

European Aviation Safety Agency

**Acceptable Means of Compliance
(AMC)
and Guidance Material (GM)
to
Part-M**

I. Draft Decision Part-M - Annex to Decision 2013/005/R

Annex I and Annex VIII to ED Decision 2003/19/RM of the Executive Director of the Agency of 28 November 2003, on 'Acceptable means of compliance and guidance material to Commission Regulation (EC) No 2042/2003 of 20 November 2003 on the continuing airworthiness of aircraft and aeronautical products, parts and appliances, and on the approval of organisations and personnel involved in these tasks', are hereby amended as follows:

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

1. deleted text is shown with a strike through: ~~deleted~~
2. new and changed text is highlighted with grey shading: **new**

1. In AMC M.B.303 (b), now AMC1 M.B.303(b), the order of the subparagraphs is changed and the text is amended as follows:

AMC1 M.B.303(b) Aircraft continuing airworthiness monitoring (*)

SCOPE OF SURVEYS

~~2-1.~~ The competent authority should undertake sample product surveys of aircraft on its register to verify that:

- (a) the condition of an aircraft as sampled is to a standard acceptable for the Certificate of Airworthiness/Airworthiness Review Certificate to remain in force,
- (b) the operator/owner's management of the airworthiness of the aircraft is effective,
- (c) the approvals and licenses granted to organisations and persons continue to be applied in a consistent manner to achieve the required standards.

A physical inspection of the aircraft is necessary during each ACAM survey (ramp or in-depth).

~~1-2.~~ Sample product surveys of aircraft include:

- (a) in-depth surveys carried out during extensive maintenance that fully encompass selected aspects of an aircraft's airworthiness,
- (b) ramp surveys carried out during aircraft operations to monitor the apparent condition of an aircraft's airworthiness.
- ~~(c) in-flight surveys, as deemed necessary by the competent authority.~~

3. When performing a ramp survey, the inspector(s) should make all possible efforts to avoid an unreasonable delay of the aircraft inspected.

2. A new AMC2 is added for M.B.303(b), it incorporates elements from AMC M.B.303(d), which is deleted.

AMC2 M.B.303(b) Aircraft continuing airworthiness monitoring

IN-DEPTH SURVEY

1. An ACAM in-depth survey is a sample inspection of the key risk elements (KREs) and should be performed during scheduled/extensive maintenance. Appendix III to GM 1 to M.B.303(b) provides guidance on KREs that can be used for planning and/or analysis of the inspections.

2. The survey should be a 'deep cut' through the elements or systems selected.

3. The record of an ACAM inspection should identify which KREs were inspected.

3. A new AMC is added for M.B.303(b):

AMC3 M.B.303(b) Aircraft continuing airworthiness monitoring*

KEY RISK ELEMENTS

1. The following KREs should be used for aircraft continuing airworthiness monitoring:

- (a) Type design and changes to type design
- (b) Airworthiness limitations
- (c) Airworthiness Directives

- (d) Aircraft documents
- (e) Flight Manual
- (f) Mass & Balance
- (g) Markings & placards
- (h) Operational requirements
- (i) Defect management
- (j) Aircraft Maintenance Programme
- (k) Component control
- (l) Repairs
- (m) Records

2. These KREs and their detailed components should be adapted to the complexity of the aircraft type being surveyed by retaining only those items that are applicable and relevant for the particular aircraft type.

4. New GM is added for M.B.303(b):

GM1 M.B.303(b) Aircraft continuing airworthiness monitoring*

KEY RISK ELEMENTS

The KREs define the scope of continuing airworthiness. The list of KREs is intended to provide the basis for planning and control of the ACAM survey programme. It will ensure that the programme covers all aspects of continuing airworthiness. While it is not required to cover all KREs during a given inspection, the ACAM survey programme needs to ensure that there is no omission, i.e. certain KRE are never inspected.

* See Appendices to Part-M - Appendix III to GM 1 M.B.303(b)

5. AMC M.B.303(d) is deleted, it is replaced by the new AMC2 to M.B.303(b) and new GM 1 to M.B.303(b).

~~AMC M.B.303 (d) Aircraft continuing airworthiness monitoring~~

- ~~1. Appendix III to this AMC is an example format for an annual in depth survey programme. A sample of the 14 key risk airworthiness elements identified on the example should be assessed during each survey and the survey should include the aircraft as the product sample. The survey should be a 'deep cut' through the elements or systems selected and all findings should be recorded. Surveyors/inspectors in conjunction with the owners, operators and maintenance organisations should identify the root cause of each confirmed finding.~~
 - ~~2. In addition, an annual ramp survey programme should be developed based on geographical locations, taking into account airfield activity, and focusing on key issues that can be surveyed in the time available without unnecessarily delaying the aircraft.~~
 - ~~3. Surveyors/inspectors should be satisfied that the root cause found and the corrective actions taken are adequate to correct the deficiency and to prevent re-occurrence.~~
 - ~~4. Where the aircraft continuing airworthiness monitoring survey visit can be linked to the oversight of an approved organisation then credit can be taken in the monitoring process of that approved organisation.~~
6. **Appendix III to AMC M.B.303(d) is renumbered 'Appendix III to GM1 M.B.303(b)' and replaced by the following document:**

Appendix III to GM1 M.B.303(b) 'KEY RISK ELEMENTS'

	Title	Description
A. AIRCRAFT CONFIGURATION		
A.1	Type design and changes to type design	The type design is the part of the approved configuration of a product, as laid down in the TCDS, common to all products of that type. With the exception of changes contained in the certification specifications referred to in Part 21 point 21A.90B or 21A.431B of the Annex (Part 21) any changes to type design shall be approved and, for those embodied, shall be recorded with the reference to the approval.
A.2	Airworthiness limitations	An airworthiness limitation is a boundary beyond which an aircraft or a component thereof must not be operated, unless the instruction(s) associated to this airworthiness limitation is (are) complied with.
A.3	Airworthiness Directives	An Airworthiness Directive means a document issued or adopted by the Agency, which mandates actions to be performed on an aircraft to restore an acceptable level of safety, when evidence shows that the safety level of this aircraft may otherwise be compromised. (Part 21A.3B)
B. AIRCRAFT OPERATION		
B.1	Aircraft documents	Aircraft certificates and documents necessary for operations.
B.2	Flight Manual	A manual, associated with the certificate of airworthiness, containing limitations within which operation of the aircraft is to be considered airworthy and, instructions and information necessary to the flight crew members for the safe operation of the aircraft.
B.3	Mass & balance	Mass and balance data is required to make sure the aircraft is capable of operating within the approved envelope.
B.4	Markings & placards	Markings and placards are defined in the individual aircraft type design. Some information may also be found in the Type Certificate Data Sheet, the Supplemental Type Certificates, the Flight Manual, the Aircraft Maintenance Manual, the Illustrated Parts Catalogue, etc.
B.5	Operational requirements	Items required to be installed to perform a specific type of operation
B.6	Defect management	Defect management requires a system whereby information on faults, malfunctions, defects and other occurrences that cause or might cause adverse effects on the continuing airworthiness of the aircraft is captured. This system should be properly documented. It may include, amongst others, the Minimum Equipment List system, the Configuration Deviation List system and deferred defects management.
C. AIRCRAFT MAINTENANCE		
C.1	Aircraft Maintenance Programme	A document which describes or incorporates by reference the specific scheduled maintenance tasks and their frequency of completion, the associated maintenance procedures and related standard maintenance practices necessary for the safe operation of those aircraft to which it applies.
C.2	Component control	The component control should consider a twofold objective for components maintenance: - maintenance for which compliance is <u>mandatory</u> ; - maintenance for which compliance is <u>recommended</u> .

	Title	Description
C.3	Repairs	<p>All repairs and unrepaired damage/degradations need to comply with the instructions of the appropriate maintenance manual (e.g. the SRM, the AMM, the CMM) . With the exception of repairs contained in the certification specifications referred to in Part 21 point 21A.90B or 21A.431B of the Annex (Part 21), all repairs not defined in the appropriate maintenance manual need to be appropriately approved and recorded with the reference to the approval.</p> <p>This includes any damage or repairs to the aircraft/engine(s)/propeller(s), and their components.</p>
C.4	Records	Continuing Airworthiness records are defined in M.A.305 and M.A.306 and related AMCs.

A.1	Type design and changes to type design	The type design is the part of the approved configuration of a product, as laid down in the TCDS, common to all products of that type. With the exception of changes contained in the certification specifications referred to in Part 21 point 21A.90B or 21A.431B of the Annex (Part 21) any changes to type design shall be approved and, for those embodied, shall be recorded with the reference to the approval.
Supporting information		Typical inspection items
<p>The type design consists of:</p> <ol style="list-style-type: none"> 1. the drawings and specifications, and a listing of those drawings and specifications, necessary to define the configuration and the design features of the product (i.e. the aircraft, its components, etc.) shown to comply with the applicable type-certification basis and environmental protection requirements; 2. information on materials and processes and on methods of manufacture and assembly of the product necessary to ensure the conformity of the product; 3. an approved Airworthiness Limitation Section (ALS) of the Instructions for Continued Airworthiness (ICA); and 4. any other data necessary to allow by comparison the determination of the airworthiness, the characteristics of noise, fuel venting, and exhaust emissions (where applicable) of later products of the same type. <p>The individual aircraft design is made of the type design supplemented with changes to the type design (e.g. modifications) embodied on the considered aircraft.</p> <p>Depending on the product State of Design, Bilateral Agreements and/or Agency decisions on acceptance of certification findings exist and should be taken into account.</p>		<ol style="list-style-type: none"> 1. Use the current type certificate data sheets (airframe, engine, propeller as applicable) and check that the aircraft conforms to its type design (correct engine installed, seat configuration, etc.). 2. Check that changes have been approved properly (approved data is used, and a direct relation to the approved data). 3. Check for unintentional deviations from the approved type design, sometimes referred to as concessions, divergences, or non-conformances, Technical Adaptations, Technical Variations, etc. 4. Check cabin configuration (LOPA). 5. Check for embodiment of STC's, and, if any Airworthiness Limitations Section (ALS)/ FM/MEL/WBM and revisions are needed, they have been approved and complied with. <ol style="list-style-type: none"> a. Aircraft S/N applicable b. Applicable engines c. Applicable APU d. Max. certified weights e. Seating configuration f. Exits 6. Check that the individual aircraft design/configuration is properly established and used as a reference.
Reference documents: EASA		<ul style="list-style-type: none"> - EASA Part 21.A.31 - EASA Part 21.A.41 - EASA Part 21.A.61 - EASA Part 21.A.90A - EASA Part 21.A.90B - EASA Part M.A.304 - EASA Part M.A.305 - EASA Part M.A.401

A.2	Airworthiness limitations	An airworthiness limitation is a boundary beyond which an aircraft or a component thereof must not be operated, unless the instruction(s) associated with this airworthiness limitation is complied with.
Supporting information		Typical inspection items
<p>Airworthiness limitations are exclusively associated with instructions whose compliance is mandatory as part of the type design. They apply to some scheduled or unscheduled instructions that have been developed to prevent and/or to detect the most severe failure.</p> <p>They mainly apply to maintenance (mandatory modification, replacement, inspections, checks, etc., but can also apply to instructions to control critical design configurations (for example Critical Design Configuration Control Limitations (CDCCL) for the fuel tank safety).</p>		<ol style="list-style-type: none"> 1. Check that the Aircraft Maintenance Programme (AMP) reflects airworthiness limitations and associated instructions (standard or alternative) issued by the relevant design approval holders and is approved by the competent authority. 2. Check that the aircraft and the components thereof comply with the approved AMP. 3. Check the current status of life-limited parts. The current status of life-limited parts is to be maintained throughout the operating life of the part. <p>Typical Airworthiness Limitation items:</p> <ul style="list-style-type: none"> - Safe Life ALI (SL ALI)/Life limited parts, - Damage Tolerant ALI (DT ALI)/Structure, including ageing aircraft structure, - Certification Maintenance Requirements (CMR), - Ageing Systems Maintenance (ASM), including Airworthiness Limitations for Electrical Wiring Interconnection System (EWIS), - Fuel Tank Ignition Prevention (FTIP)/Flammability Reduction Means (FRM), - CDCCL, check wiring if any maintenance carried out in same area - wiring separation, - Ageing fleet inspections mandated through ALS or AD are included in the AMP.
Reference documents: EASA		<ul style="list-style-type: none"> - EASA Part 21A.31 - EASA Part 21A.61 - EASA CS 22.1529 - EASA CS 23.1529, Appendix G, para. G25.4 - EASA CS 25.1529, Appendix H, para. H25.4 - EASA CS 27.1529, Appendix A, para. A27.4 - EASA CS 29.1529, Appendix A, para. A29.4 - EASA CS 31HB.82 - EASA CS-APU 30 - EASA CS-E 25 - EASA CS-P 40 - EASA CS VLR.1529, Appendix A, para. A.VLR.4 - EASA Part M.A.302 - EASA Part M.A.305 - EASA Part M.A.710(a)(7)

A.3	Airworthiness Directives	An Airworthiness Directive means a document issued or adopted by the Agency, which mandates actions to be performed on an aircraft to restore an acceptable level of safety, when evidence shows that the safety level of this aircraft may otherwise be compromised (Part 21A.3B).
Supporting information		Typical inspection items
Any Airworthiness Directive issued by a State of Design for an aircraft imported from a third country, or for an engine, propeller, part or appliance imported from a third country and installed on an aircraft registered in a Member State, shall apply unless the Agency has issued a different Decision before the date of entry into force of that airworthiness directive.		<ol style="list-style-type: none"> 1. Check if all ADs applicable to the airframe, engine(s), propeller(s) and equipment have been incorporated in the AD-status, including their revisions. 2. Check records for correct AD applicability (including ADs incorrectly listed as non-applicable). 3. Check by sampling in the current AD status that applicable ADs have been or are planned to be (as appropriate) carried out within the requirements of these Airworthiness Directives, unless otherwise specified by the Agency (AMOC). 4. Check that applicable ADs related to maintenance are included into the Aircraft Maintenance Programme. 5. Check that task-cards correctly reflect AD requirements or refer to procedures and standard practises referenced in ADs. 6. Sample during a physical survey some ADs for which compliance can be physically checked.
Reference documents: EASA		<ul style="list-style-type: none"> - EASA PART 21.A.3B - EASA PART 21.B.60 - EASA PART 21.B.326 - EASA PART 21.B.327 - EASA PART M.A.201 & AMC M.A.201(h) § 4 - EASA PART M.A.303 - EASA PART M.A.305 § (d) & (h) - EASA PART M.A.401 § (a) & (b) - EASA PART M.A.501 § (b) - EASA PART M.A.503 § (a) - EASA PART M.A.504 § (a) 2 - EASA PART M.A.504 & AMC M.A.504(c) § 1 (f) - EASA PART M.A.613 & AMC M.A.613(a) § 2.4.3, 2.5.2, 2.6.1(h) & 2.8(b) - EASA PART M.A.708 § (b)8 - EASA PART M.A.709(a) - EASA PART M.A.710 § (a)5 - EASA PART M.A.801 & AMC M.A.801(h)

B.1	Aircraft documents	Aircraft certificates and documents necessary for operations.
Supporting information		Typical inspection items
<p>The aircraft certificates and documents necessary for operations may include, but are not necessarily limited to:</p> <ul style="list-style-type: none"> - Certificate of Registration; - Certificate of Airworthiness; - Noise certificate; - Aircraft certificate of release to service; - Technical log book, if required; - Airworthiness Review Certificate; - Etc. 		<ol style="list-style-type: none"> 1. Check that all certificates and documents pertinent to the aircraft and necessary for operations (or copies, as appropriate) are on board. 2. Check C of A modification/Aircraft identification. 3. Check that noise certificate corresponds to aircraft configuration. 4. Check Permit to fly and Flight Condition when necessary. 5. Check that there is an appropriate aircraft certificate of release to service.
Reference documents: EASA		<ul style="list-style-type: none"> - EASA Part 21 Subpart H - 21.A.175 - 21.A.177 - 21.A.182 - Part 21 Subpart I - Part 21 Subpart P - EASA Part 21 Subpart Q - 21.A.801 - 21.A.807 - EASA Part M.A.201(a)(2) - EASA Part M.A 801

B.2	Flight Manual	A manual, associated with the certificate of airworthiness, containing operational limitations, instructions and information necessary for the flight crew members for the safe operation of the aircraft.
Supporting information		Typical inspection items
<p>The Flight Manual needs to reflect the current status/configuration of the aircraft. When it does not, it may provide flight crew members with wrong information.</p> <p>This may lead to errors and/or to override limitations that could contribute to severe failure.</p>		<ol style="list-style-type: none"> 1. Check the conformity of the Flight Manual (FM), latest issue, with aircraft configuration, including modification status, (AD, SB, STC etc.). 2. Check: <ul style="list-style-type: none"> - the FM approval, revision control, Supplement to FM; - the impact of modification status on noise and weight & balance; - additional required manuals (QRH/FCOM/OM-B etc.); - FM limitations.
Reference documents: EASA		<ul style="list-style-type: none"> - EASA Part 21.A.174(b), 2(iii), (b), 3(ii) - EASA Part 21.A.204(b)1(ii), (b)2(i) - EASA Part M.A. 305, AMC M.A. 305(d) - EASA Part M.A.710(a), 2 - EASA Part M.A. 710(c), 2 - EASA AMC M.A.710(a), 1 - EASA AMC M.A.901(b), (g) - EASA AMC M.A.902(b), 3 - EASA AMC M.A.904(a), 2(c) and (k) - EASA AMC M.A.904(b), (c)

B.3	Mass & balance	Mass and balance data is required to make sure the aircraft is capable of operating within the approved envelope.
Supporting information		Typical inspection items
The mass and balance report needs to reflect the actual configuration of the aircraft. When it does not, the aircraft might be operated outside the certified operating envelope.		<ol style="list-style-type: none"> 1. Check that mass and balance report is valid, considering current configuration. 2. Make sure that modifications and repairs are taken into account in the report. 3. Check that equipment status is recorded on the mass and balance report. 4. Compare current mass and balance report with previous report for consistency.
Reference documents: EASA		<ul style="list-style-type: none"> - EASA Part M.A.305(d)5 - EASA Part M.A.708(b)(10) - EASA Part M.A.710(a)(9),AMC M.A.710 (1) - EASA Part-CAT: CAT.POL.MAB.100 and related AMCs/GM

B.4	Markings & placards	Markings and placards are defined in the individual aircraft type design. Some information may also be found in the TCDS, the Supplemental Type Certificates (STC), the FM, the AMM, the IPC, etc.
Supporting information		Typical inspection items
<p>Markings and placards on instruments, equipment, controls, etc. shall include such limitations or information as necessary for the direct attention of the crew during flight.</p> <p>Markings and placards or instructions shall be provided to give any information that is essential to the ground handling in order to preclude the possibility of mistakes in ground servicing (e.g. towing, refuelling) that could pass unnoticed and that could jeopardise the safety of the aircraft in subsequent flights.</p> <p>Markings and placards or instructions shall be provided to give any information essential in the prevention of passenger injuries.</p> <p>National registration markings must be installed. They include registration, possible flag, fireproof registration plate.</p> <p>Product data plates must be installed.</p> <p>When markings and placards are missing, or unreadable, or not properly installed, mistakes or aircraft damages may occur and could subsequently contribute to a severe failure.</p>		<ol style="list-style-type: none"> 1. Check that the required markings and placards are installed on the aircraft, especially the emergency exit markings instructions and passenger information signs and placards. 2. Check that all installed placards are readable. 3. Check the Flight Manual versus the instruments. (General Aviation usually). 4. Check registration markings, including State of Registry fireproof nameplate. 5. Check product data plates. <p>Examples of markings & placards:</p> <ul style="list-style-type: none"> - door means of opening, - each compartment's weight/load limitation/placards stating limitation on contents, - passenger information signs, including no smoking signs, - emergency exit marking, - pressurised cabin warning, - calibration placards, - cockpit placards and instrument markings, - O² system information data, - accesses to the fuel tanks with flammability reduction means (CDCCL), - fuelling markings (fuel vent, fuel dip stick markings), - EWIS identification, - towing limit markings, - break-in markings, - inflate tyres with nitrogen, - RVSM + static markings.
Reference documents: EASA		<ul style="list-style-type: none"> - EASA Part 21A.175 - EASA Part 21A.715 - EASA Part 21A.801 - EASA Part 21A.803 - EASA Part 21A.804

	<ul style="list-style-type: none"> - EASA Part 21A.805 - EASA Part 21A.807 - relevant CS for the aircraft type being inspected - EASA Part M.A.501 - EASA Part M.A.710(c) - EASA AMC M.A.504(e) - EASA AMC M.A.603(c) - EASA AMC M.A.904(a)(2), para. 2.f. & 2.k.
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B.5	Operational requirements	Requirements for the type of operation are complied with (e.g. equipment, documents, approvals).
Supporting information		Typical inspection items
<p>This includes all equipment required by the applicable operational code including national requirements.</p> <p>In case of malfunction, it can create a hazardous situation. Especially emergency equipment needs attention during this inspection.</p>		<ol style="list-style-type: none"> 1. Check permits & approvals required for type of operation. 2. Check for the presence and serviceability of equipment required by operational approvals. 3. Check safety equipment, check that emergency equipment is readily accessible.
Reference documents: EASA		<ul style="list-style-type: none"> - EASA Part M.A.201(a)(2) - EASA Part 21 Subpart I - EASA Part-CAT, Subpart D 'Instruments, Data and Equipment'

B.6	Defect management	<p>Defect management requires a system whereby information on faults, malfunctions, defects and other occurrences that cause or might cause adverse effects on the continuing airworthiness of the aircraft is captured. This system should be properly documented.</p> <p>It includes, amongst others, the MEL system, the CDL system and deferred defects management.</p>
Supporting information		Typical inspection items
<p>This KRE addresses the effectiveness of defect management, it should also consider defects found during the physical inspection.</p>		<ol style="list-style-type: none"> 1. Check that the deferred defects have been identified, recorded, and rectified/deferred in accordance with approved procedures and within approved time limits. 2. Check that operations outside published approved data have only been performed under a Permit to Fly or under flexibility provisions (Basic Regulation Article 14). Sample on: <ol style="list-style-type: none"> a. TLB and hold item list, b. maintenance task cards, c. engine shop report, d. (major) component shop report, e. maintenance/repair/modification working party files after embodiment of modifications or repairs, f. occurrence reporting data, g. communications between the user of maintenance data and the maintenance data author in case of inaccurate, incomplete, ambiguous procedures and practices. 3. Check that the consequences of the deferral have been managed with Operation/Crew. 4. Check that defects are being deferred in accordance with approved data (current revision of the MEL, CDL, aircraft maintenance programme). 5. Compare physical location of parts/serial numbers with recorded locations to identify undocumented parts swaps for troubleshooting.
Reference documents: EASA / EU		<ul style="list-style-type: none"> - EASA Part M.A.301(2) - AMC M.A.301-2 - EASA Part M.A.403 - AMC M.A.710(a) Airworthiness review - EASA Part 145.A.60 - EASA Part 145.A.45(c) - EASA Part 21 AMC 20-8 - EU Directive 2003/42/EC on occurrence reporting

C.1	Aircraft Maintenance Programme	A document which describes the specific scheduled maintenance tasks and their frequency of completion, related standard maintenance practices and the associated procedures necessary for the safe operation of those aircraft to which it applies.
Supporting information		Typical inspection items
<p>The Aircraft Maintenance Programme (AMP) is intended to include scheduled maintenance tasks, the associated procedures and standard maintenance practises. It also includes the reliability programme, when required.</p> <p>Tasks included in the maintenance programme can originate from:</p> <ul style="list-style-type: none"> - tasks for which compliance is <u>mandatory</u>: instructions specified in repetitive Airworthiness Directives (AD), or in the Airworthiness Limitations Section (ALS), which may include Certification Maintenance Requirements (CMRs). The ALS is included in the Instructions for Continuing Airworthiness (ICA) of a design approval holder; - tasks for which compliance is <u>recommended</u>: additional instructions specified in the Maintenance Review Board Report (MRBR), the Maintenance Planning Document (MPD), Service Bulletins (SB), or any other non-mandatory continuing airworthiness information issued by the design approval holder; - additional or alternative instructions proposed by the owner or the continuing airworthiness management organisation once approved in accordance with point M.A.302(d)(iii); <p>The AMP shall contain details, including frequency, of all maintenance to be carried out, including any specific tasks linked to the type and the specificity of operations.</p>		<p>Review of AMP contents:</p> <ol style="list-style-type: none"> 1. Check that the AMP properly reflects mandatory continuing airworthiness instructions (ALIs, CMRs (the latest source documents' revision. Sample check that tasks are implemented within approved compliance times and that no tasks have been omitted). 2. Check how recommended scheduled maintenance tasks (such as TBO intervals, recommended through Service Bulletins, Service Letters, etc..., the latest source documents' revision) are considered when updating the AMP. If applicable, check embodiment policy as required by M.A.301 point 7. 3. Check that the AMP properly reflects the maintenance tasks specified in repetitive ADs. 4. Check that the AMP properly reflects additional instructions for continuing airworthiness resulting from specific installed equipment or modifications embodied. 5. Check that the AMP properly reflects additional instructions for continuing airworthiness resulting from repairs embodied. 6. If applicable, check that the AMP properly reflects additional maintenance tasks required by specific approvals (e.g. RVSM, ETOPS, MNPS, B-RNAV). 7. Check for any additional scheduled maintenance measures required due to the use of the aircraft and the operational environment. 8. If applicable, check for proper identification of pilot-owner maintenance tasks and identification of the pilot-owner(s) or the alternative procedure described in AMC M.A.803 point 3. 9. Check approval status of additional or alternative instructions (M.A.302(d)(iii)). 10. Check if a reliability programme is present and active when required. <p>Review of aircraft compliance with an AMP:</p> <ol style="list-style-type: none"> 11. Check if the AMP used is valid for the aircraft, is approved and is amended correctly. 12. Check if tasks are performed within the value(s) quoted in AMP and the source documents 13. Sample check that no task has been omitted without justifications accepted by the Competent Authority (at the time of decision).

	<p>14. Check the reporting of performed scheduled maintenance into the records system.</p> <p>15. Analyse the effectiveness of the AMP and reliability by reviewing the unscheduled tasks.</p>
Reference documents: EASA	<ul style="list-style-type: none">- EASA Part M.A.302 and its AMC.- EASA Part M.A.708(b)(1), (2), (4)- EASA Part M.A.803 and its AMC

C.2	Component control	<p>The component control should consider a twofold objective for components maintenance:</p> <ul style="list-style-type: none"> - maintenance for which compliance is mandatory. - maintenance for which compliance is recommended.
Supporting information		Typical inspection items
<p>Depending on each maintenance task, accomplishment is <u>scheduled</u> or <u>unscheduled</u>. Refer to KRE C.1 'Aircraft Maintenance Programme'.</p> <p>Components affected by scheduled maintenance:</p> <p>Life-limited components are of two types:</p> <ul style="list-style-type: none"> - components subject to a certified life limit; - components subject to a service life limit. <p>Components with a certified life-limit must be <u>permanently</u> removed from service when, or before, their operating limitation is exceeded. The life limitation is controlled at the component level (in opposition to aircraft level).</p> <p>Components subject to a service life ('time controlled components') include the following:</p> <ul style="list-style-type: none"> - components for which removal and restoration are scheduled, regardless of their level of failure resistance. Reference is made to hard time components: They are subject to periodic maintenance dealing with a deterioration that is assumed to be <u>predictable</u> (the overall reliability invariably decreases with age): Failure is less likely to occur before restoration is necessary; - components for which failure resistance can reduce and drop below a defined level: Inspections are scheduled to detect potential failures. Reference is made to 'On-condition' components: They are called such because components, which are inspected, are left in service (no further maintenance action taken) on the condition that they continue to meet specified performance standards. <p>Notes:</p> <ol style="list-style-type: none"> 1. Restoration tasks for hard time components are not the same as 'On-condition' tasks, since they do not monitor <u>gradual</u> deterioration, but are primarily done to ensure the item may continue to remain in service until the next planned restoration. 2. Components subject to 'condition-monitoring' are permitted 		<ol style="list-style-type: none"> 1. Check that the mandatory maintenance tasks are identified as such and managed separately from recommendations. 2. Sample check installed components (PN and SN) against aircraft records: <ol style="list-style-type: none"> a. Correct Part Number and Serial Number installed. b. Correct authorised release document available. 3. Check the current status of time-controlled components, with due consideration to deferred items. They must identify: <ol style="list-style-type: none"> a. The affected components (Part Number and Serial Number). b. For components subject to a repetitive task: the task description and reference, the applicable threshold/interval, the last accomplishment data (date, the component's total accumulated life in Hours, Cycles, Landings, Calendar time, as necessary) and the next planned accomplishment data. c. For components subject to an unscheduled task: the task description and reference, the accomplishment data (date, the component's total accumulated life in Hours, Cycles, Landings, Calendar time, as necessary). Pay attention to ETOPS and CDCCL components. 4. Check current status of life-limited components. This status can be requested upon each transfer throughout the operating life of the part: <ol style="list-style-type: none"> a. The life limitation, the component's total accumulated life, and the life remaining before the component's life limitation is reached (indicating Hours, Cycles, Landings, Calendar time, as necessary). b. If relevant for the determination of the remaining life, a full installation history indicating the number of hours, cycles or calendar time relevant to each installation on these different types of aircraft/engine. 5. Check if the aircraft maintenance programme and reliability programme results impact the component control. 6. Check that life-limited and time controlled components are correctly marked during a physical survey.

<p>to remain in service without preventive maintenance until functional failure occurs. Reference is made to 'fly-to-failure'. Such components are subject to unscheduled tasks.</p>	
<p>Reference documents: EASA</p>	<ul style="list-style-type: none">- EASA Part 21.A.805- EASA Part M.A.302- EASA Part M.A.305- EASA Part M.A.501- EASA Part M.A.503- EASA Part M.A.710

C.3	Repairs	<p>All repairs and unrepaired damage/degradations need to comply with the instructions of the appropriate maintenance manual (e.g. the SRM, the AMM, the CMM) . With the exception of repairs contained in the certification specifications referred to in Part 21 point 21A.90B or 21A.431B of the Annex (Part 21), all repairs not defined in the appropriate maintenance manual need to be appropriately approved and recorded with the reference to the approval.</p> <p>This includes any damage or repairs to the aircraft/engine(s)/propeller(s), and their components.</p>
Supporting information		Typical inspection items
<p>The data substantiating repairs should include, but is not limited to, the damage assessment, the rationale for the classification of the repair, the evidence the repair has been designed in accordance with approved data, i.e. by reference to the appropriate manual, procedure or to a Part 21 repair design approval, the drawings/material and accomplishment instructions, as well as the maintenance and operational instructions.</p> <p>'Repair status' means a list of:</p> <ul style="list-style-type: none"> - the repairs embodied since the original delivery of (and still existent upon) the aircraft/engine/propeller/component; and - the un-repaired damage/degradations. <p>It also includes, either directly or by reference to supporting documentation (i.e. repair files), the substantiating data supporting compliance with the applicable airworthiness requirements.</p> <p>The repair status should identify the repair file reference, the repair classification, the repaired item (i.e. aircraft/engine/propeller/component, and a precise location if necessary), and the date and total life in FH/FC accumulated by the item at the time of repair or finding of the un-repaired damage/degradations. Cross-reference to the aircraft maintenance programme should also be included, as necessary.</p> <p>Depending on the product State of Design, Bilateral Agreements and/or Agency Decisions on acceptance of certification findings exist and should be taken into account for the determination of acceptable data for repairs.</p>		<ol style="list-style-type: none"> 1. Sample the repair <u>status</u> to confirm it appropriately traces repairs and un-repaired damage/deteriorations. 2. Sample repair <u>files</u> (at least one file for each type of repaired items) to check that repaired and unrepaired damage/deterioration have been assessed against the latest published approved repair data. 3. Check that repair instructions detailed in the repair file comply with published approved repair data. 4. Check that major repairs resulting in new or amended airworthiness limitations and associated mandatory instructions (including ageing aircraft programme) have been included in the aircraft maintenance programme. 5. Check that new or amended maintenance instructions resulting from repairs have been considered for inclusion in the aircraft maintenance programme. 6. Compare the repair status and the physical status of the repaired aircraft/engine(s)/propeller(s), and their repaired components (physical survey) in order to confirm the accuracy of the repair status. Sample embodied repairs to check their conformity against the repair files (physical survey).
Reference documents: EASA		<ul style="list-style-type: none"> - EASA Part 21.A.431A - EASA Part 21.A.431B - EASA Part M.A.304 - EASA AMC Part M.A.304

	<ul style="list-style-type: none"> - EASA Part M.A.305 - EASA AMCs to Part M.A.305 - EASA Part M.A.401 - EASA AMCs to Part M.A.401 	
C.4	Records	Continuing Airworthiness records are defined in M.A.305 and M.A.306 and related AMCs.
Supporting information		Typical inspection items
<p>Retention/Transfer of the records is required so that the status of the aircraft and its components can be readily established at any time.</p> <p>Task accomplishment is scheduled (one time or periodically), or unscheduled (e.g. following an event). Aircraft continuing airworthiness records (refer to logbooks, technical logbooks, component log cards or task cards) shall provide the status with regard to:</p> <ul style="list-style-type: none"> - scheduled tasks: <ul style="list-style-type: none"> - one-time: life-limited parts status, modification status, repair status. - repetitive: maintenance programme status. - unscheduled tasks. 		<ol style="list-style-type: none"> 1. Check the aircraft continuing airworthiness record system: M.A.305 and M.A.306, as applicable, require that certain records are kept for defined periods. Pay attention to the continuity, integrity and traceability of records: <ol style="list-style-type: none"> a. integrity: Check the data recorded is legible, b. continuity: Check that records are available for the applicable retention period, c. traceability: Check the link between operator/CAMO and maintenance documentation, traceability to approved data, traceability to appropriate release documents, etc. 2. If applicable, make sure that the tech log system is used correctly, including: <ol style="list-style-type: none"> a. current aircraft release to service (including the maintenance statement) issued and b. pre-flight inspections signed-off by authorised persons; 3. Check that any maintenance required following abnormal operation/event (such as overspeed, overweight operation, hard landing, excessive turbulence, and operation outside of Flight Manual limitations) has been performed, as applicable.
Reference documents: EASA		<ul style="list-style-type: none"> - EASA Part M.A.305 - EASA Part M.A.306 - EASA Part M.A.307 - EASA Part M.A.801 - EASA AMCs to Part M.A.305 - EASA AMCs to Part M.A.306 - EASA AMC to Part M.A.307

Abbreviations used:

A/C	Aircraft
ACAM	Aircraft Continuous Airworthiness Monitoring
AD	Airworthiness Directive
ALI	Airworthiness Limitation Items
ALS	Airworthiness Limitations Section
AMM	Aircraft Maintenance Manual
AMP	Aircraft Maintenance Programme
APU	Auxiliary Power Unit
ASM	Ageing Systems Maintenance
B-RNAV	Basic Area Navigation
CAMO	Continuing Airworthiness Management Organisation
CDL	Configuration Deviation List
CDCCL	Critical Design Configuration Control Limitations
CMM	Component Maintenance Manual
CMR	Certification Maintenance Requirement
DT	Damage Tolerant
ED	Executive Director of EASA
ETOPS	Extended Range Operations with Two-engined aeroplanes
ETSO	European Technical Standard Order
EWIS	Electrical Wiring Interconnection System
EZAP	Enhanced Zonal Analysis Procedure
FCOM	Flight Crew Operations Manual
FDR	Flight Data Recorder
FM	Flight Manual
FRM	Flammability Reduction Means
FTIP	Fuel Tank Ignition Prevention
GA	General Aviation
ICA	Instructions for Continuing Airworthiness
IPC	Illustrated Parts Catalogue
KRE	Key Risk Element
LHIRF	Lightning High Intensity Radiated Field
LOPA	Layout of Passenger Accommodation
MCAI	Mandatory Continuing Airworthiness Information
MEL	Minimum Equipment List
MNPS	Minimum Navigation Performance Specification
MRB	Maintenance Review Board
MRBR	Maintenance Review Board Report
MPD	Maintenance Planning Document
NAA	National Aviation Authority
OEM	Original Equipment Manufacturer
OM	Operations Manual
OM-B	Operations Manual Part-B
PN	Part Number
QRH	Quick Reference Handbook

PWR	Power
RVSM	Reduced Vertical Separation Minima
SN	Serial Number
SB	Service Bulletin
SM	Service Manual
SRM	Structural Repair Manual
STC	Supplemental Type Certificate
TBO	Time Between Overhauls
TC	Type Certificate
TCDS	Type Certificate Data Sheet
TLB	Technical Logbook
TSO	Technical Standard Order