Australian Government Civil Aviation SafetyAuthority



Maintenance training organisations

CASR Part 147

Date File ref February 2024 D23/392859 An Acceptable Means of Compliance (AMC) explains how one or more requirements of the Civil Aviation Safety Regulations 1998 (CASR) for the issue of a certificate, licence, approval or other authorisation, can be met by an individual or organisation applying to the Civil Aviation Safety Authority (CASA) for the authorisation.

AMC are non-binding advisory documents issued by CASA which may be used by persons and organisations to achieve compliance with CASR.

Applicants are not required to utilise an AMC to comply with a legislative requirement but if they do, CASA will issue the authorisation to which the AMC relates.

AMC do not articulate the only way compliance can be achieved. Individuals and operators may, on their own initiative, propose other ways of meeting the requirements of CASR; however, any such proposal will be subject to separate assessment by CASA to determine whether the proposed methods are likely to produce the required legislative outcome.

Guidance material (GM) is non-binding material issued by CASA which helps to illustrate the meaning of a requirement or specification in CASR. It provides explanations of the CASR and sometimes an amplification of the policy intention underpinning the applicable provision of CASR, rather than a means of complying with it. GM should be read in conjunction with the applicable provision of CASR and AMC. GM is identified by grey shaded text.

Contents

1	Reference material			5	
	1.1	Acrony	/ms	5	
	1.2	Definit	ions	5	
	1.3	Refere	ences	6	
	1.4	Forms		7	
2	Reco	gnitior	gnition of prior learning		
	2.1	Recog	nition of prior learning principles	8	
	2.2		ng RPL for the units of competency required for a category or subcategory nce, or for removal of an exclusion	10	
3	Main	tenanc	e training organisations	11	
Appendix A Appendix B Appendix C		KB Sample 2 - Certificate of recognition (essay)		19 21 23	
Annex A			Mapping — CASA basics exam syllabus to Part 66 basic knowledge syllabus	<u>A1</u>	

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Status

This version of the AMC and GM is approved by the Branch Manager, Airworthiness and Engineering.

Note: Changes made in the current version are annotated with change bars.

Version	Date	Details
v3.2	September 2023	 Annex A - Mapping of the CASA Basics exams: Minor update made to add CASA Basics exam 'GE' to sub-modules 16.11, 16.12 & 16.13, of the Module 16 - Piston engine, mapping table. Minor update made to add CASA Basics exam 'BA' to the Co-axial cable topic within sub-module 7.7. Colour coding added to each of the 17 Module tables in Annex A.
v3.1	October 2022	Administrative review only.
v3.0	October 2020	Mapping of the CASA Basics exam syllabus to the Part 66 basic knowledge syllabus has been undertaken and a mapping document has been incorporated into Annex A as an acceptable means of compliance.
v2.4	Oct 2019	 Guidance regarding the application of RPL for the knowledge and practical experience requirements for a category or subcategory licence and RPL in relation to the competencies required to remove licence exclusions. Standard RPL measures for maintenance organisations has been increased, with other adjustments made to the RPL Evidence and Process guidance table.
v2.3	Jan 2016	 Clarification of the information an MTO may require from an applicant when conducting an RPL assessment. Update to the projected date for which the Part 66 of CASR will be amended (as mentioned in the section titled 'Recognition of Prior Learning') to recognise the MEA41015 Certificate IV in Aeroskills (Mechtronics) training course as the training required to gain a B1.2 and B1.4 licence outcome.
v2.2	Jul 2015	 Guidance regarding RPL for individuals currently enrolled in the Diploma of Aeroskills (Mechanical) vs future enrolment in Certificate IV in Aeroskills (Mechatronics) for a subcategory B1.2 or B1.4 licence outcome. Minor update to MEA qualification numbers in the section titled: "Recognition of Prior Learning" as a result of these qualification numbers being updated with the recent endorsement of the MEA training package in Feb 2015
v2.1	Nov 2014	• MOS AMC 147.A.135 – Assessments. Provide an AMC that describes the use of personnel other than assessors, such as administration personnel, within a Part 147 MTO as examination invigilators during the conduct of student examinations.
v2.0	Oct 2012	 Guidance about applying RPL for the units of competency required for a category or subcategory and RPL in relation to the competencies required to remove licence exclusions. Standard RPL measure for maintenance authorities has been increased and other adjustments to the RPL Evidence and Process guidance table.

Version	Date	Details
v1.1	Jul 2012	 RPL AMC information updated. Typographic corrections.
v1.0	Jan 2012	 References to Recognised Organisation (RO) on page 5 updated to read MTO. List of Approved Training Courses by CASR Part 147 Maintenance Training Organisations moved into Advisory Circular (AC) 147-2. MOS AMC 147.A.140 cross reference to the CASA Sample MTO exposition corrected. MOS GM 147.A.205 – Category Training assessments incorrectly mentioned AC 145-2 instead of AC 147-2.

1 Reference material

1.1 Acronyms

The acronyms and abbreviations used in this AMC-GM are listed in the table below.

Acronym	Description
AC	advisory circular
AMC	acceptable means of compliance
AQF	Australian Qualification Framework
CAR	Civil Aviation Regulation 1988
CASA	Civil Aviation Safety Authority
CASR	Civil Aviation Safety Regulation 1998
DEEWR	Department of Education, Employment and Workplace Relations
EASA	European Aviation Safety Agency
GM	guidance material
MOS	Manual of Standards
MTO	maintenance training organisation
NAA	National Aviation Authority
RPL	recognition of prior learning
RTO	registered training organisation
UOC	units of competency

1.2 **Definitions**

Terms that have specific meaning within this AMC-GM are defined in the table below.

Term	Definition
Term Registered training organisation (RTO) assessments	The following is a copy of then (2008) Department of Education, Employment and Workplace Relations (DEEWR) standards for the conduct of Recognition of Prior Learning (RPL).
	The Registered Training Organisation's (RTO) assessments meet the requirements of the endorsed components of Training Packages and the outcomes specified in accredited courses within the scope of its registration.
	 The RTO must ensure that assessments (including RPL): comply with the Assessment Guidelines included in the applicable nationally endorsed Training Packages or the assessment requirements specified in accredited courses; lead to the issuing of a Statement of Attainment or qualification under the Australian Qualification Framework (AQF) when a person is assessed as competent against nationally endorsed unit(s) of competency in the applicable Training Package or modules specified in the applicable

Term	Definition
	accredited course;
	3. are valid, reliable, fair and flexible;
	 provide for applicants to be informed of the context and purpose of the assessment and the assessment process;
	 where relevant, focus on the application of knowledge and skill to the standard of performance required in the workplace and cover all aspects of workplace performance, including task skills, task management skills, contingency management skills and job role environment skills;
	 involve the evaluation of sufficient evidence to enable judgements to be made about whether competency has been attained;
	 provide for feedback to the applicant about the outcomes of the assessment process and guidance on future options in relation to those outcomes;
	 are equitable for all persons, taking account of individual needs relevant to the assessment; and
	9. provide for reassessment on appeal.
	The RTO must ensure that RPL is offered to all applicants on enrolment. The RTO must have an RPL process that is structured to minimise the time and cost to applicants; and provides adequate information, support and opportunities for participants to engage in the RPL process.

1.3 References

Legislation

Legislation is available on the Federal Register of Legislation website https://www.legislation.gov.au/

Document	Title
Part 147 of CASR	Continuing airworthiness—maintenance training organisations
Part 147 MOS	Part 147 Manual of Standards
Part 66 of CASR	Continuing airworthiness—aircraft engineer licences and ratings
Part 66 MOS	Part 147 Manual of Standards

Advisory material

CASA's advisory materials are available at https://www.casa.gov.au/publications-and-resources/guidance-materials

Document	Title
AC 147-02	Approved Part 147 training organisations
AMC/GM Part 66	Continuing airworthiness—Aircraft engineer licences and ratings

1.4 Forms

CASA's forms are available at http://www.casa.gov.au/forms

Form number	Title
Form 465	Part 147 Maintenance Training Organisation and Part 145 Approved Maintenance Organisation Notification of Training outcomes

2 **Recognition of prior learning**

2.1 Recognition of prior learning principles

Where a maintenance training organisation (MTO) has sought and gained approval from CASA, for an RPL control procedure within its exposition, the MTO may conduct RPL assessments as authorised by the exposition. An acceptable means of compliance (AMC) would be to develop an RPL procedure that contained the following:

- completion of a self-assessment appraisal against the training standard
- collection of evidence for the development of the evidence package which supports the self-assessment claims
- submission of an RPL application/claim with an opportunity to gather further evidence
- assessments including details of how a competency assessment is carried out
- interviews/testing/workplace visits/substantiation of claims
- evidence to support a claim should include:
 - certificates/diplomas
 - references
 - duty statements
 - company approvals
 - samples of work
 - workplace review
 - recorded practical experience
 - documentation/reports/journals.

For licence category training, the RPL assessment is made against the Aeroskills training package competency standards, comprised of both theory and practical elements within the units of competencies (UOCs). As part of the RPL assessment the MTO may require the applicant to undergo additional assessment exercises or provide further evidence to support their application, such as:

- written assessments/ assignments
- oral or written questions
- observations, real or simulated
- practical demonstrations
- interviews
- examinations.

Category training MTO's need to ensure that CASA's Part 66 basic knowledge examination requirements are followed, to ensure that the Part 66 basic knowledge examination standard is assured.

Candidates using CASA Basics exam results, for the purpose of RPL towards a Part 66 licensing outcome, can expect to receive credit against the Part 66 basic knowledge syllabus (knowledge modules). Further detail is at Annex A to this document.

For each RPL assessment, all MTOs are to ensure this standard is consistently applied.

RPL is not to be carried out by an MTO in relation to a licence issued from a particular foreign country, or by other approved pathways, unless the MTO approval includes RPL for that country or pathway. CASA lists the countries for which an MTO is approved in Part 1 of Advisory Circular <u>AC 147-02</u> - <u>Approved Part 147 Training Organisations</u>. Where an MTO has sought and gained approval from CASA for an RPL control procedure for a foreign country within its exposition, the MTO may conduct RPL for that country. RPL is dependent on the form of evidence and from where a licence or foreign company authorisation (the licence) originated. The straight recognition of privileges, on the face of the foreign licence, is further dependant on the MTO understanding via its up-to-date country files, exactly which licence privileges are relevant to the process of straight recognition. In addition, the MTO will also consider the training undertaken, in order to gain the foreign licence. For an MTO approved to do so, an AMC for the conduct of RPL is as provided in the Table 1 below.

Evidence	Process
RPL against the Part 66 MOS examination standards	Only against CASA basic examinations (Refer Annex A to this AMC/GM), approved module examinations or approved countries (where country files are held).
CASA AME CAR 31 basic exams (including extension basics)	Already tested at 75% and determined to have satisfied CASR Part 66 level of training requirements. The MTO may grant knowledge as per mapping between CASR Part 66 knowledge requirements and CAR 31 knowledge examined (Refer Annex A to this AMC/GM).
Expired CASA CAR 31 licence (not transitioned)	Straight recognition of privilege as detailed on the face of the expired licence, excluding cancelled or revoked licences. The MTO may grant knowledge as per mapping between CASR Part 66 knowledge requirements and CAR 31 knowledge examined (Refer Annex A to this AMC/GM). CASA can advise if a licence has been cancelled or revoked.
EASA Part 66 licence	Evidence to support application as per RPL process approved for the MTO by CASA for the approved country, as detailed in AC147-02. Straight recognition of privilege as detailed on the face of the licence, based on alignment of the CASA/EASA syllabus and examination standards. Recognition of practical maintenance experience may be gained with evidence of exercising the EASA licence and or authorisation.
Other foreign licence	Only if RPL for the particular country has been approved in the MTO exposition. Knowledge tested to confirm 75% pass mark. Practical maintenance experience recognition may be gained with evidence of exercising the foreign licence and/or authorisation.
Overseas National Aviation Authority (NAA) Part 66 exams	Only if RPL for the particular country has been approved in the MTO exposition. If examined at 75% - confirmation of mapping between CASR Part 66 knowledge requirements and knowledge delivered, including – syllabus content and levels of training.
DASR Part 66 licence	Straight recognition of the competency reported only. Underlying knowledge requirement to be examined in accordance with Part 66 examination standards (Part 66 module examinations) to 75% pass mark.
MTO outcome	Confirmation that the underlying knowledge of CASR Part 66 has been delivered in accordance with CASA knowledge syllabus and the required Part 66 MOS examination standards have been met. Respective CASA

Table 1 - RPL procedure - acceptable means of compliance considerations

Evidence	Process
	modules may then be credit transferred.
Non-MTO (RTO only)	Straight recognition of the competency reported only. Underlying knowledge requirement to be examined in accordance with Part 66 examination standard (Part 66 module examinations) to 75% pass mark.
Non-aviation technical qualifications or licences	Mapping of competencies held to units of competency required for category or subcategory outcome only. Underlying knowledge requirement to be examined in accordance with Part 66 MOS examination standards to 75% pass mark.

When CASA is approving the RPL control procedures for an MTO, it will inform the MTO about any licence rating or certification privileges, issued by a particular country, which CASA is aware is not relevant for RPL straight recognition purposes. For example: the Canadian M1 licence includes certification privileges for electrical tasks the holder may not physically carry out. Before being approved by CASA, the MTO's RPL procedure/process must be capable of managing and being updated by such information.

2.2 Applying RPL for the units of competency required for a category or subcategory of licence, or for removal of an exclusion

The only competencies that a Part 147 MTO can currently report to CASA for the grant of a category A, B1 or B2 licence, are those units of competency specified for each licence and listed in Appendix IV of Part 66 MOS, or those determined by CASA to be equivalent competencies. RPL against the Part 66 knowledge examination standards can only be carried out as detailed in the table above.

Within the Aeroskills training package, the qualifications and their associated units of competencies (delivered in accordance with the documented packaging rules), recognised by CASA for grant of a Part 66 licence are:

- MEA20518 Certificate II in Aircraft Line Maintenance category A licence outcome.
- MEA50219 Diploma of Aeroskills (Mechanical) category B1 licence outcome.
- MEA50118 Diploma of Aeroskills (Avionics) category B2 licence outcome.

If a student has gained other competencies from other qualifications (e.g. from the Certificate IV in Aeroskills Mechanical or Avionics), then the Part 147 MTO must confirm the Elements and Performance Criteria, Required Skills and Knowledge and the Range Statement of each unit of competency listed in Appendix IV of Part 66 MOS for the category of licence sought, have been met by the student. RPL against Part 66 knowledge examination standards can only be carried out as detailed in the table above.

Once RPL to that standard has been achieved, the Part 147 MTO can report to CASA the relevant competencies and the Part 66 knowledge examination standard requirements have been gained, for the purpose of Part 66 licensing outcome or exclusion removal.

3 Maintenance training organisations

MOS GM 147.A.10 – General

An MTO may conduct business from more than one address and may hold more than one approval.

An MTO may conduct licence category training and aircraft type training, including training for removal of an exclusion from a category of licence or from an aircraft type rating endorsed on an existing licence, if approved by CASA and approved as an RTO.

MOS GM 147.A.15

All applications made by organisations for a Part 147 MTO initial approval or change to an existing approval are to be submitted to CASA via use of CASA Form 547.

All relevant documents and links for the application are to be emailed to: <u>Part147.MTO@casa.gov.au</u>

MOS AMC 147.A.100 (i) – Facility requirements

An AMC would be to hold and ensure reasonable access to copies of aviation legislation, examples of typical aircraft maintenance manuals and service bulletins, airworthiness directives, aircraft and component records, release documentation, procedures manuals and aircraft maintenance programmes.

Maintenance documentation should represent typical examples for both large and small aircraft and cover both aeroplanes and helicopters as appropriate. Avionics systems documentation should cover a representative range of available equipment. All documentation should be reviewed and updated on a regular basis.

Airworthiness information may be made available through various sources, including ownership, leasing, sharing arrangements, access through web address (URL), or supplied by another person (i.e. an aircraft owner). Where information is subject to any loan agreement evidence of the arrangement that gives the MTO access to such information must be available.

MOS GM 147.A.100 (i) – Facility requirements

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

MOS AMC 147.A.105 – Personnel requirements

An AMC for a larger MTO (an organisation with the capacity to provide training for 50 students or more) would be the appointment of a Training Manager with the responsibility of managing the training organisation on a day to day basis. Such person could also be the Accountable Manager. In addition, the organisation should appoint a Quality Manager with the responsibility of managing the quality system as specified in paragraph 147.A.130 (b) of Part 147 MOS, and an Examination Manager with the responsibility of managing the relevant Subpart 147.C or

Subpart 147.D of CASR examination system. Such person(s) may also be an Instructor and/or Examiner.

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

An acceptable means of compliance, when an organisation is also approved against other Parts of the CASR's which contain some similar functions/responsibilities, is to combine those functions/responsibilities.

MOS GM 147.A.105 (c) – Personnel requirements

The MTO should have a core structure of permanently employed staff to undertake the minimum amount of maintenance training proposed. However, may contract instructors for subjects which are only taught on an occasional basis.

MOS AMC 147.A.105 (d)

Where an MTO uses another organisation to provide practical training and assessment, the MTO is to ensure the organisation has appropriate instructors/assessors on staff to ensure Part 66 training standard are met.

MOS GM 147.A.105 (g) – Personnel requirements

Assessors should demonstrate a clear understanding of the assessment standard required by Part 66 of CASR and have a responsible attitude to the conduct of examinations such that the highest training and assessment integrity is assured.

MOS AMC 147.A.105 (h) – Personnel requirements

An MTO is to provide recurrency training of 35 hours duration adjusted to the scope of training undertaken within the organisation, and of the particular instructor/assessor's terms of reference.

MOS GM 147.A.105 (h) – Personnel requirements

Records should be kept for each instructor/assessor and recorded when recurrency training was scheduled, and when it took place.

The recurrency training may be subdivided into more than one element during a 24-month period and may include such activities as attendance at relevant lectures and symposiums.

MOS AMC 147.A.106 (a) – Assessors for category training

An acceptable training course would be a Certificate IV (training & assessment).

MOS GM 147.A.106 (c) – Assessors for aircraft type training

An MTO should ensure aircraft type training assessors have previously held the licence rating or previously undertaken type course training for the aircraft rating being taught.

MOS AMC 147.A.110 – Records of instructors and assessors

An AMC is to keep on record the following minimum information relevant to the scope of activity in respect of each instructor, knowledge examiner and practical assessor. It is acceptable to keep the record in any format under the control of the organisations quality system:

- Name
- Date of Birth
- Personnel/Staff number
- Experience
- Qualifications
- Training history (before entry)
- Subsequent Training
- Scope of activity
- Starting date of employment/contract
- If appropriate ending date of employment/contract.

An AMC for access control limitations, is to maintain access to a minimal level, such that it is assured. The records cannot be altered in an unauthorised manner, or that such confidential records become accessible to unauthorised persons.

MOS GM 147.A.110 – Records of instructors and assessors

Instructors, knowledge examiners and practical assessors should be provided with a copy of their Terms of Reference (TOR), to ensure they are fully aware of the instructional, examination and/or assessor privileges/restrictions they hold.

MOS AMC 147.A.115 (c) – Instructional equipment

An AMC is to provide an appropriate selection of aircraft parts in relation to the subject module or sub-module of the Part 66 curriculum being instructed. For example, turbine engine module training should require the provision of sufficient parts from different types of turbine engines to demonstrate what parts look like, what the critical areas are from a maintenance viewpoint, and to enable disassembly/assembly exercises to be completed.

Appropriate aircraft, engines, aircraft parts and avionics equipment means appropriate in relation to the subject module or sub-module of the Part 66 curriculum 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 an operational environment.

"Access" may be interpreted to mean, in conjunction with the facilities requirement of paragraph 147.A.100 (d) of the Part 147 MOS, that there may be an agreement with a maintenance organisation approved under Part 145 of CASR to access such parts, aircraft, etc.

MOS AMC 147.A.115 (d) Aircraft access

Aircraft access agreements must be in place prior to any practical training and assessment commencing and detail the following:

- period of enabled access
- any limitations regarding aircraft systems access and operation
- any limitations regarding the disassembly and reassembly of aircraft parts
- any restrictions regarding operation and testing of the aircraft systems

The agreement must be in written form and be signed by the parties entering into the agreement and retained by the MTO for CASA audit purposes.

MOS GM 147.A.115 (e) – Instructional equipment

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

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

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

MOS AMC 147.A.125 (a) Records

Assessment records to be retained, include copies of examination papers which are to be kept either in their original form or as scanned copies. For retention of electronic examination banks/systems, these electronic records must be able to be reviewed/inspected by CASA upon request.

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

The independent audit procedure should ensure that all aspects of Part 147 of CASR compliance are validated at least once 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 and documented plan.

In a small MTO, the independent audit function may be contracted to another maintenance training organisation approved under Part 147 of CASR or to a competent person acceptable to CASA. Where the small training organisation 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. Where the MTO is also approved in conjunction with another CASR Part requiring a quality system, then such quality systems may be combined.

When training or examination is carried out under the sub-contract control system:

a pre audit procedure should be established whereby the Part 147 of CASR approved MTO should audit a prospective sub-contractor to determine the services of the sub-contractor meet the intent of Part 147 of CASR;

- a renewal audit of the subcontractor should be performed at least once every 12 months to ensure continuous compliance with the CASR Part 147 standard; and
- the sub-contract control procedure should record audits of the subcontractor and have a corrective action follow-up plan.

The independence of the audit system should be established by always ensuring that audits are carried out by personnel not responsible for the department/section function or procedure being checked.

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

The primary objective of the quality system is to enable the training organisation to satisfy itself that it can deliver properly trained students and that the organisation remains in compliance with Part 147 of CASR.

The independent audit is a process of routine sample checks of all aspects of the training organisation'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.

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.

A large training organisation (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 small training organisations (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 independent function or procedure being checked within the audited section/ department subject to the overall planning and execution being controlled by the quality manager.

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 rectifications, except that in the large training organisation, 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 senior staff involved to review the overall performance.

MOS GM 147.A.135 – Assessments

CASA will determine when or if the disqualified assessor may be reinstated.

MOS AMC 147.A.137 (a) – Conduct of assessments (examinations)

Examinations may be computer or hard copy based or a combination of both. The actual questions to be used in a particular examination should be determined by the assessment staff, or as generated from an established secure examination bank/system.

MOS AMC 147.A.137 (b) – Conduct of assessments

When carrying out assessments of students, an MTO may utilise staff other than assessors (who need to be qualified as per section 147.A.106 of the Part 147 MOS) e.g. administrative personnel to act as examination invigilators during the conduct of student examinations.

MOS AMC 147.A.138 (a)

An MTO that provides category training and assessment must ensure a pass mark of 75% or more is achieved for each respective CASA module examination, as detailed as applicable in Appendix 1 of the Part 66 MOS and in accordance with Appendix IV of the Part 66 MOS, in conjunction with determining competence of the respective UOC's as documented as applicable in accordance with Appendix IV of the Part 66 MOS.

For an MTO that provides Category training and assessment, an approved form of a module examination result certificate is provided at Appendix A.

MOS AMC 147.A.138 (b)

An MTO that provides type training, must ensure a pass mark of 75% or more is achieved for each separate type training examination, if the examination and course is separated.

MOS AMC 147.A.140 – MTO Exposition

A recommended format of an exposition is included in the Part 147 Sample Exposition - MTO.

When an MTO is approved in accordance with any other CASR Part which also requires an exposition, the exposition required by the other Part may form the basis of the MTO exposition in a combined document, as long as the other exposition contains the information required by 147.A.140 of the Part 147 MOS, and a cross reference index is included based upon the CASA Part 147 Sample Exposition - MTO.

When training or examination is carried out under the sub-contract control system the MTO exposition should contain a specific procedure on the control of sub-contractors as per the Sample MTO Exposition Item 2.18 and include a list of sub-contractors as required by 147.A.140 (a) 12, and as detailed in the Part 147 Sample Exposition - MTO (Item 1.7).

CASR Part 147.040 – Privileges for maintenance training organisations

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 MTO's students should meet the requirements of Part 147 of CASR for the duration of that training or examination and it remains the Part 147 organisation's responsibility to ensure such requirements are satisfied.

The MTO approved under Part 147 of CASR 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 sub-contractor meets the Part 147 of CASR standards. Particular attention should be given to ensuring that the training that is delivered also meets the requirements of Part 66 of CASR and aircraft technologies as appropriate.

The contract between the MTO approved under Part 147 of CASR and the sub-contractor should contain a provision for:

- CASA to have right of access to the sub-contractor
- the sub-contractor to inform the Part 147 approved MTO of any change that may affect its Part 147 of CASR approval, before any such change takes place.

MOS GM 147.A.200– Category training

Where the MTO approved under Part 147 of CASR contracts the practical training element either totally or in part to another organisation, the organisation in question should ensure that the practical training elements are properly carried out. At least a third of the practical training element should be carried in an actual maintenance working environment.

MOS GM 147.A.205 – Category training assessments

A student who has completed competency-based training would be expected to demonstrate their capability to use relevant tools/test equipment and their ability to use maintenance manuals, to ensure the student can carry out any required inspections/testing without missing any defects. The student should be able to readily identify the location of aircraft components and be 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 their competence. The student should appreciate and 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.

MTOs approved for category training are listed within Part 1 of the <u>AC 147-02 - Approved</u> <u>Part 147 Training Organisations</u>.

MOS GM 147.A.300 – Aircraft type training

Aircraft type training may be sub-divided into airframe type training, powerplant type training, or avionic systems type training. An MTO approved under Part 147 of CASR may be approved to conduct airframe type training only, powerplant type training only or avionics systems type training only.

Airframe type training means type training including all relevant aircraft structure and systems excluding the powerplant.

Powerplant type training means type training on the engine only, including the build-up to a quick engine change unit.

MTOs approved for aircraft type training are listed within Part 2 of the <u>AC 147-02 - Approved</u> <u>Part 147 Training Organisations</u>.

Appendix A

Sample 1 - Certificate of recognition (multiple choice questions)

Certificate of Recognition

Approval Reference: CASA.147 MTO.0000

Examination date: dd/mm/yyyy



Name: P	ositio
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Position:

Signature:	Date Issued:
olghatalo.	 Duic 155ucu.

CASA organisation ARN xxxxxx RTO No. xxxxx

Appendix B

Sample 2 - Certificate of recognition (essay)

Certificate of Recognition

Approval Reference: CASA.147 MTO.0000

Examination date: dd/mm/yyyy



RTO No. xxxxx

Appendix C

Sample certificate of examinations

Certificate of Examinations

Approval Number: CASA.147 MTO.0000

This this certificate of examination is issued to

Student NAME

Date of Birth: dd/mm/yyyy ARN: xxxxx By:

Company name Pty Ltd

Street Address, City, State, Australia, Post Code

A MTO approved to provide training and conduct examinations within its approved schedule and in accordance with CASR Part 147.

This certificate confirms the above person successfully passed the module examination/s stated below:

Module/	Title	Category	Туре	Attempts	Result	Date
Subject						
1	Mathematics	A or B1/B2	MCQ			
2	Physics	A or B1/B2	MCQ			
3	Electrical fundamentals	A or B1/B2	MCQ			
4	Electrical fundamentals	B1 or B2	MCQ			
5	Digital techniques/electronic instrument systems	A or B1 or B2	MCQ			
6	Materials and hardware	A or B1 or B2	MCQ			
7	Maintenance practices	A or B1 or B2	MCQ			
7	Maintenance practices	A or B1 or B2	Essay			
7	Maintenance practices	A or B1 or B2	Essay			
8	Basic aerodynamics	A or B1 or B2	MCQ			
9	Human factors	A or B1 or B2	MCQ			
9	Human factors	A or B1 or B2	Essay			
10	Aviation Legislation	A or B1/B2	MCQ			
10	Aviation Legislation	A or B1/ B2	Essay			
11	Aeroplane aerodynamics, structures and systems	A or B1	MCQ			
12	Helicopter aerodynamics, structures and systems	A or B1	MCQ			
13	Aircraft aerodynamics, structures and systems	B2	MCQ			
14	Propulsion – avionic system	B2	MCQ			
15	Gas turbine engine	A or B1	MCQ			
16	Piston engine	A or B1	MCQ			
17	Propeller	A or B1	MCQ			

Name: _____

Position:_____

Signature:_____

Date Issued:_____

CASA organisation ARN xxxxxx RTO No. xxxxx