



EUROPEAN MILITARY AIRWORTHINESS REQUIREMENT

EMAR 147

AMC & GM

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NOTE:

This EMAR AMC/GM relies on definitions laid down in EMAD 1.

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ACCEPTABLE MEANS OF COMPLIANCE

SECTION A -

TECHNICAL REQUIREMENTS

AMC 147.A.15 Application

The application form should contain the information required in the EMAR Form 12 (see Appendices to AMC Appendix IV).

AMC 147.A.100(b) Facility requirements

1. The maximum number of students undergoing knowledge training during any training session should not normally exceed 28. In cases where it is necessary to exceed this number, the NMAA is to be informed and the MTO should submit evidence of how an 'effective learning environment' is being maintained with this larger number of students.

AMC 147.A.100(d) Facility requirements

1. In the context of this paragraph, 'another organisation' means any other organisation with which the MTO has a formal agreement for the provision of practical training facilities. This organisation's details should be included in Section 2.8 of the MTOE.

AMC 147.A.100(i) Facility requirements

1. For approved basic maintenance training courses this means holding and ensuring reasonable access to copies of all national military aviation legislation, examples of typical aircraft maintenance manuals and service bulletins and Airworthiness Directives (or their national equivalents), aircraft and component records, release documentation, procedures manuals and aircraft maintenance programmes.

2. Except for the national military aviation regulations, the remainder of the documentation should represent typical examples of military aircraft and cover both aeroplanes and helicopters as appropriate for the nation. Avionic and armaments documentation should cover a representative range of available equipment that will be encountered within the pMS. All documentation should be reviewed and updated on a regular basis.

AMC 147.A.105 Personnel requirements

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

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

3. When the organisation is also approved against other EMARs which contain some similar functions, then such functions may be combined.

AMC 147.A.105(b) Personnel requirements

With the exception of the Accountable Manager, an EMAR Form 4 should be completed for each person nominated to hold a position required by EMAR 147.A.105(b). EMAR Form 4 is contained within the EMAR Forms document.

AMC 147.A.105(c) Personnel requirements

The MTO should have a core 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 147.A.105(f) Personnel requirements

1. Any person currently accepted by the NMAA in accordance with the national military aviation regulations in force prior to a date established in national regulation for the implementation of the requirements of EMAR 147 may continue to be accepted in accordance with EMAR 147.A.105(f).

Paragraph 3 of Appendix III to AMC of EMAR 66 provides criteria to establish the qualification of assessors.

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

AMC 147.A.105(h) Personnel requirements

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

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

AMC 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) Full Name;

(b) Rank/Grade (if applicable);

(c) Date of birth;

- (d) Service/Personnel number;
- (e) Experience;
- (f) Qualifications;
- (g) Training history (before entry);
- (h) Subsequent training;
- (i) Scope of activity;
- (j) Starting date of employment/contract/posting into MTO;
- (k) If appropriate – ending date of employment/contract/posting out of MTO;
- (l) Security clearance (where appropriate).

2. The record may be kept in any format but should be under the control of the MTO's quality system.

3. Persons authorised to access the system should be maintained at a minimum to ensure that records cannot be altered in an unauthorised manner or that such confidential records become accessible to unauthorised persons.

4. The NMAA, or qualified entity acting on behalf of the NMAA, is to be considered as an 'authorised person' when investigating the records system for initial and continued approval or when the NMAA has cause to doubt the competence of a particular person.

AMC 147.A.115(c) Instructional equipment

1. An appropriate selection of aircraft parts means appropriate in relation to the particular subject module or submodule of EMAR 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, avionic equipment, armaments, escape systems and other relevant military-specific systems' means appropriate in relation to the particular subject module or submodule of EMAR 66 being instructed. For example, Category B2 avionic training should require, amongst other equipment, access to different navigation systems such that maintenance and system functioning can be observed and therefore more fully understood by the student in the working environment.

3. Moved to AMC 147.A.115(d).

AMC 147.A.115(d) Instructional equipment

"Access" should be interpreted to mean, in conjunction with the facilities requirement of EMAR 147.A.100(d), that there may be an agreement with an EMAR 145 Approved Maintenance Organisation to access the aircraft type, related 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.125 Records of students

In addition to each student's training, examination and assessment records, the content of the course(s) undertaken by each student (eg syllabus, together with the amendment state of the course content as detailed in the MTOE Item 4.2) should also be retained.

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

1. The independent audit procedure should ensure that all aspects of EMAR 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 MTO (an organisation with the capacity to provide training for less than 50 students) the independent audit function may be contracted to another MTO approved under EMAR 147 by an arrangement acceptable to the NMAA, or to a competent person acceptable to the NMAA. Where the small MTO chooses to contract the audit function, the NMAA should specify the audit periodicity.

3. Where the MTO is part of an organisation that is also approved to another EMAR requiring a quality system, then such quality systems may be combined.

4. When training or examination is carried out under the 'subcontract control system' (see EMAR 147.A.145):

(i) a pre-audit procedure should be established whereby the EMAR 147 MTO should audit a prospective subcontractor to determine whether the services of the subcontractor meet the intent of EMAR 147. The pre-audit procedure should focus on establishing compliance with the training and examination standards set out in EMAR 147 and EMAR 66.

(ii) a renewal audit of the subcontractor should be performed at least once every 12 months to ensure continuous compliance with the EMAR 147 standard.

(iii) the subcontract control procedure should record audits of the subcontractor and 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.

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 examiners.

AMC 147.A.135(b) Examinations

If the NMAA approves a period of less than 12 months, this approval should be provided in writing to the MTO and kept within the student's records as detailed in EMAR 147.A.125.

AMC 147.A.140 Maintenance Training Organisation Exposition (MTOE)

1. The information detailed in Appendix I to the AMCs should be included in the MTOE.
2. When the MTO, or organisation it is part of, is approved in accordance with any other EMAR or EASA approval which also requires an exposition, the exposition required by the other EMAR or EASA approval may form the basis of the MTOE in a combined document, as long as the other exposition contains the information required by EMAR 147.A.140 and a cross-reference index is included based upon Appendix I.
3. When training or examination is carried out under the 'subcontract control system' (see EMAR 147.A.145), the MTOE should contain a specific procedure on the control of subcontractor(s) as per Appendix I item 2.18 plus a list of subcontractor(s) as required by EMAR 147.A.140(a)12 and detailed in Appendix I item 1.7.
4. NOT APPLICABLE.

AMC 147.A.145(d) Privileges of the Maintenance Training Organisation

1. When training or examination is carried out under the 'subcontract control system', it means that for the duration of such training or examination, the EMAR 147 approval has been temporarily extended to include the subcontractor. It therefore follows that those parts of the subcontractor's facilities, personnel and procedures involved with the EMAR 147 MTO's students should meet the requirements of EMAR 147 for the duration of that training or examination and it remains the EMAR 147 MTO's responsibility to ensure such requirements are satisfied.

2. The MTO approved under EMAR 147 is not required to have complete facilities and personnel for training that it needs to subcontract but it should have its own expertise to determine that the subcontractor meets the EMAR 147 standards. Particular attention should be given to ensuring that the training that is delivered also meets the requirements of EMAR 66 and that the aircraft technologies are appropriate.

3. The contract between the MTO approved under EMAR 147 and the subcontractor should contain:

- a provision for the NMAA to have right of access to the subcontractor;
- a provision that the subcontractor must inform the EMAR 147 approved MTO of any change that may affect its EMAR 147 approval, before any such change takes place.

AMC 147.A.145(f) Privileges of the Maintenance Training Organisation

NOT APPLICABLE.

AMC 147.A.155(a)2 Continued validity of approval

In addition to being granted access to the MTO to determine continued compliance, the NMAA should also be granted access to any organisation carrying out training (and, if applicable, examination) on behalf of the MTO under the 'subcontract control system' as specified at AMC 147.A.145(d).

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

Each MAML category or subcategory basic training course may be subdivided into modules or submodules of knowledge and may be intermixed with the practical training elements subject to the required time elements of EMAR 147.A.200 (f) and (g) being satisfied.

AMC 147.A.200(d) The approved basic training course

1. NOT APPLICABLE.
2. At least 30% of the practical training element should be carried out in a realistic maintenance working environment.

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

1. 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 6 hours. A training hour means 60 minutes of tuition excluding any breaks, examination, revision, preparation and aircraft visits. In exceptional cases, the NMAA 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 student to meet the objectives of the course should not be less than 90 % of the tuition hours. Additional training may be provided by the MTO in order to meet the minimum participation time. If the minimum participation defined for the course is not met, a certificate of recognition (see example at EMAR 147 Appendix III) should not be issued.

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

NOT APPLICABLE.

AMC 147.A.205 Basic knowledge examinations

The NMAA may accept that the MTO approved under EMAR 147 can conduct examination of students who did not attend an approved basic course at that MTO.

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

NOT APPLICABLE.

AMC 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 EMAR 147.A.200(e). 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, and 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 the airworthiness of the aircraft.

Appendix III to AMC to EMAR 66 provides criteria for the competence assessment performed by the designated assessors (and their qualifications).

AMC 147.A.300 Military Aircraft Type/Task Training

Military Aircraft Type Training may be subdivided into airframe and/or powerplant and/or avionics/electrical systems and/or armaments/escape systems/other relevant military-specific systems type training courses. An MTO approved under EMAR 147 may be approved to conduct airframe type training only, powerplant type training only, avionics/electrical systems type training only, armaments/escape systems/other relevant military-specific 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 an engine change unit.
3. The interface of the engine/airframe systems should be addressed by either airframe or powerplant type training course.
4. Avionics/electrical systems type training course means type training on avionics and electrical systems as determined by the NMAA.
5. Armaments/escape systems/other relevant military-specific systems type training means type training on all other military-specific systems not covered in sub-paragraphs 1-4 above, as determined by the NMAA.

SECTION B

PROCEDURES FOR NATIONAL MILITARY AIRWORTHINESS AUTHORITIES

AMC 147.B.10(a) National Military Airworthiness Authority

1. In deciding upon the required organisational structure, the NMAA should review the number of certificates to be issued, the number and size of potential EMAR 147 approved MTOs within that pMS, as well as the level of military aviation activity, number and complexity of aircraft and the size of the pMS's military aviation forces.
2. The NMAA should retain effective control of important surveillance functions and not delegate them in such a way that EMAR 147 MTOs, in effect, regulate themselves in airworthiness matters.
3. The set-up of the organisational structure should ensure that the various tasks and obligations of the NMAA are not relying on individuals. That means that a continued and undisturbed fulfillment of these tasks and obligations of the NMAA should also be guaranteed in case of illness, accident or leave of individual employees.

AMC 147.B.10(c) National Military Airworthiness Authority

1. NMAA 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 national implementing rules/regulations, certification specifications, airworthiness codes and guidance material;
- b. the NMAA's procedures;
- c. the rights and obligations of a surveyor;
- d. quality systems;
- e. continuing airworthiness management.

1.3 training on auditing techniques;

1.4 five years relevant work experience to be allowed to work as a surveyor independently. This may include, but should not be limited to, experience gained during training to obtain the sub-paragraph 1.5 (below) qualification;

1.5 a relevant engineering degree or an aircraft maintenance technician qualification 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;

1.6 knowledge of a relevant sample of aircraft types;

1.7 knowledge of maintenance training standards.

2. 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.

3. A programme for continuation training should be developed that ensures that the surveyors remain competent to perform their allocated tasks.

AMC 147.B.10(d) National Military Airworthiness Authority

The documented procedures should contain the following information:

(a) The pMS's designation of the NMAA.

(b) The title(s) and name(s) of the manager(s) of the NMAA and their duties and responsibilities.

(c) Organisation 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 authorised to sign certificates.

(e) A general description of the facilities.

(f) Procedures specifying how the NMAA ensures compliance with EMAR 147.

AMC 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 organised in a consistent way throughout the NMAA (chronological, alphabetical order, etc.).

2. All records containing sensitive data regarding applicants or organisations 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 EMAR 147.B.20.

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

1. 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.
2. The audit report should be made on an EMAR Form 22 (see Appendix III).

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

1. The reports should include the date each finding was cleared together with reference to the NMAA report or letter that confirmed the clearance.
2. Findings should be recorded on the audit report form with a provisional categorisation as a level 1 or 2. Subsequent to the audit visit that identified the particular findings, the NMAA should review the provisional finding levels, adjusting them if necessary and change the categorisation from “provisional” to “confirmed”.

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

1. Audits should be conducted to ensure the continuity of the approval; it is not necessary to sample all basic and Military Aircraft Type Training courses, but the NMAA should sample, as appropriate, one basic and one Military aircraft 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 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 NMAA should sample, as appropriate, one basic and one Military Aircraft Type Training course examination.

AMC 147.B.130(b) Findings

1. In the case of a level 2 finding, the NMAA may give up to 6 months’ notice of the need for rectification. Dependent upon the seriousness of the level 2 finding(s), the NMAA may choose a notice period less than 6 months.
2. When the NMAA chooses to allow 6 months, the initial notification should be of 3 months duration to the quality manager followed by the final 3 months’ notice to the Accountable Manager.

AMC to Appendix II to EMAR 147 “Maintenance Training Organisation Approval”

AMC to EMAR Form 11 is contained in the EMAR Forms document.

AMC to Appendix III to EMAR 147 “Examples of Training Certificates”

A Certificate of Recognition for an EMAR 147 Basic Training Course or Basic Examination should be issued after completion of either basic training, basic examination or both basic training and basic examination.

Some examples of cases where a Certificate of Recognition should be issued are the following:

After successful completion of a full basic course in one MAML (sub) category including successful completion of the examinations of all the corresponding modules.

After successful completion of a full basic course in one MAML (sub) category without performing examinations. The examinations may be performed at a different EMAR 147 MTO (this MTO will issue the corresponding Certificate of Recognition for those examinations) or at the NMAA.

After successful completion of all module examinations corresponding to a MAML (sub) category.

After successful completion of certain modules/sub-modules/subjects.

It must be noted that “successful completion of a course” (without the module examinations) means successful completion of the theoretical and practical training including the corresponding practical assessment.

APPENDICES TO AMC to EMAR 147

Appendix I - Maintenance Training Organisation Exposition (MTOE)

1. The following subject headings form the basis of the MTOE required by EMAR 147.A.140.
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 material 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 for doing so should be specified in paragraph 1.10.
4. Where an MTO is approved in accordance with any other EMARs 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 assessors
- 1.4. Management personnel organisation 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 subcontractors as per EMAR 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 NMAA
- 1.10. Notification procedures regarding changes to MTO
- 1.11. MTOE 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. 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. Organisation 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 subcontractors

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 II – EMAR Form 4

EMAR Form 4 is contained in the EMAR Forms document.

Appendix III - EMAR Form 22

EMAR Form 22 is contained in the EMAR Forms document.

Appendix IV - EMAR Form 12

EMAR Form 12 is contained in the EMAR Forms document

GUIDANCE MATERIAL

SECTION A

TECHNICAL REQUIREMENTS

GM 147.A.10 General

Such an MTO may conduct its activity from more than one address.

GM 147.A.100(i) Facility requirements

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

GM 147.A.105(f) Personnel requirements

It is recommended that potential instructors be trained in instructional techniques.

GM 147.A.105 (g) Personnel requirements

Moved to AMC 147.A.105(f).

GM 147.A.105(h) Personnel requirements

1. Moved to AMC 147.A.105(h)2.
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 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 147.A.115(a) Instructional equipment

1. Synthetic training devices are working models of a particular system or component and include computer simulations.
2. NOT APPLICABLE.

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

1. The primary objective of the quality system is to enable the MTO to satisfy itself that it can deliver properly trained students and that the MTO remains in compliance with EMAR 147.

2. The independent audit is a process of routine sample checks of all aspects of the MTO'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 MTO (an organisation 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 MTO (an organisation 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 MTO 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 147.A.135(c) Examinations

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

GM 147.A.140(c) Maintenance Training Organisation Exposition (MTOE)

The quality manager should be responsible for monitoring the amendment of the MTOE, unless otherwise agreed by the NMAA, including associated procedures manuals and submission of the proposed amendments to the NMAA. However, the NMAA may agree via a procedure stated in the amendment section of the MTOE that some defined class of amendments may be incorporated without prior approval by the NMAA.

GM 147.A.145(d) Privileges of the Maintenance Training Organisation

1. Moved to AMC 147.A.130(b) paragraph 4(i).

2. The fundamental reason for allowing an MTO approved under EMAR 147 to subcontract certain basic theoretical training courses is to permit the approval of MTOs which may not have the capacity to conduct training courses on all EMAR 66 modules.

3. The reason for allowing the subcontracting of only training modules 1 to 6 and 8 to 10 of Appendix I to EMAR 66 is that most of the related subjects can generally also be taught by training organisations not specialised in aircraft maintenance and the practical training element as specified in EMAR 147.A.200 does not apply to them. However, training modules 7, 11 to 17 and 50 to 55 of Appendix I to EMAR 66 are specific to aircraft maintenance and include the practical training element as specified in EMAR 147.A.200. The intent of the “limited subcontracting” option as specified in EMAR 147.A.145 is to grant EMAR 147 approvals only to those organisations having themselves at least the capacity to teach on-aircraft maintenance specific matters.

GM 147.A.145(d)3 Privileges of the Maintenance Training Organisation

In the case of Military Aircraft Type Training and examination, the reason for restricting subcontracting to powerplant, avionic systems, armaments, escape systems and other relevant military-specific systems is that the related subjects can generally also be imparted by certain organisations specialised in these domains such as the (Military) Type Certificate Holder of the powerplant or the OEMs of these avionic systems, armaments, escape systems and other relevant military-specific systems. In such a case, the Military Aircraft Type Training course should make clear how the interfaces with the aircraft are addressed and by whom (the subcontracted organisation or the EMAR 147 MTO itself).

SECTION B

PROCEDURES FOR NATIONAL MILITARY AIRWORTHINESS AUTHORITIES

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

1. NOT APPLICABLE.

2. The NMAA should determine how and by whom the audit should be conducted. For example, if the applicant is a large MTO, it will be necessary to determine whether one large team audit or 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 EMAR 145/EMAR 147 organisation is the possibility to combine the audits.

3. Where it is intended that the MTO may conduct training and examinations away from the MTO address(es) in accordance with EMAR 147.A.145(c), then a sample audit of the process should be carried out by the NMAA from time to time to ensure that procedures are followed. For practical reasons such sample audits will need to be carried out when the training is actually being conducted away from the MTO address(es).

4. The auditing surveyor should ensure that they are always accompanied throughout the audit by a senior member of the MTO making application for an EMAR 147 approval. Normally this should be the proposed quality manager. The reason for being accompanied is to ensure that the MTO is fully aware of any findings during the audit. In any case, the proposed quality manager/senior member of the MTO should be debriefed at the end of the audit visit on the findings made during the audit.

5. There may be occasions when the auditing surveyor may find situations in the applicant's organisation on which he/she is unsure about compliance. In this case, the organisation should be informed about possible non-compliance at the time and the fact that the situation will be reviewed within the NMAA before a decision is made. The organisation should be informed of the decision within 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 organisation will suffice.

6. A change of name of the MTO requires the MTO to submit a new application as a matter of urgency stating that only the name of the MTO has changed including a copy of the MTOE with the new name. Upon receipt of the application and the MTOE, the NMAA should reissue the approval certificate.

7. A name change alone does not require the NMAA to audit the MTO, unless there is evidence that other aspects of the MTO have changed.

8. A change of Accountable Manager requires the MTO to submit such fact to the NMAA 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 EMAR 147.A.105(b) requires the MTO to submit to the NMAA an EMAR Form 4 in respect of the particular person. If satisfied that the qualifications and experience meet the standard required by EMAR147, the NMAA should indicate acceptance in writing to the MTO.

10. A change in the MTOE requires the NMAA to establish that the procedures specified in the MTOE are in compliance with EMAR 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 MTO requires the MTO to make a new application to the NMAA together with the submission of an amended MTOE. The NMAA should follow the procedure specified in EMAR 147.B.110(a) and (b) in so far as the change affects such procedure before issuing a new EMAR147 approval certificate.

12. The complete or partial reorganisation of an MTO should require the re-audit of those elements that have changed.

13. Any additional basic or Military Aircraft Type Training courses require the MTO to make a new application to the NMAA together with the submission of an amended MTOE. 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 NMAA should follow the procedure of paragraph 11 (above) in so far as the change affects such procedures unless the NMAA is satisfied that the MTO has a well-controlled procedure to qualify such change when it is not necessary to conduct the audit elements of the paragraph 11 procedure.