Annex II to ED Decision 2020/002/R Acceptable Means of Compliance (AMC) and Guidance Material (GM) to Annex II (Part-145) to Commission Regulation (EU) No 1321/2014 Issue 2 — Amendment 3

Annex II to Decision 2015/029/R is amended as follows:

The text of the amendment is arranged to show deleted text, new or amended text as shown below:

- deleted text is struck through;
- new or amended text is highlighted in blue;
- an ellipsis '[...]' indicates that the remaining text is unchanged in front of or following the reflected amendment.

AMC 145.1 General

A competent authority may be a ministry, a national aviation authority, or any aviation body designated by the Member State and located within that Member State. A Member State may designate more than one competent authority to cover different areas of responsibility, as long as the designation decision contains a list of the competencies of each authority and there is only one competent authority responsible for each given area of responsibility.

SECTION A - TECHNICAL REQUIREMENTS

GM 145.A.10 Scope

[...]

4.1. [...]

Either person can assume the responsibilities of the accountable manager providing that they can comply in full with the applicable elements of <u>145.A.30(a)</u>, but the 'maintenance engineer' should be is the certifying person to retain the independence of the 'quality audit engineer' to carry out audits. Nothing prevents either engineer from undertaking maintenance tasks providing that the 'maintenance engineer' issues the certificate of release to service. This 'maintenance engineer' may also be nominated as airworthiness review staff to carry out airworthiness reviews and issue the corresponding airworthiness review certificate for aircraft for which Part-ML applies ELA1 aircraft not involved in commercial operations in accordance with M.A.901(I) MLA.903.

[...]

AMC 145.A.30(d) Personnel requirements

[...]

6. The quality monitoring compliance function man-hours should be sufficient to meet the requirement of <u>145.A.65(c)</u> which means taking into account <u>AMC 145.A.65(c)</u>. Where quality monitoring staff perform other functions, the time allocated to such functions needs to be taken into account in determining quality monitoring staff numbers.

[...]

AMC2 145.A.30(e) Personnel requirements

[...]

 Initial human factors training should cover all the topics of the training syllabus specified in <u>GM1</u> <u>145.A.30(e)</u> either as a dedicated course or else integrated within other training. The syllabus may be adjusted to reflect the particular nature of the organisation. The syllabus may also be adjusted to meet the particular nature of work for each function within the organisation. For example:

[...]

GM2 145.A.30(e) Competence assessment procedure

	Managers	Planners	Supervisor	Certifying staff and support staff	Mechanics	Specialised Service staff	Quality audit staff
Knowledge of applicable officially recognised standards						х	х
Knowledge of auditing techniques: planning, conducting and reporting							х
Knowledge of human factors, human performance and limitations	х	х	х	х	х	х	x
Knowledge of logistics processes	Х	Х	Х				
Knowledge of organisation capabilities, privileges and limitations	x	x	х	x		x	x
Knowledge of Part-M, Part-ML, Part-145 and any other relevant regulations	х	x	х	х			x
Knowledge of relevant parts of the maintenance organisation exposition and procedures	х	x	х	х	x	x	x
Knowledge of occurrence reporting system and understanding of the importance of reporting occurrences, incorrect maintenance data and existing or potential defects		x	х	х	x	x	
Knowledge of safety risks linked to the working environment	х	x	х	х	x	x	x
Knowledge on CDCCL when relevant	Х	Х	Х	Х	Х	Х	Х
Knowledge on EWIS when relevant	Х	Х	Х	Х	Х	Х	Х
Understanding of professional integrity, behaviour and attitude towards safety	x	x	х	х	х	х	x
Understanding of conditions for ensuring continuing airworthiness of aircraft and components				x			x
Understanding of his/her own human performance and limitations	x	x	х	х	х	х	x
Understanding of personnel authorisations and limitations	х	х	х	х	х	х	х
Understanding critical maintenance task		Х	Х	Х	Х		Х
Ability to compile and control completed work cards		х	х	х			
Ability to consider human performance and limitations.	x	x	x	x			x
Ability to determine required qualifications for task performance		x	х	x			
Ability to identify and rectify existing and potential unsafe conditions			х	x	x	x	x
Ability to manage third parties involved in maintenance activity		х	Х				

	Managers	Planners	Supervisor	Certifying staff and support staff	Mechanics	Specialised Service staff	Quality audit staff
Ability to confirm proper accomplishment of maintenance tasks			х	х	х	x	
Ability to identify and properly plan performance of critical maintenance tasks		х	x	x			
Ability to prioritise tasks and report discrepancies		Х	Х	Х	Х		
Ability to process the work requested by the operator		х	х	х			
Ability to promote the safety and quality policy	Х		Х				
Ability to properly process removed, uninstalled and rejected parts			х	х	х	х	
Ability to properly record and sign for work accomplished			х	х	х	x	
Ability to recognise the acceptability of parts to be installed prior to fitment				х	х		
Ability to split complex maintenance tasks into clear stages		х					
Ability to understand work orders, work cards and refer to and use applicable maintenance data		х	x	х	х	х	х
Ability to use information systems	Х	Х	Х	Х	Х	Х	Х
Ability to use, control and be familiar with required tooling and/or equipment			х	х	х	х	
Adequate communication and literacy skills	Х	Х	Х	Х	Х	Х	Х
Analytical and proven auditing skills (for example, objectivity, fairness, open-mindedness, determination,)							x
Maintenance error investigation skills							Х
Resources management and production planning skills	x	x	x				
Teamwork, decision-making and leadership skills	x		x				

AMC 145.A.36 Records of airworthiness review staff

[...]

(d) experience as certifying staff on ELA1 aircraft covered by Part-ML

(e) qualifications relevant to the approval (knowledge of relevant parts of Part-M Part-ML and knowledge of the relevant airworthiness review procedures);

GM1 AMC1 145.A.42(a)(ii) Components

[...]

AMC1 145.A.42(a)(iii) Components

[...]

(d) certified life-limited parts with mandatory life limitations that have reached or exceeded these limitations their certified life limits, or have missing or incomplete records;

[...]

GM1 145.A.42(b) Components

Used components maintained by a CAO appropriately approved for component maintenance and released on an EASA Form 1 cannot be installed on complex motor-powered aircraft or aircraft used by an air carrier licensed in accordance with Regulation (EC) No 1008/2008.

GM 145.A.48(c) Performance of maintenance

To minimise the risk of multiple errors or errors being repeated, the organisation may implement:

- procedures to plan the performance by different persons of the same task in different systems;
- duplicate independent inspection or re-inspection procedures.

GM 145.A.48(d) Performance of maintenance - critical design configuration control limitations (CDCCL)

The organisation should ensure that when performing maintenance the CDCCL are not compromised. The organisation should pay particular attention to possible adverse effects of any change to the wiring of the aircraft, even of a change not specifically associated with the fuel tank system. For example, it should be common practice to identify segregation of fuel gauging system wiring as a CDCCL. The organisation can prevent adverse effects associated with changes to the wiring by standardising maintenance practices through training, and not through periodic inspections. Training should be provided to avoid indiscriminate routing and splicing of wire and to provide comprehensive knowledge of critical design features of fuel tank systems that would be controlled by a CDCCL. Guidance on the training of maintenance organisation personnel is provided in <u>Appendix IV to AMC</u> 145.A.30(e) and 145.B.10(3) <u>145.A.35</u>.

AMC 145.A.50 Certification of maintenance after embodiment of a Standard Change or Standard Repair (SC/SR)

<u>AMC M.A.801</u> of the AMC to Part-M and AMC1 MLA.801 of the AMC to Part-ML contains acceptable means of compliance for the release to service of a SC/SR by an organisation approved in accordance with <u>Part-145</u>.

AMC2 145.A.50(d) Certification of maintenance

- [...]
- 2.4.4. Detail of life used for service life-limited parts life-limited parts and time-controlled components being any combination of fatigue, overhaul or storage life.
- [...]
- 2.6.1. Serviceable aircraft components removed from a Member State registered aircraft may be issued with an EASA Form 1 by an appropriately rated organisation subject to compliance with this subparagraph.
- [...]
- (g) The flight hours/cycles/landings as applicable of any service life-limited parts life-limited parts and time-controlled components including time since overhaul should be established.
- [...]
- 2.8. Used aircraft components maintained by organisations not approved in accordance with Part 145. For used components maintained by a maintenance organisation not approved under Part 145, due care should be taken before acceptance of such components. In such cases an appropriately rated maintenance organisation approved under Part 145 should establish satisfactory conditions by:
- [...]
- (b) replacing all service life-limit components life-limited parts and time-controlled components when no satisfactory evidence of life used is available and/or the components are in an unsatisfactory condition;

AMC 145.A.50(e) Certification of maintenance

1. Being unable to establish full compliance with sub-paragraph <u>Part-145.A.50(a)</u> means that the maintenance required by the aircraft operator could not be completed due either to running out of available aircraft maintenance downtime for the scheduled check or by virtue of the condition of the aircraft requiring additional maintenance downtime or because the maintenance data requires a flight to be performed as part of the maintenance, as described in paragraph 4.

4. Certain maintenance data issued by the design approval holder (e.g. aircraft maintenance manual (AMM)) requires that a maintenance task be performed in flight as a necessary condition to complete the maintenance ordered. Within the aircraft limitations, an appropriately authorised certifying staff should release the incomplete maintenance before the flight on behalf of the maintenance organisation. GM M.A.301(i) or GM1 ML.A.301(f) describe the relations with the aircraft operator, which retains the responsibility for the maintenance check flight (MCF). After performing the flight and any additional maintenance necessary to complete the maintenance ordered, a certificate of release to service should be issued in accordance with 145.A.50(a).

GM 145.A.55(a) Maintenance and airworthiness review records

1. [...]

The prime objective is to have secure and easily retrievable records with comprehensive and legible contents. The aircraft record should contain basic details of all serialised aircraft components and all other significant aircraft components installed, to ensure traceability to such installed aircraft component documentation, and associated maintenance data as specified in <u>145.A.45</u> and data for modifications and repairs.

[...]

GM 145.A.65(b)(1) Safety and quality policy, maintenance procedures and quality system

<u>Appendix XI to AMC M.A.708(c)</u> or Appendix V to AMC1 CAMO.A.315(c) provides guidance on the elements that need to be considered for the maintenance contract between the CAMO and the maintenance organisation. The <u>Part-145</u> organisation should take into account these elements to ensure that a clear contract or work order has been concluded before providing maintenance services.

GM 145.A.65(c)(1) Safety and quality policy, maintenance procedures and quality system

PARA	Comment	HANGAR	ENGINE	MECH	AVIONIC
			Workshop	Workshop	Workshop
<u>145.A.25</u>		Yes	Yes	Yes	Yes
<u>145.A.30</u>		Yes	Yes	Yes	Yes
<u>145.A.35</u>		Yes	Yes	Yes	Yes
<u>145.A.36</u>		Yes	No	No	No
<u>145.A.40</u>		Yes	Yes	Yes	Yes
<u>145.A.42</u>		Yes	Yes	Yes	Yes
<u>145.A.45</u>		Yes	Yes	Yes	Yes
<u>145.A.47</u>		Yes	Yes	Yes	Yes
<u>145.A.48</u>		Yes	Yes	if appl.	if appl.

PARA	Comment	HANGAR	ENGINE	MECH	AVIONIC
<u>145.A.50</u>		Yes	Yes	Yes	Yes
<u>145.A.55</u>		Yes	Yes	Yes	Yes
<u>145.A.60</u>		Yes	Yes	Yes	Yes
<u>145.A.65</u>		Yes	Yes	Yes	Yes
2.1	MOE	Yes	Yes	Yes	Yes
2.2	MOE	Yes	Yes	Yes	Yes
2.3	MOE	Yes	Yes	Yes	Yes
2.4	MOE	Yes	Yes	Yes	Yes
2.5	MOE	Yes	Yes	Yes	Yes
2.6	MOE	Yes	Yes	Yes	Yes
2.7	MOE	Yes	Yes	Yes	Yes
2.8	MOE	Yes	Yes	Yes	Yes
2.9	MOE	Yes	Yes	Yes	Yes
2.10	MOE	Yes	No	No	No
2.11	MOE	Yes	Yes	Yes	Yes
2.12	MOE	Yes	Yes	Yes	Yes
2.13	MOE	Yes	Yes	Yes	Yes
2.14	MOE	Yes	Yes	Yes	Yes
2.15	MOE	Yes	No	No	No
2.16	MOE	Yes	Yes	Yes	Yes
2.17	MOE	if appl.	if appl.	if appl.	if appl.
2.18	MOE	Yes	Yes	Yes	Yes
2.10	MOE	Yes	Yes	Yes	Yes
2.20	MOE	Yes	Yes	Yes	Yes
2.20	MOE	if appl.	if appl.	if appl.	if appl.
2.22	MOE	Yes	Yes	No	No
2.22	MOE	Yes	Yes	if appl.	if appl.
2.23	MOE	Yes	Yes	Yes	Yes
2.25	MOE	Yes	Yes	Yes	Yes
2.26	MOE	Yes	Yes	Yes	Yes
2.20	MOE	Yes	Yes	Yes	Yes
2.28	MOE	Yes	Yes	Yes	Yes
2.29	MOE	Yes	No	No	No
2.30	MOE	Yes	No	No	No
L2.1	MOE	if appl.	No	No	No
L2.1 L2.2	MOE		No	No	No
L2.2 L2.3	MOE	if appl.			
		if appl.	No	No	No
L2.4	MOE	if appl.	No	No	No
L2.5	MOE	if appl.	No	No	No
L2.6	MOE	if appl.	No	No	No
L2.7	MOE	if appl.	No	No	No
3.9	MOE	if appl.	if appl.	if appl.	if appl.
3.10	MOE	if appl.	if appl.	if appl.	if appl.
3.11	MOE	if appl.	if appl.	if appl.	No
3.12	MOE	Yes	Yes	No	No
3.13	MOE	Yes	Yes	Yes	Yes
3.14	MOE	Yes	Yes	Yes	Yes

PARA	Comment	HANGAR	ENGINE	MECH	AVIONIC
<u>145.A.70</u>		Yes	Yes	Yes	Yes
<u>145.A.75</u>		Yes	Yes	Yes	Yes
145.A.80		Yes	Yes	Yes	Yes
<u>145.A.85</u>		Yes	Yes	Yes	Yes
145.A.95		if appl.	if appl.	if appl.	if appl.
<u>M.A.201(c)</u>		Yes <mark>if appl.</mark>	Yes <mark>if appl.</mark>	Yes <mark>if appl.</mark>	Yes <mark>if appl.</mark>
<u>M.A.403(b)</u>		Yes <mark>if appl.</mark>	No	No	No
ML.A.201(c)		<mark>if appl.</mark>	<mark>if appl.</mark>	i <mark>f appl.</mark>	<mark>if appl.</mark>
ML.A.403(b)		<mark>if appl.</mark>	<mark>if appl.</mark>	i <mark>f appl.</mark>	<mark>if appl.</mark>

- Note 1: 'if appl.' means 'if applicable or relevant'.
- Note 2: In the case of line stations, all line stations should be audited at the frequency agreed with the competent authority within the limits of <u>AMC 145.A.65(c)(1)</u>.

AMC 145.A.70(a) Maintenance organisation exposition

[...]

- 2.29 Airworthiness review procedures and records for ELA1 aircraft not involved in commercial operations
- 2.30 Development and approval processing for maintenance programmes for ELA2 aircraft not involved in commercial operations [Reserved]

[...]

GM 145.A.70(a) Maintenance organisation exposition

- [...]
- 3. <u>145.A.70(a)(1) to (a)(11)</u> constitutes the 'management' part of the MOE and therefore could be produced as one document and made available to the person(s) specified under <u>145.A.30(b)</u> who should be reasonably familiar with its contents. The <u>145.A.70(a)(6)</u> list of certifying staff, and B1 and B2 support staff and airworthiness review staff may be produced as a separate document.

APPENDICES TO AMC TO PART-145

Appendix II to AMC 145.B.20(5) EASA Form 6

	Part-145 APPROVAL RECOMMENDATION REPORT EASA FORM						
Part 2: Part-	Part 2: Part-145 Compliance Audit Review						
The five columns may be labelled and used as necessary to record the approval class and/or product line							
reviewed. Against each column used of the following Part-145 points, please either tick ($ m /)$ the box if							
satisfied with compliance, or cross (X) the box if not satisfied with compliance and specify the reference of							
the Part 4 fir	the Part 4 finding next to the box, or enter 'N/A' where an item is not applicable, or 'N/R' when applicable						
but not revie	ewed.						
Para	Subject						
145.A.25	Facility requirements						
145.A.30	Personnel requirements						
<u>1100 (100</u>	i ersonner requirements		LILILI				
145.A.35	Certifying Staff and support						
<u>143.A.33</u>	staff						
	Stall						
145 4 26	Descude of simulations						
<u>145.A.36</u>	Records of airworthiness						
	review staff						
<u>145.A.40</u>	Equipment, Tools and						
	material						
	_						
<u>145.A.42</u>	Acceptance of Components						
<u>145.A.45</u>	Maintenance Data						
<u>145.A.47</u>	Production Planning						
<u>145.A.48</u>	Performance of maintenance						
<u>145.A.50</u>	Certification of Maintenance						
<u>145.A.55</u>	Maintenance Records						
<u>145.A.60</u>	Occurrence Reporting						
<u>145.A.65</u>	Safety and Quality Policy,						
	maintenance procedures and						
	Quality System						
<u>145.A.70</u>	Maintenance Organisation						
	Exposition (see Part 3)						
<u>145.A.75</u>	Privileges of the organisation						
<u>145.A.80</u>	Limitations on the						
	organisation						
1							

<u>145.A.85</u>	Changes to the organisation				
<u>145.A.95</u>	Findings				
<u>M.A.201(c)</u>	Responsibilities				
<u>M.A.403(b)</u>	Aircraft Defects				
<u>ML.A.201(c)</u>	Responsibilities				
ML.A.403(b)	Aircraft Defects				
Competent su	Competent surveyor(s): Signature(s):				
Competent a	uthority office:	Date of EASA Form 6 Part 2 completion:			

	Part-145 APPROVAL RECOMMENDATION REPORT EASA FORM 6					
	Part 3: Compliance with <u>145.A.70</u> Maintenance organisation exposition					
	Please either tick ($$) the box if satisfied with compliance, or cross (X) if not satisfied with compliance and specify the reference of the Part 4 finding, or enter 'N/A' where an item is not applicable, or 'N/R' when					
applicable but not reviewed.						
PART 1	Management					
1.1	Corporate commitment by the accountable manager					
1.2	Safety and Quality Policy					
1.3	Management personnel					
1.4	Duties and responsibilities of the management personnel					
1.5	Management Organisation Chart					
1.6 1.7	List of Certifying staff, support staff and airworthiness review staff (Note: a separate document may be referenced) Manpower resources					
1.8						
1.8	General description of the facilities at each address intended to be approved Organisations intended scope of work					
1.10	Notification procedure to the competent authority regarding changes to the organisation's activities/approval/location/personnel					
1.11	Exposition amendment procedures					
PART 2	Maintenance Procedures					
2.1	Supplier evaluation and subcontract control procedure					
2.2	Acceptance/inspection of aircraft components and material from outside contractors					
2.3	Storage, tagging, and release of aircraft components and material to aircraft maintenance					
2.4	Acceptance of tools and equipment					
2.5	Calibration of tools and equipment					
2.6	Use of tooling and equipment by staff (including alternate tools)					
2.7	Cleanliness standards of maintenance facilities					
2.8	Maintenance instructions and relationship to aircraft/aircraft component manufacturers' instructions including updating and availability to staff					
2.9	Repair procedure					
2.10	Aircraft maintenance programme compliance					
2.11	Airworthiness Directives procedure					
2.12	Optional modification procedure					
2.13	Maintenance documentation in use and its completion					
2.14	Technical records control					
2.15	Rectification of defects arising during base maintenance					
2.16	Release to service procedure					
2.17	Records for the operator					

	Part-145 APPROVAL RECOMMENDATION REPORT EASA FORM 6					
•	pliance with <u>145.A.70</u> Maintenance organisation exposition					
	r tick ($$) the box if satisfied with compliance, or cross (X) if not satisfied with compliance and					
specify the reference of the Part 4 finding, or enter 'N/A' where an item is not applicable, or 'N/R' when applicable but not reviewed.						
2.18	Reporting of defects to the competent authority/Operator/Manufacturer					
2.19	Return of defective aircraft components to store					
2.20	Defective components to outside contractors					
2.21	Control of computer maintenance record systems					
2.22	Control of man-hour planning versus scheduled maintenance work					
2.23	Critical maintenance tasks and error-capturing methods					
2.24	Reference to specific maintenance procedures					
2.25	Procedures to detect and rectify maintenance errors					
2.26	Shift/task handover procedures					
2.27	Procedures for notification of maintenance data inaccuracies and ambiguities to the type certificate holder					
2.28	Production planning procedures					
2.29	Airworthiness review procedures and records for ELA1 aircraft not involved in commercial operations					
2.30	Development and approval processing for maintenance programmes for ELA2 aircraft not involved in commercial operations [Reserved]					
PART L2	Additional Line Maintenance Procedures					
L2.1	Line maintenance control of aircraft components, tools, equipment, etc.					
L2.2	Line maintenance procedures related to servicing/fuelling/de-icing, etc.					
L2.3	Line maintenance control of defects and repetitive defects					
L2.4	Line procedure for completion of technical log					
L2.5	Line procedure for pooled parts and loan parts					
L2.6	Line procedure for return of defective parts removed from aircraft					
L2.7	Line procedure for critical maintenance tasks and error-capturing methods					
PART 3 C	Quality System Procedures					
3.1	Quality audit of organisation procedures					
3.2	Quality audit of aircraft					
3.3	Quality audit remedial action procedure					
3.4	Certifying staff and support staff qualification and training procedures					
3.5	Certifying staff records					
3.6	Quality audit personnel					
3.7	Qualifying inspectors					
3.8	Qualifying mechanics					
3.9	Aircraft/aircraft component maintenance tasks exemption process control.					
3.10	Concession control for deviation from organisation's procedures					

	Par	t-145 APPROVAL RECOMMENDATION REPORT	EASA FORM 6		
Part 3: Co	mpliance	with <u>145.A.70</u> Maintenance organisation exposition			
Please eith	her tick (\ e referend	l) the box if satisfied with compliance, or cross (X) if noise of the Part 4 finding, or enter 'N/A' where an item i	ot satisfied with compliance and		
3.11		Qualification procedure for specialised activities suc	h as NDT, welding, etc.		
3.12		Control of manufacturers' and other maintenance w	vorking teams		
3.13		Human Factors training procedure			
3.14		Competence assessment of personnel			
3.15		Training procedures for on-the-job training as per <u>Se</u> (limited to the case where the competent authority the Part-66 licence is the same).			
3.16		Procedure for the issue of a recommendation to the of a Part-66 licence in accordance with <u>66.B.105</u> (lin competent authority for the Part-145 approval and	nited to the case where the		
PART 4		1			
4.1		Contracting operators			
4.2		Operator procedures/paperwork			
4.3		Operator record completion			
PART 5	Append	lices			
5.1		Sample Documents			
5.2		List of subcontractors			
5.3		List of Line maintenance locations			
5.4		List of Part-145 organisations			
PART 6	PART 6 Operators' Maintenance Procedures (reserved for those maintenance organisations that are approved under Part-145 which are also operators)				
6.1					
MOE Refe	rence:	MOE Amendment:			
Competen	nt authori	ty audit staff: Signature(s):			
Competen	it authori	ty office: Date of EASA Form 6 Part 3 completion	on:		