety threat, or;
- (b) suspend, revoke or limit an approval pursuant to <u>147.B.130</u>.

## **APPENDICES TO PART-147**

## Appendix I - Basic training course duration

The minimum duration of a complete basic training course shall be as follows:

Basic Course	Duration (in hours)	Theoretical Training Ratio (in %)
A1	800	30–35
A2	650	30–35
A3	800	30–35
A4	800	30–35
B1.1	2 400	50–60
B1.2	2 000	50–60
B1.3	2 400	50–60
B1.4	2 400	50–60
B2	2 400	50–60
B3	1 000	50–60

### Appendix II - Maintenance Training Organization approval

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### MAINTENANCE TRAINING ORGANIZATION APPROVAL

## CERTIFICATE

#### Approval No: .....

Pursuant to the Civil Aviation Law and the Civil Aviation regulation of Libya for the time being in force and subject to the conditions specified below, the Libyan Civil Aviation Authority (LYCAA) hereby certifies:

## NAME OF ORGANIZATION ADDRESS COUNTRY

As a Maintenance Training Organization in compliance with LYCAR Part-147, approved to provide training listed in the approval schedule attached and to issue related certificates of recognition to students using the above references.

#### Conditions

1. This approval is limited to that specified in the scope of work section of the latest approved Maintenance Training Organization Exposition (MTOE), and,

2. This approval requires compliance with the procedures specified in the latest approved Maintenance Training Organization Exposition (MTOE), and,

3. This approval is valid whilst the approved maintenance organization remains in compliance with Part-147.

4. Subject to compliance with the foregoing conditions, this approval shall remain valid till the date of expiry of attached Approval Schedule, unless the approval has previously been surrendered, suspended or revoked.

Date of Original issue:

Date of current issue:

Name:

Signature:

Page 2 of 2

## MAINTENANCE TRAINING ORGANIZATION APPROVAL SCHEDULE

Approval No : Organization: [company name and address]			
CLASS	LICENSE CATEGORY	LIMITATION	
Basic (**)	B1 (**)	(***)	
	B2 (**)	(***)	
	B3 (**)	(***)	
	A (**)	(***)	
Type/Task (**)	C (**)	(***)	
	B1 (**)	(***)	
	B2 (**)	(***)	
	A (**)	(***)	

This approval schedule is limited to those trainings specified in the approved Maintenance Training Organization Exposition.

Maintenance Training Organization Exposition reference:

Locations of Training facilities: .....

Date of Original issue:

Date of current issue:

Name:

Signature:

(\*\*) delete as appropriate if the organization is not approved

(\*\*\*) complete with appropriate rating and limitation

#### Appendix III. Maintenance Training Organization Exposition (MTOE)

- 1. The following subject headings form the basis of the MTOE required by <u>147.A.140</u>.
- 2. Whilst this format is recommended, it is not mandatory to assemble the MTOE in this manner as long as a cross-reference index is included in the MTOE as an Appendix and the Part 1 items remain in Part 1.
- 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 organization is approved in accordance with any other Part(s) 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 organization chart
- 1.5. List of instructional and examination staff (Note: A separate document may be referenced)
- 1.6. List of approved addresses
- 1.7. List of sub-contractors as per 147.A.145(d)
- 1.8. General description of facilities at paragraph 1.6 addresses
- 1.9. Specific list of courses and type examinations approved by the competent authority
- 1.10. Notification procedures regarding changes to organization
- 1.11. Exposition and associated manuals amendment procedure

#### **PART 2 - TRAINING AND EXAMINATION PROCEDURES**

- 2.1. Organization 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. Conduct of theoretical training & practical training (during basic knowledge training and type/task training)
- 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. Organization of examinations
- 2.10. Security and preparation of examination material
- 2.11. Preparation of examination rooms
- 2.12. Conduct of examinations (basic knowledge examinations, type/task training examinations and type examinations)
- 2.13. Conduct of practical assessments (during basic knowledge training and type/task training)
- 2.14. Marking and record of examinations
- 2.15. Storage of examination records
- 2.16. Examinations at locations not listed in paragraph 1.6
- 2.17. Preparation, control & issue of basic training course certificates
- 2.18. Control of sub-contractors

#### **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 and the assessors
- 3.8. Records of qualified instructors & examiners

#### **PART 4 - APPENDICES**

- 4.1. Example of documents and forms used
- 4.2. Syllabus of each training course
- 4.3. Cross-reference index if applicable

## Appendix IV. LYCAA Form 4

Organization:	Approval Number:		
1. Details of Management	Personnel required to be accepted		
2. Title / First Name / Surna	ame:		
3. Position within the Orga	nization:		
4. Qualifications relevant to	o the item (3) position:		
5. Work experience relevant to the item (3) position:			
(Information on work exper Vitae) attached to this form	ience can be provided in a separate document (i.e., Curriculum ).		
Certification of Accountabl	e Manager:		
I hereby certify that the above-nominated person is qualified for the appropriate task(s)and conversant with LYCAA requirements and procedures on matter for which he is responsible.			
Signature:	Date:		
LYCAA use only			

Name and signature of authorized LYCAA staff member Accepting / Approving /Rejecting this person:

Signature:

Date: