|  |
| --- |
| **Guide “Aircraft technical log system”** |

*Transportstyrelsen fråntar sig ansvar för att samtliga regler är omhändertagna och att texten helt överensstämmer med gällande regler.*

(EU) No 1321/2014 Uppdaterad enligt:

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Amd 6 | Amd 7 | Amd 8 | Amd 9 | Amd 10 | Amd 11 | Amd 12 | Amd 13 |
| 2020/270 | 2020/1159 | 2021/700 | 2021/1963 | 2022/410 | 2022/1360 | 2023/203 | 2023/989 |
| Y | NA | NA | NA | NA | NA | NA | NA |

|  |
| --- |
| Amd 14 |
| 2025/111 |
| NA |

AMC, **Del-M** Uppdaterad enligt:

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Issue 2 | Amd 1 | Amd 2 | Amd 3 | Amd 4 | Amd 5 | Amd 6 | Amd 7 | Amd 8 |
| 2015/029/R | 2016/011/R | 2019/009/R | 2020/002/R | 2020/023/R | 2021/009/R | 2022/011/R | 2022/017/R | 2023/013/R |
| Y | Y | N | Y | NA | NA | NA | Y | NA |

Guide “**Aircraft technical log system**” är en guide för att underlätta att identifiera och redovisa hur kraven uppfylls.

|  |  |
| --- | --- |
| **Operatör** |  |
| **Operatör** |  |
| **Operatör** |  |
| **Tillståndsref:** | SE.CAMO.  SE.CAO. |
| **Ärendenummer:** |  |
| **CAME/CAE rev nr** |  |
| **Granskad av:** |  |
| **Datum:** |  |

|  |
| --- |
| **Beskrivning av utförd granskning:** |
|  |

| **Övriga krav att beakta vid ”e-logg”** | | |
| --- | --- | --- |
| **Krav** | *Bifoga bilaga som innehåller detaljerad redovisning:*   * ***Vilka*** *krav som beaktats*   *Krav för krav (”rad för rad” där så krävs)* ***och***   * ***Hur*** *kravet uppfyllts/verifierats.* |  |
| eCAW - Guidelines on the use of electronic documents, records, and signatures (TE.GEN.00107-003) |  |  |
| (EU) nr 910/2014 om elektronisk identifiering och betrodda tjänster för elektroniska transaktioner på den inre marknaden och om upphävande av direktiv 1999/93/EG |  |  |
| AMC 20-25A Airworthiness considerations for Electronic Flight Bags (EFBs) |  |  |
| Part-IS.I.OR |  |  |
| M.A.305 inklusive AMC’s  *(Se sida 10 och framåt)* |  |  |

| **Krav** | Ange detaljerat ”**hur**” det är omhändertaget med t.ex. vilket fält |
| --- | --- |
| **M.A.306 Aircraft technical log system**  *Regulation (EU) 2020/270* |  |
| **(a)** In addition to the requirements of point M.A.305, for   * CAT, * commercial specialised operations ***and*** * commercial ATO ***or*** * commercial DTO operations,   the **operator** shall use a technical log system containing the following information for each aircraft: |  |
| 1. **information** about **each flight**, necessary to ensure continued flight safety, ***and***; |  |
| 2. the **current** aircraft **certificate of release to service**, ***and***; |  |
| 3. the **current maintenance statement** giving the aircraft maintenance status of   * what scheduled ***and*** * out of phase maintenance is next due * **except** that the competent authority may agree to the maintenance statement being kept elsewhere, ***and***; |  |
| ***TS Tillägg:***  AMC M.A.301(a) Continuing airworthiness tasks  *ED Decision 2020/002/R*  **PRE-FLIGHT INSPECTIONS**  1.(b) an inspection of the aircraft continuing airworthiness record system or the **aircraft technical log system**, as applicable, **to ensure** that the intended flight is not adversely affected by **any outstanding deferred defects** and **that** **no required maintenance action shown in the maintenance statement is overdue** *or* **will become due during the flight**. |  |
| 4. all **outstanding deferred defects rectifications** that affect the operation of the aircraft, ***and***; |  |
| 5. any necessary **guidance instructions** on maintenance support arrangements. |  |
| **(b)** The initial issue of aircraft technical log system shall be approved by the competent authority specified in point   * CAMO.A.105 of Annex Vc (Part-CAMO), ***or*** * point M.1 of this Annex (Part-M) ***or*** * point CAO.1(1) of Annex Vd (Part-CAO),   as applicable.  Any subsequent amendment to that system shall be managed in accordance with   * + point CAMO.A.300(c), ***or***   + points M.A.704(b) and (c), ***or***   + point CAO.A.025(c). |  |
| **AMC M.A.306(a) Aircraft technical log system**  *ED Decision 2020/002/R* |  |
| **CONTENT OF INFORMATION ON THE ATL SYSTEM**  For   * CAT operations, * commercial specialised operations ***and*** * commercial ATO ***or*** * commercial DTO operations, * the aircraft technical log **is a system** for recording **defects** and **malfunctions** during the aircraft operation ***and*** * for **recording details of all maintenance carried out on an aircraft between scheduled base maintenance visits**.   **In addition**, it is used for   * recording flight safety ***and*** * maintenance information   the operating crew need to know. |  |
| **Cabin or galley** defects and malfunctions that affect   * the safe operation of the aircraft ***or*** * the safety of its occupants   are regarded as forming part of the aircraft log book where recorded by another means. |  |
| The aircraft technical log system may range from a simple single section document to a complex system containing many sections but in all cases it should include the information specified for the example used here which happens to use a 5 section document / computer system: |  |
| **Section 1** should contain details of the   * registered name ***and*** * address of the operator * the aircraft type ***and*** * the complete international registration marks of the aircraft. |  |
| **Section 2** should contain details of when the   * **next** scheduled maintenance is due, * **including**, if relevant any out of phase component changes due before the next maintenance check. * **In addition** this section should contain the **current** certificate of release to service (CRS), for the complete aircraft, issued normally at the end of the last maintenance check. |  |
| **NOTE**: The flight crew do not need to receive such details if the next scheduled maintenance is controlled by other means acceptable to the competent authority. |  |
| **Section 3** should contain details of all information considered necessary to ensure continued flight safety.  Such information includes: |  |
| **(i)** the **aircraft type** and **registration mark**, |  |
| **(ii)** the   * date ***and*** place * of take-off ***and*** * landing, |  |
| **(iii)** the **times** at which the aircraft   * took off ***and*** * landed, |  |
| **(iv)** the running **total** of flying hours, such that the hours to the next schedule maintenance can be determined.   * The flight crew does not need to receive such details if the next scheduled maintenance is controlled by other means acceptable to the competent authority. |  |
| **(v)** details of any failure, defect ***or*** malfunction to the aircraft affecting airworthiness ***or*** safe operation of the aircraft including emergency systems, ***and*** any failure, defect ***or*** malfunctions in the cabin ***or*** galleys that affect the safe operation of the aircraft or the safety of its occupants that are known to the commander.  **Provision** should be made for the commander to   * **date** and **sign**   such entries including, where appropriate, the **nil** defect state for continuity of the record.  **Provision** should be made for a   * CRS following   + rectification of a defect ***or***   + any deferred defect ***or***   + maintenance check carried out.   Such a certificate appearing on each page of this section should readily identify the defect(s) to which it relates or the particular maintenance check as appropriate.  In the case of maintenance performed by a Part-145 maintenance organisation, it is acceptable to use an   * alternate abbreviated certificate of release to service consisting of the statement ‘Part-145 release to service’ instead of the full certification statement specified in AMC 145.A.50(b) paragraph 1. * When the alternate abbreviated certificate of release to service is used, the introductory section of the technical log should include an example of the full certification statement from AMC 145.A.50(b) paragraph 1. |  |
| **(vi)** the **quantity** of   * fuel and oil uplifted ***and*** * the quantity of fuel available in each tank,   ***or***   * combination of tanks, at the   + beginning ***and***   + end   of each flight;   * + provision to show, in the same units of quantity, both the amount of fuel planned to be uplifted ***and***   + the amount of fuel actually uplifted; |  |
| * provision for the **time** when ground   + de-icing ***and/or***   + anti-icing   was started ***and***   * + the type of fluid applied,   + including mixture ratio fluid/water ***and***   + any other information required by the operator's procedures in order to allow the assessment on whether inspections for **and/or**   + elimination of de-icing/anti-icing fluid residues that could endanger flight safety are required. |  |
| **(vii)** the **pre-flight inspection signature**.  **In addition** to the above, it may be necessary to record the following supplementary information:   * the time spent in particular engine power ranges where use of such engine power affects the life of the engine or engine module; * the number of landings where landings affect the life of an aircraft ***or*** aircraft component; * flight cycles or flight pressure cycles where such cycles affect the life of an aircraft ***or*** aircraft component. |  |
| **NOTE 1**: Where Section 3 is of the multi-sector ‘part removable’ type, then such ‘part removable’ sections should contain all of the foregoing information where appropriate. |  |
| **NOTE 2**: Section 3 should be designed so that   * **one** copy of each page may remain on the aircraft ***and*** * **one** copy may be retained on the ground until completion of the flight to which it relates. |  |
| **NOTE 3**: Section 3 layout should be divided to show clearly   * **what** is required to be completed after flight ***and*** * **what** is required to be completed in preparation for the next flight. |  |
| **Section 4** should contain details of all deferred defects that affect ***or*** may affect the safe operation of the aircraft ***and*** should therefore be known to the aircraft commander.  **Each page** of this section should be pre-printed with the   * operator’s name ***and*** * page serial number ***and***   make provision for recording the following: |  |
| **(i)** a cross reference for each deferred defect such that the original defect can be identified in the particular section 3 sector record page. |  |
| **(ii)** the original date of occurrence of the defect deferred. |  |
| **(iii)** brief details of the defect. |  |
| **(iv)** details of the   * eventual rectification carried out ***and*** * its CRS ***or*** * a clear cross-reference back to the document that contains details of the eventual rectification. |  |
| **Section 5** should contain any necessary maintenance support information that the aircraft commander needs to know.   * Such information would include data on how to contact maintenance if problems arise whilst operating the routes etc. |  |
| **AMC M.A.306(b) Aircraft technical log system**  *ED Decision 2016/011/R* |  |
| The aircraft technical log system can be either a paper or computer system ***or*** any combination of both methods acceptable to the competent authority.  In case of a computer system, it should contain programme safeguards against the ability of unauthorised personnel to alter the database. |  |
| **GM1 M.A.306(b) Aircraft technical log system**  *ED Decision 2022/017/R* |  |
| **INTEROPERABLE AIRCRAFT TECHNICAL LOG SYSTEM**  If a CAMO is contracted (in accordance with point M.A.201(ea)) by operators that form part of a single air carrier business grouping and intend to regularly transfer aircraft from one AOC holder to another within the group, the CAMO is expected to ensure that:   * there is an interoperable aircraft technical log system for all associated operators; ***and*** * common data formats and data exchange are defined. |  |

| **Krav** | Ange detaljerat ”**hur**” det är omhändertaget med t.ex. vilket fält |
| --- | --- |
| **ORO.MLR.110 Journey log**  *Regulation (EU) No 379/2014* |  |
| Particulars of the aircraft, its crew and each journey shall be retained for each flight, or series of flights, in the form of a journey log, or equivalent. |  |
| **AMC1 ORO.MLR.110 Journey log**  *ED Decision 2014/017/R* |  |
| **GENERAL**  **(a)** The aircraft journey log, or equivalent, should include the following items, where applicable:  (1) aircraft nationality and registration,  (2) date,  (3) name(s) of crew member(s),  (4) duty assignments of crew member(s),  (5) place of departure,  (6) place of arrival,  (7) time of departure,  (8) time of arrival,  (9) hours of flight,  (10) nature of flight (scheduled or non-scheduled),  (11) incidents, observations, if any,  (12) signature of person in charge. |  |
| **(b)** The information, ***or*** parts thereof, may be recorded in a form other than on printed paper. Accessibility, usability and reliability should be assured. |  |
| **(c)** ‘Journey log, ***or*** equivalent’ means that the required information may be recorded in documentation other than a log book,   * such as the   + operational flight plan ***or***   + the aircraft technical log. |  |
| **(d)** ‘Series of flights’ means consecutive flights, which begin ***and*** end:  (1) within a 24-hour period;  (2) at the same aerodrome ***or*** operating site ***or*** remain within a local area specified in the operations manual; ***and***  (3) with the same pilot-in-command/commander of the aircraft. |  |

**Tillägg vid ”e-logg”:**

| **Krav** | **Punkt** | **Regeltext** | Ange detaljerat ”**hur**” kravet är omhändertaget, kan verifieras. *(eller Inte tillämpligt om så är fallet)* |
| --- | --- | --- | --- |
| **M.A.305** | (a) | At the completion of any maintenance, aircraft certificate of release to service (‘CRS’) required by point M.A.801 or point 145.A.50, as applicable, shall be entered in the aircraft continuing airworthiness record system, as soon as practicable and no later than 30 days after the completion of any maintenance. |  |
|  | (b) | The aircraft continuing airworthiness record system shall contain the following: |  |
|  | (b)1 | the date of the entry, the total in-service life accumulated in the applicable parameter for aircraft, engine(s) and/or propeller(s); |  |
|  | (b)2 | the aircraft continuing airworthiness records described in points (c) and (d) below together with the supporting detailed maintenance records described in point (e) below; |  |
|  | (b)3 | if required by point M.A.306, the aircraft technical log. |  |
|  | (c) | The aircraft continuing airworthiness records shall include the current mass and balance report and the current status of: |  |
|  | (c)1 | ADs and measures mandated by the competent authority in immediate reaction to a safety problem; |  |
|  | (c)2 | modifications and repairs; |  |
|  | (c)3 | compliance with the AMP; |  |
|  | (c)4 | deferred maintenance tasks and deferred defects rectification. |  |
|  | (d) | The aircraft continuing airworthiness records shall include the current status specific to components of: |  |
|  | (d)1 | life-limited parts, including the life accumulated by each affected part in relation to the applicable airworthiness limitation parameter; and |  |
|  | (d)2 | time-controlled components, including the life accumulated by the affected components in the applicable parameter, since the last accomplishment of scheduled maintenance, as specified in the AMP. |  |
|  | (e) | The owner or operator shall establish a system to keep the following documents and data in a form acceptable to the competent authority and for the periods specified below: |  |
|  | (e)1 | aircraft technical log system: the technical log or other data equivalent in scope and detail, covering the 36 months period prior to the last entry, |  |
|  | (e)2 | the CRS and detailed maintenance records: |  |
|  | (e)2(i) | demonstrating compliance with ADs and measures mandated by the competent authority in immediate reaction to a safety problem applicable to the aircraft, engine(s), propeller(s) and components fitted thereto, as appropriate, until such time as the information contained therein is superseded by new information equivalent in scope and detail but covering a period not shorter than 36 months; |  |
|  | (e)2(ii) | demonstrating compliance with the applicable data in accordance with point M.A.304 for current modifications and repairs to the aircraft, engine(s), propeller(s) and any component subject to airworthiness limitations; and |  |
|  | (e)2(iii) | of all scheduled maintenance or other maintenance required for continuing airworthiness of aircraft, engine(s), propeller(s), as appropriate, until such time as the information contained therein is superseded by new information equivalent in scope and detail but covering a period not shorter than 36 months. |  |
|  | (e)3 | data specific to certain components: |  |
|  | (e)3(i) | an in-service history record for each life-limited part based on which the current status of compliance with airworthiness limitations is determined; |  |
|  | (e)3(ii) | the CRS and detailed maintenance records for the last accomplishment of any scheduled maintenance and any subsequent unscheduled maintenance of all life- limited parts and time-controlled components until the scheduled maintenance has been superseded by another scheduled maintenance of equivalent scope and detail but covering a period not shorter than 36 months; |  |
|  | (e)3(iii) | the CRS and owner’s acceptance statement for any component that is fitted to an ELA2 aircraft without an EASA Form 1 in accordance with point 21.A.307(b)(2) of Annex I (Part 21) to Regulation (EU) No 748/2012 but covering a period not shorter than 36 months; |  |
|  | (e)3(iv) | the CRS and owner’s acceptance statement for any component that is fitted to an aircraft without an EASA Form 1 in accordance with point 21L.A.193(b)(2) of Annex Ib (Part 21 Light) to Regulation (EU) No 748/2012 but covering a period not shorter than 36 months. |  |
|  | (e)4 | Record-keeping periods when the aircraft is permanently withdrawn from service: |  |
|  | (e)4(i) | the data required by point (b)(1) of point M.A.305 in respect of aircraft, engine(s), and propeller(s) which shall be retained for at least 12 months; |  |
|  | (e)4(ii) | the last effective status and reports as identified under points (c) and (d) of point M.A.305 which shall be retained for at least 12 months; and |  |
|  | (e)4(iii) | the most recent CRS(s) and detailed maintenance records as identified under points (e)(2)(ii) and (e)(3)(i) of point M.A.305 which shall be retained for at least 12 months. |  |
|  | (f) | The person or organisation responsible for the management of continuing airworthiness tasks pursuant to point M.A.201 shall comply with the requirements regarding the aircraft continuing airworthiness record system and present the records to the competent authority upon request. |  |
|  | (g) | All entries made in the aircraft continuing airworthiness record system shall be clear and accurate. When it is necessary to correct an entry, the correction shall be made in a manner that clearly shows the original entry. |  |
| **AMC M.A.305**(a) |  | CERTIFICATE OF RELEASE TO SERVICE |  |
|  | (a) | The inclusion of the certificate of release to service in the aircraft continuing airworthiness record system means that the date and/or any applicable parameter at which the maintenance was performed, including a unique reference to the certificate of release to service, should be processed in the record system. |  |
|  | (b) | For components with airworthiness limitations, this information should be found on the authorised release certificate (EASA Form 1 or equivalent). For life-limited parts, some relevant information required by M.A.305 may need to be introduced in the in-service history records. |  |
| **AMC M.A.305**(b)1 |  | IN-SERVICE LIFE FOR ENGINES, PROPELLERS AND APU’S |  |
|  | (a) | Some gas turbine engines and propellers are assembled from modules and the total life accumulated in service for the complete engine or propeller may not be kept. When owners and operators wish to take advantage of the modular design, then the total life accumulated in service for each module, as well as in-service history if applicable, and detailed maintenance records for each module, should be maintained. The continuing airworthiness records as specified should be kept with the module and should show compliance with any mandatory requirements pertaining to that module. |  |
|  | (b) | The recording of in-service life accumulation may be necessary also in other measurement units to ensure the continuing airworthiness of the aircraft. For example, a mandatory life limitation measured in cycles of auxiliary power unit (APU) usage may apply to some rotating parts. In such a case, APU cycles need to be recorded. |  |
| **AMC M.A.305**(c)1 |  | AIRWORTHINESS DIRECTIVES |  |
|  | (a) | The current status of ADs, and measures mandated by the competent authority in immediate reaction to a safety problem, should identify the product/component, the applicable ADs including revision or amendment numbers and the date on which the status was updated. For the purpose of assessing the AD status, there is no need to list those ADs which are superseded or cancelled. |  |
|  | (b) | If the AD is generally applicable to the aircraft or component type but is not applicable to the particular aircraft, engine, propeller or component, then this should be identified with the reason why it is not applicable. |  |
|  | (c) | The current status of ADs should include the release to service date on which the AD or measure was accomplished (the date the certificate of release to service was issued), and where the AD or measure is controlled by flight hours and/or flight cycles and/or landings and/or any other applicable parameter, as appropriate, it should include the corresponding total life on that parameter accumulated in service on the date when the AD or measure was accomplished and/or the due limit in the appropriate parameter. For repetitive ADs or measures, only the last and next applications with the reference to the applicable parameter should be recorded in the current status. |  |
|  | (d) | The status should also specify the method of compliance and which part of a multi-part AD or measure has been accomplished, where a choice is available in the AD or measure. |  |
|  | (e) | The current status of AD should be sufficiently detailed to identify any loadable software aircraft part which is used for operating or controlling the aircraft. |  |
|  | (f) | When the AD is multi-part or requests assessments of certain inspections, this information should be shown as well. |  |
| **AMC M.A.305**(c)2 |  | MODIFICATIONS AND REPAIRS |  |
|  | (a) | Status of current modifications and repairs means a list compiled at aircraft level of modifications and repairs currently embodied. It should include the identification of the aircraft, engine(s) or propeller(s), as appropriate, and the date of the certif cate of release to service when the modification or repair was accomplished. Where a modification or repair creates the need for the accomplishment of scheduled maintenance tasks, the reference to the applicable tasks should be added to the aircraft maintenance programme. The status should include the reference to the data in accordance with M.A.304 that provides the accomplishment procedure for the modification or repair. It should also specify which part of a multi-part modification or repair has been accomplished and the method of compliance, where a choice is available in the data. |  |
|  | (b) | In addition to the previous applicable information, in respect to structure, the status of the current repairs should contain the description of the repair (e.g. doubler, blend, crack, dent, etc.), its location (e.g. reference to stringers, frames, etc.) and the dimensions. In the case of blend-out repairs, the remaining material should be recorded too. |  |
|  | (c) | The status of modifications should be sufficiently detailed to identify any installed loadable software aircraft part used for operating or controlling the aircraft, the part number of which evolves independently of its associated aircraft hardware component, as identified in the maintenance data of the relevant design approval holder or the declarant of a declaration of design compliance.  Other loadable software parts, such as navigational data bases or entertainment systems, are not considered under this recording requirement. |  |
|  | (d) | For the purpose of this point, a component replaced by a fully interchangeable alternate component is not considered a modification if this condition is published by the design approval holder or the declarant of a declaration of design compliance. |  |
|  | (e) | The status of modifications and repairs should include engine(s), propeller(s) and components subject to mandatory instructions and associated airworthiness limitations, and it is not intended that it should be retained for other components. |  |
| **AMC M.A.305**(c)3 |  | AIRCRAFT MAINTENANCE PROGRAMME |  |
|  | (a) | The current status of compliance with the aircraft maintenance programme means the last and next accomplishment data (referring to the applicable parameter) for the tasks specified in the maintenance schedule of the aircraft maintenance programme. It should include: |  |
|  | (a)(1) | an identifier specific enough to allow an easy and accurate identification of the task to be carried out, such as a task reference combined with a task title or short description of the work to be performed; |  |
|  | (a)(2) | the engine, propeller or component identification when the task is controlled at engine, propeller, or component level; and |  |
|  | (a)(3) | the date when the task was accomplished (i.e. the date the certificate of release to service was issued) and for repetitive tasks when it is next due time, as well as when the terminating action is performed. |  |
|  | (b) | (Where the task is controlled by flight hours and/or flight cycles and/or landings and/or calendar time and/or any other applicable parameter, the total in-service life accumulated by the aircraft, engine, propeller or component (as appropriate) in the suitable parameter(s) should also be included. |  |
| **AMC M.A.305**(e) |  | INFORMATION TECHNOLOGY (IT) SYSTEMS AND FORM OF RECORDS |  |
|  | (a) | The information that constitutes the aircraft continuing airworthiness records may be entered in an information technology (IT) system and/or documents equivalent in scope and detail.  IT systems acceptable for supporting the aircraft continuing airworthiness records should: |  |
|  | (a)(1) | include functions so that search of data and production of status is possible; |  |
|  | (a)(2) | allow a transfer of the aircraft continuing airworthiness records data from one system to another using an industry-wide/worldwide data format or allow printing information; |  |
|  | (a)(3) | contain safeguards which prevent unauthorised personnel from altering data; and |  |
|  | (a)(4) | ensure the integrity of the data, including traceability of amendments. |  |
|  | (b) | ‘Data equivalent in scope and detail’ are included in the airworthiness record system and could be an aircraft logbook, engine logbook(s) or engine module log cards, propeller logbook(s) and log cards for life-limited parts.  Any logbook/log card should contain: |  |
|  | (b)(1) | identification of the product or component it refers to; |  |
|  | (b)(2) | type, part number, serial number and registration, as appropriate, of the aircraft, engine, propeller, engine module, or component to which the component has been fitted in, along with the reference to the installation and removal; |  |
|  | (b)(3) | the date and the corresponding total in-service life accumulated in any applicable parameter unit, as appropriate; and |  |
|  | (b)(4) | any AD, modification, repair, maintenance or deferred maintenance tasks applicable. |  |
|  | (b) | When fulfilling the applicable requirements, a logbook/log card as described above could be a means to comply with the current status and the in-service history record for each life-limited part. |  |
|  | (c) | Form of records  Producing and/or keeping continuing airworthiness records in a form acceptable to the competent authority normally means in either material/physical or electronic state, or a combination of both.  Retention of records should be done in one of the following formats: |  |
|  | (c)(1) | original paper document or electronic data (via an approved electronically signed form); |  |
|  | (c)(2) | a paper reproduction of a paper document (original or copy); or |  |
|  | (c)(3) | an electronic reproduction of electronic data (original or copy); or |  |
|  | (c)(4) | a printed reproduction of electronic data (original or copy); or |  |
|  | (c)(5) | an electronically digitised reproduction of a paper document (original or copy); or |  |
|  | (c)(6) | a microfilm or scanned reproduction copy of a paper document (original or copy). |  |
|  | (c) | Where IT systems are used to retain documents and data, it should be possible to print a paper version of the documents and data kept. |  |
|  | (d) | Physical (non-digitised) records  All physical records should remain legible throughout the required retention period. Physical records on either paper or microfilm systems should use robust material, which can withstand normal handling, filing and ageing. They should be stored in a safe way with regard to damage, alteration and theft. |  |
|  | (e) | Digitised records  Digitised records may be created from a paper document (original or copy) or from electronic data.  When created from a paper document: |  |
|  | (e)(1) | the creation date of the digitised record should be stored with the digitised record; |  |
|  | (e)(2) | it is advisable to create an individual digitised record for each document; |  |
|  | (e)(3) | if an organisation creates a large number of digitised records, the use of database technology should ease the future retrieval of the record; and |  |
|  | (e)(4) | digitised records should be legible, including details such as, but not limited to, the date of signature, names, stamps, notes, or drawings. |  |
|  | (f) | Digitised record retention  Digitised records when created from an original paper record, or as a digital electronic original, should be stored on a system which is secured and kept in an environment protected from damage (e.g. fire, flooding, excessive temperature or accidental erasing). IT systems should have at least one backup system, which should be updated at least within 24 hours of any entry in the primary system. Access to both primary and backup systems is required to be protected against the ability of unauthorised personnel to alter the database and they should preferably be located remotely from the main system.  The system used for retention of digitised records should: |  |
|  | (f)(1) | ensure the integrity, accuracy and completeness of the record; |  |
|  | (f)(2) | ensure that access to the digitised record has safeguards against alteration of the data; |  |
|  | (f)(3) | ensure the authenticity of the record including assurance that the date has not been modified after creation; |  |
|  | (f)(4) | be capable of retrieving individual records within a reasonable time period; and |  |
|  | (f)(5) | be maintained against technological obsolescence which would prevent printing, displaying or retrieval of the digitised records. |  |
|  | (f) | Computer backup discs, tapes etc. should be stored in a different location from that containing the current working discs, tapes, etc. and in a safe environment. |  |
|  | (f) | Where the competent authority has accepted a system for digitised record-keeping satisfying the above, the paper document may be permanently disposed of. |  |
|  | (g) | Lost or destroyed records  Reconstruction of lost or destroyed records can be done by reference to other records which reflect the time in service, research of records maintained by maintenance organisations and reference to records maintained by individual mechanics, etc. When reconstruction has been done and the record is still incomplete, the owner/operator may make a statement in the new record describing the loss and establishing the time in service based on the research and the best estimate of time in service. The reconstructed records should be submitted to the competent authority for acceptance. The competent authority may require the performance of additional maintenance if not satisfied with the reconstructed records. |  |
| **AMC M.A.305**(e)1 |  | This retention period of 36 months could be extended in the case of an entry in the technical log system requiring an additional period of retention as defined in Part-M. |  |
| **AMC M.A.305**(e)2 | (a) | EASA Form 1 and the Certificate of Conformity of the components used to perform a modification/repair are not part of the substantiation data for a modification/repair. These certificates are retained by the maintenance organisation. |  |
|  | (b) | In the case of an AD with several steps or with intermediate assessments during its application, these intermediate steps should be part of the detailed maintenance records. |  |
| **AMC M.A.305**(e)3 | (a) | An EASA Form 1 and detailed maintenance records are not required to be kept to support every installation/removal shown in the in-service history records. |  |
|  | (b) | Conservative methods to manage missing historical periods are acceptable to establish the current status of the life-limited part. In the case of use of a conservative method, the supporting documents should be endorsed. Recommendations from the design approval holder or the declarant of a declaration of design compliance on the procedures to record or reconstruct the in-service history should be considered. |  |
| **AMC M.A.305**(f) |  | When the owner or organisation responsible for the aircraft continuing airworthiness arranges for the relevant maintenance organisation to retain copies of the continuing airworthiness records on their behalf, the owner or organisation responsible for the aircraft continuing airworthiness will continue to be responsible for the retention of records. If they cease to be the owner or organisation responsible for the aircraft continuing airworthiness of the aircraft, they also remain responsible for transferring the records to the new owner or organisation. |  |