

Part-145

Part-145: General

Is Part-M applicable to approved Part-145 organisations?

Answer

Yes, in addition to the Part-M or Part-ML provisions directly referred to in Part-145 (such as reference to point M.A.304 or ML.A.304 in 145.A.48), certain other requirements laid down in Part-M or Part-ML should also be considered by these organisations. Guidance on this subject is given in 'GM Article 4(1)'.

Last updated:

28/01/2021

Link:

https://www.easa.europa.eu/en/faq/19036

What does the term 'occasional' mean in 145.A.75(c)?

Answer

Within the privilege described in 145.A.75(c) an aircraft maintenance organisation (AMO) may perform line maintenance activity (Part-145) in other-than-approved locations, provided it is considered as 'occasional'. There is no formal definition of 'occasional' in the regulation, AMC and GM, but this privilege should be used to support an operator with which the AMO is already in contractual relation, when this operator needs line maintenance service for a short period at a new location due to a **special occasion or particular reason** (e.g. one-time flights, short term contracts/flight destination, flight schedule changes, special event at a particular location such as European athletics championship in Berlin, 6-12 August 2018, etc.) or the owner needs supporting maintenance service for a short period at a new location due to a **special occasion or particular reason**.

Subject to the approval by the Competent Authority, the maintenance organisation should develop in the MOE (e.g. Chapter 2.24 Reference to Specific Maintenance

Procedures) the generic procedures to be followed in such a case: how to assess whether the maintenance can be performed, availability of tools/ equipment/ material/ components/ maintenance data, staff, adequacy of the facilities, environmental conditions, quality system, record keeping, need to report these cases to the competent authority, etc. In addition, the procedure should include the criteria (e.g. maximum service duration without gap in the continuity; limitation in the repetition of the need* at one given location) to classify the activity as 'occasional line maintenance'.

* In principle, the repetitive use of this privilege at the same location should not be considered, and for repetitive needs, an approved line station should normally be established at that location.

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02/02/2021

Link:

https://www.easa.europa.eu/en/faq/21265

How to easily update the "EASA Form 1 - MF/145 Issue 2" to "EASA Form 1 - MF/CAO/145 Issue 3"?

Answer

Purpose of the FAQ

This FAQ is intended to recommend the industry and national competent authority (NCA) an easy way to implement the 'EASA Form 1 Issue 3', applicable from 24.03.2020, by the Maintenance organisations.

Description of the issue

The Regulation (EU) 2019/1383 updated the Appendix II to Annex I (Part-M) — Authorised Release Certificate — EASA Form 1 by changing the footer of the form in order to add the reference of the Part-CAO.

Some organisations may still have in stock hardcopies of EASA Form 1 Issue 2.

In such case, due to the fact that there is no change in the content of the EASA Form 1 or/and in its completion methodology, for the Part-145 and Part-M, Subpart F approved organisations, the change can be done by:

• crossing out the footer in an 'EASA Form 1 - MF/145 Issue 2' and replacing it by

- 'EASA Form 1 MF/CAO/145 Issue 3'; or
- accompanying the Form 1 with a communication explaining that the footer should be read as 'EASA Form 1 - MF/CAO/145 Issue 3' in accordance with the MOE/MOM procedure; or
- by other means acceptable to the NCA.

Last updated:

23/10/2020

Link:

https://www.easa.europa.eu/en/faq/119322

How did you install a Commercial Off-The-Shelf (COTS) equipment without EASA form-1? How do you arrange Part-145 side actually?

Answer

Please check for the answer published here.

Last updated:

06/12/2021

Link:

https://www.easa.europa.eu/en/faq/134264

Quality system

Does the Part-145 or Part-CAO quality system need to be subject to monitoring?

Answer

Yes, the quality system is part of the activities of the Part-145 organisation and therefore it should be monitored.

Point 145.A.65 (c) or CAO.A.100 (b) (1) requires that the quality system monitors that the activities are (being) performed in accordance with the approved procedures. The quality system procedures are included within these approved procedures. This implies that quality system must be subject to audits and the Part-145 or Part-CAO organisation audit programme/plan needs to reflect this.

Besides that, the audits of the quality system shall satisfy the requirement of independent audits. This is further explained in AMC 145.A.65(c)(1) point 11: the independence of the audits should be established by always ensuring that audits are carried out by personnel not responsible for the functions, procedures or products being checked. So, the quality manager cannot audit the quality system in terms of independence of the audit. For Part-CAO this subject is explained in AMC1 CAO.A.100(b).

Therefore, to audit the quality system, it is acceptable to:

- use competent personnel from a different section/department in the same organisation not responsible for the quality function/procedure, or,
- contract the independent audit element of the quality system to another organisation or a qualified competent person.

The way the quality system is going to be audited has to be described in the MOE or CAE and approved by the competent authority.

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28/01/2021

Link:

https://www.easa.europa.eu/en/faq/19054

Certification of maintenance

With respect to blend out repairs, is it required to record the depth and area dimensions of material removed during a blend out repair or is it sufficient to simply record that the damage has been repaired as per the SRM?

Answer

Yes, the dimensions of the damage and the removed/remaining material should be recorded. This is a very important information in order to assess whether further damage (adjacent or at the same spot) at a later stage would be allowable or not. In addition, it is a safeguard measure in order to be able to determine, during audits, whether the person correctly determined that the damage was within limits.

Last updated:

15/12/2014

Link:

https://www.easa.europa.eu/en/faq/19053

Can the subcontractor of a Part-145 or Part-CAO organisation release maintenance?

Answer

One of the fundamentals of subcontracting activities is that, during such maintenance, the Part-145 approval is extended to include the subcontractor activities. Subcontracting can be done only if the Part-145 has approved procedures to do it (145.A.75(b)) and the MOE is amended to reflect this new subcontractor.

A certificate of release to service can be issued by a person from the subcontractor who has received a certification authorisation from the Part-145 organisation in accordance with the certification authorisation procedure of the MOE including the assessment of competence.

The certificate of release to service and the EASA Form 1 will always be issued under the maintenance organisation approval reference.

For maintenance by Part-CAO the situation is different. Only 'specialised services' (e.g. NDT) can be subcontracted to another organisation, in accordance with the appropriate procedure set out in the CAE and approved by the competent authority (CAO.A.095(a)(2)). In accordance with AMC1 CAO.A.025 the procedure should be part of chapter B.7 'Subcontracting'.

A certificate of release to service can be issued by a person from the other organisation who has received a certification authorisation from the CAO in accordance with the certification authorisation procedure of the CAE.

The certificate of release to service will always be issued under the CAO approval reference.

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https://www.easa.europa.eu/en/faq/19051

Release to service of NDT tasks by Part-145 or Part-CAO organisations

Answer

This answer is separated in two tables. One table is for organisation holding a Part-145 approval and the second table is for organisations holding a Part-CAO approval.

Part-145:

Part-145	Certifying staff	Qualification system	General Release	Release procedure for an
Part-145 organisation Aircraft (class A)	Certifying staff required	Qualification system	General Release procedure	Release procedure for an NDT inspection A Part-145 organisation holding an A approval rating on a particular aircraft type and having in its approved scope of work NDT inspections for
	The release of			inspections for this aircraft type. This organization needs to have part-66 certifying staff and NDT personnel
	the aircraft maintenance carried out under A class rating has to be performed	Licencing of	The release is either on the aircraft technical	qualified in accordance with 145.A.30(f). In this case the NDT inspector performs the NDT
	staff holding a	personnel has to follow Part-66 regulation.	log or issuing an aircraft release to service statement.	task and signs off the work order. The aircraft is released by appropriately qualified B1, B3, C

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	organisation's A rating.)			or L certifying staff under the organisation's A rating. Please note that the release may include not only the NDT task but also the associated tasks (removal of panels, blankets, wires, reinstallation, etc), or the NDT task may be part of a base maintenance check.
Engines Class B	The release of the engine maintenance carried out under B class	The certifying staff is qualified following the procedures established by the organisation in compliance with the competent authority requirements. Part-66 licence is not required.	The release of works performed under class B is done on an EASA Form 1 (or by means of an internal release document when this component	A Part-145 organisation holding a B rating approval on a particular engine type and having in its approved scope of work NDT inspections for this engine type. This organization needs to have "engine" certifying staff (qualified in accordance with company procedures) and

be performed by engine's certifying staff.	organisation's own use and the organisation has in place the related internal procedures in the MOE).	145.A.30(f). In this case the NDT inspector

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The release the components carried ander C rating he performs by components certifying (CCS).	nent nance out class nas to ormed nents ng staff	The certifying staff is qualified following the procedures established by the organisation in compliance with the competent authority requirements. The CCS is not required to have a Part-66 licence.	The release of works performed under class C is done on an EASA Form 1 (or by means of an internal release document when this component is for the organisation's own use and the organisation has in place the related internal procedures in the MOE).	A Part-145 organisation holding a C rating approval on a particular component and having in its approved scope of work NDT inspections for this component. This organization needs to have CCS and NDT personnel qualified in accordance with 145.A.30(f). In this case the NDT inspector performs the NDT task and signs off the Work Order / Engineering Order. The CCS releases the works performed to the component (including NDT inspection) on an EASA Form 1.

Specialised			A Part-145
The release of the maintenance carried out under D1 class rating has to be performed by "specialised services" certifying staff.	The certifying staff is qualified following the procedures established by the organisation in	The release of works performed under class D1 rating is done on an EASA Form 1 or using another form of release to service (other than aircraft release to service) as defined by the organisation in the MOE in compliance with 145.A.50 and approved by the competent authority.	organisation holding a D1 approval on a particular NDT method. The approved scope of work will be NDT inspections on this method. This organisation needs to have NDT certifying staff qualified in accordance with 145.A.30(f). In this case the NDT certifying staff performs and releases the NDT task on an EASA Form 1 or using another form of release to service (other than aircraft release to service) as defined by the organisation in the MOE in compliance with 145.A.50 and approved by the competent
			authority.
	organisations approve		

Note: In case of non-EU organisations approved by the EASA in accordance with

Part-145, the Part-66 licence could be read as "Part-66 or national licence in accordance with Part-145 Appendix IV"

Part-CAO:

Part-145	Certifying staff	Qualification system	General Release procedure	Release procedure for an NDT
organisation	required			inspection
Aircraft (class aeroplanes, helicopter, airships, balloons or sailplanes)				A Part-CAO organisation holding an aeroplanes, helicopter, airships, balloons or sailplanes particular aircraft type or and having in its approved scope of work NDT inspections for this aircraft type.
	The release of the aircraft			This organization needs to have part-66 certifying staff and NDT personnel qualified in accordance with CAO.A.035(f).
	maintenance carried out under A class rating has to be performed by certifying staff holding a Part-66 licence.	Licencing of personnel has to follow Part- 66 regulation.	The release is either on the aircraft technical log or issuing an aircraft release to service statement.	

rating.

Please note that the release may include not only the NDT task but also the associated tasks (removal of panels, blankets, wires, reinstallation, etc), or the NDT task may be part of a base maintenance check.

A Part-CAO

organisation holding a components rating

approval on a particular engine type or 'components

other than complete engines' and having in its approved scope

of work NDT

inspections for this

engine type.

This organization needs to have "engine" or

'components other

The release of works performed under class than complete components is done on engines' certifying an EASA Form 1 (or by staff (qualified in means of an internal

release document when this component is procedures) and NDT for the organisation's

own use and the organisation has in accordance with company personnel qualified in

accordance with CAO.A.035(f).

Engines or Components other than complete engines

Components

Class

The certifying

staff is qualified following the

procedures established by

the

organisation, Part-66 licence

is not required.

The release of the engine

maintenance carried out under components class rating has to be performed by 'engine's'

or

'components

other than complete engines' certifying staff. place the related internal procedures in the CAE).

In this case the NDT inspector performs the NDT task and signs off the work order. The engine or 'components other than complete engines' certifying staff releases the works performed to the engine or 'components other than complete engines' (including NDT inspection) on an EASA Form 1.

Class C

staff is The release qualified following the of the component procedures maintenance established by carried out the under C organisation in class rating compliance has to be with the performed competent authority by components requirements. certifying The CCS is not

staff (CCS).

The certifying

required to

licence.

have a Part-66

The release of works performed under class C is done on an EASA Form 1 (or by means of an internal release document when this component is for the organisation's own use and the organisation has in place the related inspector performs internal procedures in the MOE).

A Part-145 organisation holding a C rating approval on a particular component and having in its approved scope of work NDT inspections for this component.

This organization needs to have CCS and NDT personnel qualified in accordance with 145.A.30(f).

In this case the NDT the NDT task and signs off the Work Order / Engineering Order. The CCS releases the works performed to the component (including NDT inspection) on an EASA Form 1.

A Part-CAO

organisation holding

Specialised services

The release of works performed under class method. 'Specialised Services' rating is done on an EASA Form 1 or using another form of release qualified in to service (other than aircraft release to service) as defined by the organisation in the certifying staff CAE in compliance with performs and CAO.A.070(a) and approved by the competent authority (AMC1 CAO.A.070 (a) (1)).

a 'Specialised Services' approval on a particular NDT method. The approved scope of work will be NDT inspections on this This organisation needs to have NDT certifying staff accordance with CAO.A.035(f). In this case the NDT releases the NDT task on an EASA Form 1 or using another form of release to service (other than aircraft release to service) as defined by the organisation in the CAE in compliance with CAO.A.070 and approved by the competent authority.

The release The certifying of the maintenance staff is qualified carried out following the under 'Specialised procedures established by Services' the class rating organisation in has to be compliance performed with EN4179, by Part-66 licence "specialised is not services" required. certifying

staff.

Note: In case of non-EU organisations approved by the EASA in accordance with Part-145, the Part-66 licence could be read as "Part-66 or national licence in accordance with Part-145 Appendix IV"

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https://www.easa.europa.eu/en/faq/19055

Maintenance data

Shall the maintenance data be available and controlled at all times, even if there is no maintenance work going, or shall it be available only during the performance of maintenance?

Answer

Maintenance data has direct influence on many processes of the approved maintenance organisation (AMO) and contributes to demonstrate the overall capability of the organisation to perform maintenance.

The maintenance data either can be arranged directly by the AMO or provided by the customer/operator as specified by 145.A.45(a), M.A.609 or CAO.A.055(a). In both cases, the AMO should demonstrate that the maintenance data used, regardless of the source, is up-to-date. To discharge this responsibility, a procedure should be established to:

- (a) control the amendment status of any documents being used;
- and
- (b) regularly check that all amendments are being received, e.g. by subscribing to a document amendment scheme (sufficient in case of direct access to the maintenance data through the DAH/OEM. The subscription to the maintenance data distribution system of the customer/operator is insufficient, additional independent verifications through the original author shall be done).

When the maintenance data is arranged directly by the AMO it shall be available and controlled continuously.

There are certain situations when the maintenance data can be obtained only through the customer/operator. One of the examples would be the maintenance data for the large aircraft. The maintenance data coming from the TC holder is

usually customised because of the model/configuration/modification/order of aircraft, so it is normally not possible for the AMO to have this customised maintenance data directly from TC holder without having an aircraft of that type under the contract.

When the maintenance data is provided by the customer/operator, it shall be held and controlled by the AMO during maintenance on the concerned aircraft/component. Whenever the maintenance data is not available or not current, the maintenance shall not be performed and released.

Additionally, as part of the obligation for maintenance records, used maintenance data shall be:

- recorded (in compliance with 145.A.55(c), M.A.614(c) or CAO.A.090(b))
- Remark: Manuals issued by the (S)TC (Supplementary Type Certificate) holder such as AMM and CMM do not need to be stored as a record. Recording the revision status of such manual may be sufficient [AMC 145.A.55(c), AMC M.A.614(c)]; and
- accessible for auditing purpose to demonstrate that the organisation worked in compliance with their respective requirements.

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Link:

https://www.easa.europa.eu/en/faq/19104

Personnel requirements

Can a certification maintenance requirement (CMR) be performed by the Flight Crew before flight?

Answer

Normally the flight crew should not release CMR task unless that task is included in a "repetitive pre-flight airworthiness directive" under the conditions of 145.A.30(j) (3), M.A.606(h)(1) or CAO.A.040(c)(1)

In case of aircraft operated away from a supported location, the provisions of 145.A.30(j)(4), M.A.606(h)(2) or CAO.A.040(c)(2) could be used for CMRs as long as all the applicable conditions are met. In particular:

- sufficient practical training has been carried out.
- there is a procedure in the Maintenance Organisation Exposition, Maintenance Organisation Manual or Combined Airworthiness Exposition (CAE).

the task is considered "minor maintenance or a simple check" (AMC 145.A.30(j)(4) point 2(i) or AMC M.A.606(h)(2) point 2).

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Link:

https://www.easa.europa.eu/en/faq/19105

What is the meaning of the Protected Rights in the Appendix IV to Part-145?

Answer

The protected rights mentioned in paragraph 2(a) of the Appendix IV to Part-145 were included in the Regulation 2042/2003 for the persons who were already working in a Part-145 organisation in a location situated outside the EU before the entry into force of Part-66. These protected rights allowed those persons to continue exercising (inside that particular Part-145 organisation) the privileges of the certification authorisation issued by that Part-145 organisation without the need to comply with paragraphs 1(c) to 1(f).

If this person changed the employment to a different Part-145 approved organisation after the entry into force of Part-66 (i.e. 28 November 2003), the previous certification authorisation is not valid and he/she needs to receive a new one from the new Part-145 approved organisation. In this case paragraph 2 of Appendix IV is not applicable anymore.

This implies that any new or extended authorisation granted by AMOs to their C/S after the entry into force of Part-66 must comply with paragraphs 1(c) to 1(f) in particular regarding the type training certificates.

Last updated:

23/01/2017

Link:

https://www.easa.europa.eu/en/faq/21913

What are the training requirements for personnel within a Part-

145 organisation, other than those contained in Part-66?

Answer

Requirement	Reference
The accountable manager shall demonstrate a basic understanding	145.A.30(a)
of Part-145.	point 3.
The person or group of persons nominated responsible for ensuring	
that the organisation complies with Part-145 (including the Quality	
Manager) shall be able to demonstrate	145.A.30(b)
 relevant knowledge, background and satisfactory 	point 3.
experience related to aircraft or components maintenance	
as applicable,	
• a working knowledge of Part-145,	
The organisation shall establish and control the competence of	
personnel involved in any maintenance, airworthiness	145.A.30(e)
review management and/or quality audits in accordance with a	and
procedure and to a standard agreed by the competent authority.	associated
In addition to the necessary expertise related to the job	AMC/GM.
function, competence must include an understanding of the	Appendix IV
application of human factors and human performance issues	to AMC
appropriate to that person's function in the organisation.	145.A.30(e)
This should include also:	and
inis silvala iliciade also.	145.B.10(3)
 Fuel Tank Safety training (AMC3 145-A-30(e) and Appendix IV to AMC 145.A.30(e) and 145.B.10(3)). 	AMC 20-22.
• EWIS training (AMC 20-22)	

The organisation shall ensure that personnel who carry out and/or control a continued airworthiness non-destructive test of aircraft structures and/or components are appropriately qualified for the particular non-destructive test in accordance with the European or equivalent Standard recognised by the Agency.

Personnel who carry out any other specialised task shall be appropriately qualified in accordance with officially recognised Standards.

145.A.30(f) and AMC 145.A.30(f).

By derogation to this paragraph those personnel specified in paragraphs (g) and (h)(1) and (h)(2), qualified in category B1, B3 or L in accordance with Annex III (Part-66) may carry out and/or control colour contrast dye penetrant tests.

By derogation to paragraphs (g) and (h), in relation to the obligation to comply with Annex III (Part-66), the organisation may use certifying staff qualified in accordance with the following provisions:

- 1. For organisation facilities located outside the Community territory certifying staff may be qualified in accordance with the national aviation regulations of the State in which the organisation facility is registered subject to the conditions specified in Appendix IV to this Part.
- 2. For line maintenance carried out at a line station of an organisation which is located outside the Community territory, the certifying staff may be qualified in accordance with the national aviation regulations of the State in which the line station is based, subject to the conditions specified in Appendix IV to this Part.
- 3. For a repetitive pre-flight airworthiness directive which specifically states that the flight crew may carry out such airworthiness directive, the organisation may issue a limited certification authorisation to the aircraft commander and/or the flight engineer on the basis of the flight crew licence held. However, the organisation shall ensure that sufficient practical training has been carried out to ensure that such aircraft commander or flight engineer can accomplish the airworthiness directive to the required standard.
- 4. In the case of aircraft operating away from a supported location the organisation may issue a limited certification authorisation to the

and associated

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commander and/or the flight engineer on the basis of the flight crew licence held subject to being satisfied that sufficient practical training has been carried out to ensure that the commander or flight engineer can accomplish the specified task to the **required standard.** The provisions of this paragraph shall be detailed in an exposition procedure.

AMC/GM.

Appendix IV to Part-145.

- 5. In the following unforeseen cases, where an aircraft is grounded at a location other than the main base where no appropriate certifying staff are available, the organisation contracted to provide maintenance support may issue a one-off certification authorisation:
- to one of its employees holding equivalent type authorisations on aircraft of similar technology, construction and systems; or
- to any person with **not less than five years maintenance** experience and holding a valid ICAO aircraft maintenance licence rated for the aircraft type requiring certification provided there is no organisation appropriately approved under this Part at that location and the contracted organisation obtains and holds on file evidence of the experience and the licence of that person.

All such cases as specified in this point shall be reported to the competent authority within seven days of the issuance of such certification authorisation. The organisation issuing the one-off authorisation shall ensure that any such maintenance that could affect flight safety is re-checked by an appropriately approved organisation.

In addition to the appropriate requirements of 145.A.30(g) and (h), the organisation shall ensure that certifying staff and support staff have an adequate understanding of the relevant aircraft and/or components, or both, to be maintained and of the associated organisation procedures. In the case of certifying staff, this shall be 145.A.35(a). accomplished before the issue or reissue of the certification authorisation.

145.A.35(a) and AMC

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The organisation shall ensure that all certifying staff and support staff are involved in at least six months of actual relevant aircraft or component maintenance experience in any consecutive two-year period. The organisation shall ensure that all certifying staff and support staff	145.A.35(c) and AMC 145.A.35(c)
receive sufficient continuation training in each two-year period to ensure that such staff have up-to-date knowledge of relevant technology, organisation procedures and human factor issues.	145.A.35(d) and AMC 145.A.35(d)
The organisation shall establish a programme for continuation training for certifying staff and support staff, including a procedure to ensure compliance with the relevant paragraphs of 145.A.35 as the basis for issuing certification authorisations under this Part to certifying staff, and a procedure to ensure compliance with Annex III (Part 66).	145.A.35(e) and AMC 145.A.35(e)
Except where any of the unforeseen cases of 145.A.30(j)(5) apply, the organisation shall assess all prospective certifying staff for their competence, qualification and capability to carry out their intended certifying duties in accordance with a procedure as specified in the exposition prior to the issue or reissue of a certification authorisation under this Part.	145.A.35(f) and AMC 145.A.35(f)
The holder of a category A aircraft maintenance licence may only exercise certification privileges on a specific aircraft type following the satisfactory completion of the relevant category A aircraft task training carried out by an organisation appropriately approved in accordance with Annex II (Part-145) or Annex IV (Part-147). This training shall include practical hands on training and theoretical training as appropriate for each task authorised. Satisfactory completion of training shall be demonstrated by an examination or by workplace assessment carried out by the organisation.	145.A.35(n) and AMC 145.A.35(n)

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The holder of a category B2 aircraft maintenance licence may only	
exercise the certification privileges described in point 66.A.20(a)(3)(ii)	
of Annex III (Part-66) following the satisfactory completion of (i) the	
relevant category A aircraft task training and (ii) six months of	
documented practical experience covering the scope of the	
authorisation that will be issued. The task training shall	145.A.35(o)
include practical hands on training and theoretical training as	and AMC
appropriate for each task authorised. Satisfactory completion of	145.A.35(o).
training shall be demonstrated by an examination or by workplace	
assessment. Task training and examination/assessment shall be	
carried out by the maintenance organisation issuing the certifying staff	!
authorisation. The practical experience shall be also obtained within	
such maintenance organisation.	
Pre-flight inspections (when the 145 organisation has an	ML.A.301(a)
agreement with an operator)	or
It should be demonstrated that the personnel carrying out pre-flight	M.A.301(a)
inspections have received appropriate training for the relevant	and AMC
pre-flight inspection tasks based on the operator's CAME.	M.A.301(a)

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