



NOTICE OF PROPOSED AMENDMENT FOR DASR CHANGE PROPOSAL 0068

INCORPORATION OF EMAR 21 EDITION 3.0 AMENDMENTS INTO DASR 21

References

- A. DASR 21 – *Aircraft Design, Production and Certification* of 27 Feb 25
- B. EMAR 21 Edition 3.0 – *Certification of Military Aircraft and Related Products, Parts and Appliances, and Design and Production Organisations* of 27 Mar 25
- C. EMAR 21 AMC & GM Edition 3.0 – *Acceptable Means of Compliance and Guidance Material for the Certification of Military Aircraft and Related Products, Parts and Appliances, and Design and Production Organisations* of 7 Oct 25

Applicability

1. This proposal is applicable to applicants for a new Military Type Certificate (MTC), and all current Design Approval Holders (DAH). In this context, DAHs is defined as:
 - a. all Military Type Certificate Holders (MTCH)
 - b. Military Design Organisation Approval (MDOA) holders with applicable design authorisations
 - c. Australian Military Technical Standard Order (AUSMTSO) authorisation holders.
2. Continuing Airworthiness Managers and Continuing Airworthiness Management Organisation (CAMO) staff should note changes that may affect their approved processes where they reference elements of DASR 21 (Reference A).

Purpose

3. The purpose of this Notice of Proposed Amendment (NPA) is to enable community input on the incorporation of the changes included in the European Military Airworthiness Requirements (EMAR) 21 Ed 3.0 release (References B and C) into DASR 21.
4. The proposed amendments:
 - a. consolidate multiple clauses across DASR 21 relating to manuals, record-keeping and Instructions for Continuing Airworthiness (ICA) into single clauses for each
 - b. change the definition of the type certificate to include all ICA and add an approval mechanism for stand-alone changes to ICA
 - c. maintain alignment of the DASR with EMAR where it has made sense to do so in the Defence context. Notably, this results in the movement of DASR 21.A.44(c) Aircraft Structural Integrity (ASI) and Propulsion System Integrity (PSI) content into the new DASR 21.A.65 clause
 - d. better communicate existing DASA policy and expectations for the issue of a Military Permit to Fly (MPTF) and the difference between the Defence and civil contexts for MPTF.



5. The main objectives of the proposed change are to:
 - a. provide clarification to the Defence aviation community, and more specifically DAHs, on the responsibilities for the development and maintenance of ICA so that CAMOs and Approved Maintenance Organisations (AMO) have complete and up-to-date ICA
 - b. streamline the DAH's ability to make changes to ICA without the involvement of DASA, where DASA involvement is not warranted by the potential risk to safety
 - c. specify obligations associated with manuals and record-keeping more clearly and consistently
 - d. align ASI (and PSI) requirements, Acceptable Means of Compliance (AMC) and Guidance Material (GM)
 - e. formalise DASA expectations that an applicant for an MPTF, for a new or modified capability will be conducting a certification program and not relying only on the MPTF to manage risk.
6. DASA expects that the changes to ICA requirements and management detailed in this NPA will improve the quality and consistency of ICA and the flow on to the continuing airworthiness space will allow for fit-for-purpose maintenance instructions.
7. The regulatory burden of the proposed changes is considered low. The proposal does not introduce new requirements for the community, although review (and potential updates) of extant processes and documentation for alignment will be required. This will likely result in a single update to DAH documentation and processes to match references to the clause changes in DASR 21, and where applicable to update Type Certificate Data Sheets (TCDS).

Background

8. **Instructions for Continuing Airworthiness.** Since the implementation of DASR 21 in 2016, DASA has observed inconsistent understanding of the requirements of both introducing new ICA and maintaining existing ICA by DAHs. Specific issues included understanding what constituted a full set of ICA, when new ICA or changes to existing ICA changed certified data and required a design change to incorporate, and when changes to existing ICA were part of the DAHs' routine obligations to maintain ICA.
9. The types of ICA changes that weren't well understood by the community included editorial changes or changes to incorporate operator feedback that did not affect airworthiness limitations and therefore did not require a design change to implement. This was due to extant regulatory requirements not always being clear on when said changes met the threshold for a design change and required DASA involvement when the change did not outright affect the Airworthiness Limitations Section (ALS).
10. Prior to 2021, EASA had identified similar confusion and gaps in understanding among the EU civil aviation community with regards to ICA. The confusion was caused by differing levels of understanding amongst DAHs as to what constituted a complete set of ICA, and their obligations to develop and maintain ICA. The hazard that existed from this condition was that maintenance organisations might not have had all the necessary data to perform maintenance correctly, which may have led some to using unapproved methods. The identified root cause was unclear requirements and unclear guidance within EASA Part 21, which flowed on through to EMAR 21 with initial releases and then into DASR 21.
11. To remedy the issue, several changes were made to EASA Part 21 and then EMAR 21. The definition of the type certificate was expanded to include all ICA, where previously the only part of ICA that formed part of the type certificate data was the ALS. The concept of stand-alone changes was also introduced as a mechanism to allow the DAH to make changes to the ICA without Authority involvement where the change to ICA is not part of a design change and where the ALS is not affected. Additionally, requirements for ICA, manuals and record-keeping that were spread across multiple subparts were consolidated into single requirements for each within Subpart A (General Provisions) for ease of access and consistency.

12. **ASI and PSI.** Alongside changes to ICA, EMAR 21 introduced, vide EMAR 21.A.65, a requirement for the DAH to ensure that continuing structural integrity programmes remain valid throughout the operational life of aircraft, taking into account data from operators. Whilst focused exclusively on structural aspects, EMAR 21.A.65 closely resembles existing DASR unique requirements (i.e. DASR 21.A.44(c)) to ensure the continued integrity of aircraft structure and propulsion systems through ongoing monitoring and periodic assessment.

13. **MPTFs for new or modified capabilities.** Over recent years, DASA observed a number of applications for MPTFs to support introduction of a new or modified capability prior to the generation of any compliance demonstration evidence attesting to safe design, or even the establishment of an agreed certification programme. In 2024, DASA issued a minute stating that DASA policy going forward for such MPTFs would require the applicant to have a Certification Program Plan (CPP) agreed to with DASA to support the defensibility of the risk characterisation, to assure that certification of the new or modified capability was achievable, and that the applicant was progressing certification.

Proposed Amendment(s)

14. The proposed changes to DASR 21 related to ICA consist of:

- a. consolidation of regulatory clauses, AMC and GM related to ICA into a single clause into Subpart A
- b. inclusion in the definition of the Type Certificate the remaining elements of ICA in addition to the ALS, requiring changes to ICA to be considered as a change to the TC except where the change falls under a stand-alone change to ICA
- c. implementation of stand-alone changes allowing changes to ICA by the DAH without DASA involvement where the change does not affect the ALS, is not part of a design change, and does not require additional compliance demonstration to be conducted with DASA involvement.

15. Proposed changes also include:

- a. consolidation of various DASR 21 regulatory clauses, AMC and GM related to manuals and record-keeping for each area into Subpart A
- b. transferring extant ASI and PSI requirements and associated AMC under 21.A.44(c) to a new clause under 21.A.65 to maintain alignment with EMAR
- c. changes to MPTF AMC and GM that formalises DASA expectations that an applicant for a an MPTF in accordance with 21.A.701(a)(17) is making progress against an agreed CPP and clarification that in the Defence context design organisations should not hold an MPTF as they do not operate aircraft
- d. additional minor changes based on community feedback since the incorporation of the EMAR 21 Edition 2.0 changes.

16. Annex A provides a summary table outlining the impacted regulations, AMC and GM clauses. All the amendments listed in Annex A are noteworthy changes, i.e. any change that is not editorial. Annex B contains full details of the proposed amendments.

Implementation Strategy

17. The changes detailed in this document are intended to be released in the March 2027 DASR release and will become effective from the time of publication. DASA will consider an earlier out of cycle release for this change if responses to this NPA indicate that this will be beneficial to the impacted community.

18. If DASA introduces this amendment as described in this NPA:

- a. All new applications for organisational approvals after the time of publication will be required to comply with the changes. Organisations that have an application in progress (i.e. has already been submitted to DASA) will be contacted by DASA to discuss any changes required to their application as necessary.

- b. All DAHs must review their procedures and expositions to reference the updated regulatory structure no later than March 2028. This includes updates of ASI and PSI documentation to replace all references to DASR 21.A.44(c) with DASR 21.A.65.
- c. DAHs must develop a procedure, or review and update an existing procedure already agreed to with DASA, for stand-alone changes to ICA and receive DASA agreement to the procedure before leveraging the provisions of 21.A.90C 'Stand-alone changes to ICA'. DASA anticipates that existing procedures in the applicable organisation's exposition could be used to satisfy this requirement.
- d. No later than March 2028, MTCHs must review their respective TCDS(s) and, where required, update to include the elements of ICA not currently listed.
- e. It is acceptable to DASA that the above occurs during routine updates to the relevant documentation. After March 2028, DASA will assess the organisation's implementation of the changes as part of its oversight and enforcement activities.

HOW TO SUBMIT COMMENTS ON THIS NPA

Format

19. DASA is particularly interested in community feedback in regards to the safety and efficiency benefits and resource implications of this proposal. These comments can be made directly to the email below or in the format provided at Annex C. Respondents wishing to make detailed comment on the specific aspects of the proposed changes are requested to use the NPA response sheet with the Objective ID [BP52729376](#).

20. Responses are to be submitted by email to dasa.iarp@defence.gov.au. Hardcopies of the NPA Comment Sheet are not accepted.

Timing

21. Comments on NPA for DCP 0068 are requested by close of business 28 Aug 26.

Additional Information

22. For additional information concerning this NPA, please contact MR Cameron Clanchy, Initial Airworthiness Regulation Lead, at cameron.clanchy@defence.gov.au.

DISPOSITION OF RESPONSES RECEIVED

23. A Comment Response Document will be prepared and published on the [DASA Website](#). DASA will not individually acknowledge or respond to comments or submissions.

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Annexes:

- A. NPA for DCP 0068 – Amendments to DASR 21 for Incorporation of EMAR 21 Ed 3.0 changes
- *Summary of Proposed Changes*
- B. NPA for DCP 0068 – Amendments to DASR 21 for Incorporation of EMAR 21 Ed 3.0 changes
- *Proposed Changes*
- C. NPA for DCP 0068 – *Response Sheet*

DCP-0068: INCORPORATION OF EMAR 21 EDITION 3.0 AMENDMENTS INTO DASR 21

SUMMARY OF CHANGES

This annex lists all major and minor changes proposed in this amendment, editorial changes are included in Annex B but are not listed here.

Table 1 – Overview of Changes to Subpart A

REG / AMC / GM	Existing DASR 21 Reference	Proposed Reference	Title	Change and Rationale
AMC	AMC1 21.A.3A(a) AUS	AMC3 21.A.3A(a)	(Existing) System for collection, investigation and analysis of data for structure and propulsion systems (AUS) (Proposed) Failures, malfunctions and defects	New EMAR AMC3, replaces some existing content from DASR AMC1 21.A.3A(a) AUS, relevant DASR specific requirements are retained from AMC1 and moved to AMC3.
AMC	AMC3 21.A.3A(a) AUS	AMC1 21.A.3A(a) (AUS)	System for collection, investigation and analysis of data from foreign Authorities (AUS)	Clause renumbered to AMC1 as EMAR 21 Ed 3.0 includes an AMC3 now. Minor rewording to clarify the Design Approval Holder should treat applicable foreign MCAI as an occurrence.
GM	GM 21.A.3A(a) (AUS)	GM 21.A.3A(a)	(Existing) System for collection, investigation and analysis of data (AUS) (Proposed) Failure, malfunctions and defects	Additional EMAR 21 Ed 3.0 guidance provides further clarity on the information that can be collected for FMDs. Also provides clarity on the fact that 21.A.3A(a) does not apply to minor change approval holders and minor repair design approval holders. DASR unique text retained.
GM	GM 21.A.3A(b)	GM 21.A.3A(b)	(Existing) Occurrence reporting (Proposed) Failure, malfunctions and defects	Editorial updates for clarity.
AMC	AMC 21.A.3B(b)	AMC1 21.A.3B(b)	(Existing) Unsafe condition (Proposed) Failures, malfunctions and defects	Changed title and number for EMAR 21 Ed 3.0 alignment. No change to content.
GM	GM 21.A.3B(b)	GM1 21.A.3B(b)	(Existing) Determination of an unsafe condition (Proposed) Failures, malfunctions and defects	Changed title and number for EMAR 21 Ed 3.0 alignment, and some changed text for clarity.

REG	21.A.55, 21.A.105, 21.A.447, 21.A.613	21.A.5	Record-keeping	Consolidates all record keeping requirement clauses across Subparts B,D,E,M. No change to regulatory requirement.
AMC	GM 21.A.55 (AUS), 21.A.105(b), AMC1 to 21.A.447 (AUS), AMC 21.A.613 (AUS)	AMC 21.A.5 (AUS)	Record-keeping (AUS)	Consolidates previous AMC, GM and regulatory clauses regarding a 2 year retention period for records.
GM	N/A	GM1 21.A.5	Repair designs and record-keeping	Links the requirement at 21.A.5 to the data described in AMC 21.A.433(b) for repair designs.
REG	21.A.57, 21.A.119	21.A.6	Manuals	Consolidates all manuals requirement clauses across Subparts B and E. No requirement change.
AMC	AMC 21.A.57 (AUS), AMC 21.A.119 (AUS)	AMC 21.A.6 (AUS)	Manuals (AUS)	Consolidates DASR unique AMC for manuals from Subparts B and E into single clause.
REG	21.A.61, 21.A.107, 21.A.120A, 21.A.449	21.A.7	Instructions for continuing airworthiness	Consolidates all ICA requirement clauses across Subparts B,D,E,M. Minor changes to structure of clause for clarity, however, no requirement change.
AMC	N/A	AMC1 21.A.7(a)	ICAs contents	Includes new content to support the addition of 21.A.7 ICA. Outlines minimum elements that should be identified and included in the ICA. Guidance from the existing GM 21.A.61 on the Airworthiness Limitations Section has been included as AMC. It should be clear what elements of the ICA comprise AwLs and DASA considers an ALS to be the best means of doing so.
AMC	N/A	AMC2 21.A.7(a)	Identification of ICAs	All new content. Sets acceptable conditions for identifying additional information that accompanies ICA.

AMC	N/A	AMC3 21.A.7(a)	DAH responsibility to check the supplier data which is part of the ICA or referenced with the ICA	All new content. Sets AMC for the DAH to validate supplier data and elements the supplier should address when sending data to the DAH.
GM	N/A	GM1 21.A.7(a)	Scope of ICAs, their publication format and typical ICAs data	List of example publications/manuals of what DAHs may identify as their ICA, and formats in which they may be published.
GM	N/A	GM2 21.A.7(a)	Determination of which supplier data is part of the ICAs	All new content. Summary guidance for design approval applicants as to which supplier data should be included in the ICA for the product.
GM	N/A	GM3 21.A.7(a)	Non -ICA supplier data (e.g. component maintenance manuals (CMMs))	All new content. GM aimed primarily at those developing ICA for the product (i.e. product OEMs).
AMC	N/A	AMC1 21.A.7(b)	Identification of a complete set of instructions for continued airworthiness (ICA)	All new content. Sets AMC for the DAH to identify the complete set of ICA in such a way that it can be referenced on a TCDS. DASR unique AMC requirement from existing DASR AMC 21.A.61 has been moved to here.
GM	N/A	GM1 21.A.7(b)	Other persons required to comply	All new content. Definition of 'other person required to comply' referred to in 21.A.7(b)(3).
GM	N/A	GM2 21.A.7(b)	ICA — format	All new content. Guide to formatting standards that can be used when developing ICA, directed primarily at those responsible for developing ICA to comply with the three formats listed in the GM. Useful background information.
GM	N/A	GM3 21.A.7(b)	Approval status of the manual for a component or article	All new content. Approval requirements for component ICA referred to in the product ICA.
GM	N/A	GM4 21.A.7(b)	Integration of ICA between products (aircraft, engines, propellers)	All new content. Relationship and division of responsibilities between aircraft/engine/propeller DAHs and their ICA. Useful information but limited applicability in Defence given engines and propellers are included as part of the aircraft TC.

AMC	N/A	AMC1 21.A.7(c)	Completeness and timely availability of the ICA	All new content. Sets 3 options for the completeness and availability of ICA for a new design approval. Options are 1 - complete ICA available at time of design approval; option 2 - complete ICA available at entry into service; option 3 - complete ICA available after entry into service.
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Table 2 – Overview of Changes to Subpart B

REG / AMC / GM	Existing DASR 21 Reference	Proposed Reference	Title	Change and Rationale
AMC	AMC 21.A.14(b)	AMC1 21.A.14(b)	(Existing) Alternative procedures (Proposed) Demonstration capability	Number and title changed for alignment with EMAR 21 Ed 3.0. Minor changes made, referencing 21.A.91 for authorised signatories, expanding on the information that should be included in the statement, and a new footer statement related to standalone changes, provides more context on elements of the AMC.
GM	GM1 21.A.15(d)	GM 21.A.15(d)	Operational Suitability Data (OSD)	Changes include clarity regarding OSD for different operations and removal of guidance on other OSD elements, and a change from GM1 21.A.15(d) to GM 21.A.15(d).
GM	GM2 21.A.15(d)	GM1 21.A.15(d)	Application for a Military Type Certificate (AUS)	Changed designation from GM2 to GM1 to match with the GM1 to GM designation change.
REG	21.A.41	21.A.41	Type certificate and restricted type certificate	Adds ICA as an explicit element of an MTC/MRTC. Also adds OSD and the OSD certification basis as elements of the MTC/MRTC (OSD inclusion is an EMAR 21 Ed 2.0 related change).

REG	21.A.44(a)	21.A.44(a)	Obligations of the holder	Changes made clause numbering to align with EMAR 21 Ed 3.0 consolidation of Record Keeping, Manuals and ICA clauses. Addition of structural integrity requirement link to 21.A.65.
REG	21.A.55	Replaced by 21.A.5	Record-keeping	Consolidated into 21.A.5.
GM	GM 21.A.55	Replaced by AMC 21.A.5 (AUS)	Record keeping (AUS)	Consolidated into AMC 21.A.5 (AUS).
REG	21.A.57	Replaced by 21.A.6	Manuals	Consolidated into 21.A.6.
AMC	AMC 21.A.57	Replaced by AMC 21.A.6 (AUS)	Manuals (AUS)	Consolidated into AMC 21.A.6 (AUS).
REG	21.A.61	Replaced by 21.A.7	Instructions for continuing airworthiness	Consolidated into 21.A.7.
AMC	AMC 21.A.61	Partially replaced by AMC1 21.A.7(b)	Instructions for continuing airworthiness (AUS)	Relevant parts incorporated into AMC1 21.A.7(b)
GM	GM 21.A.61	Partially replaced by GM1 21.A.7(a)	Instructions for continuing airworthiness (AUS)	Relevant parts incorporated into GM1 21.A.7(a)
REG	N/A (21.A.44(c))	21.A.65	Continuing structural integrity for aircraft structures	Original Australian specific requirements from 21.A.44(c) have been merged with the new EMAR 21 text into the new clause. The original requirements have been maintained. Structurally aligns DASR 21 with EMAR 21 enabling easy integration of future EMAR ASI policy if determined to apply to the Defence context.
AMC	N/A (AMC 21.A.44(c))	AMC1 21.A.65	Continuing structural integrity programme for aircraft structures	AMC 21.A.44(c) has been moved and text from EMAR further explaining the objectives of ASI/PSI monitoring.

Table 3 – Overview of Changes to Subpart C

REG / AMC / GM	Existing DASR 21 Reference	Proposed Reference	Title	Change and Rationale
GM	GM 21.A.76(a)	GM 21.A.76(a)	(Type) Continued Airworthiness System	Updated the references to remove the old Manuals and ICA clauses and replaced with the new Manuals and ICA clauses.
GM	GM 21.A.79	GM 21.A.79	Significant changes in the Continued Airworthiness System	Updated the references to remove the old Manuals and ICA clauses and replaced with the new Manuals and ICA clauses.

Table 4 – Overview of Changes to Subpart D

REG / AMC / GM	Existing DASR 21 Reference	Proposed Reference	Title	Change and Rationale
REG	N/A	21.A.90B	Standard Changes	Marked 'Reserved', EMAR change not proposed for incorporation. EMAR 21 Ed 3.0 change allows the TCH to make changes to a TC without requiring authority approval provided that they use design data approved by the authority, and methods accepted by the authority for identifying the standard changes. This change is not deemed applicable in the ADF context, since ADF aircraft would not meet the criteria for aircraft types which could utilise the standard changes clauses and standards.
GM	N/A	GM1 21.A.90B	Standard Changes – Airworthiness Codes	Not included, since clause is to be marked 'Reserved'. EMAR clause includes reference to CS-STAN as the relevant CS for Standard Changes.

REG	N/A	21.A.90C	Stand-alone changes to the Instructions for Continuing Airworthiness	Allows a DAH to make changes to ICA without needing to apply DASR 21.A.91 to 21.A.109, if the changes are not part of a change to the type design, part of a repair, and do not affect airworthiness limitations or require additional demonstration of compliance. Also requires the DAH to have a procedure agreed to by the authority to exercise 90C. This change supports inclusion of ICA in the TC as per 21.A.41, without placing additional burden on the TC holder.
GM	N/A	GM1 21.A.90C	Stand-alone changes to ICA	Gives examples of changes to ICA that would be considered stand-alone changes.
GM	Appendix A to GM 21.A.91	Appendix A to GM 21.A.91	Examples of Major Changes per discipline	Added point 11 related to stand-alone changes to ICA in support of 21.A.90C and updated Figure 1. Inclusion of guidance in point 4. Systems on information security considerations.
AMC	AMC 21.A.93(b)	AMC 21.A.93(b)	Certification programme for a change to a TC or an STC	Adds the following line to the end of the paragraph 'The applicant should include justifications for the exclusion of items of the certification basis.'
REG	21.A.105	Replaced by 21.A.5	Record-keeping	Consolidated into 21.A.5.
REG	21.A.107	Replaced by 21.A.7	Instructions for continuing airworthiness	Consolidated into 21.A.7.
AMC	AM 21.A.107	Partially replaced by AMC1 21.A.7(b)	Instructions for continuing airworthiness (AUS)	Relevant parts incorporated into AMC1 21.A.7(b)
GM	GM 21.A.107	Partially replaced by GM1 21.A.7(a)	Instructions for continuing airworthiness (AUS)	Relevant parts incorporated into GM1 21.A.7(a)
REG	21.A.109	21.A.109	Obligations and Australian Military Parts Approval Marking	Updated references to ICA and Record keeping clauses, inclusion of reference to Manuals clause, and OSD.

Table 5 – Overview of Changes to Subpart E

REG / AMC / GM	Existing DASR 21 Reference	Proposed Reference	Title	Change and Rationale
GM	GM 21.A.112B	GM1 21.A.112B	Demonstration of capability	Some changed within example to include OSD
REG	21.A.119	Replaced by 21.A.6	Manuals	Consolidated into 21.A.6.
AMC	AMC 21.A.119	Replaced by AMC 21.A.6 (AUS)	Manuals (AUS)	Consolidated into AMC 21.A.6 (AUS).
REG	21.A.120A	Replaced by 21.A.7	Instructions for continuing airworthiness	Consolidated into 21.A.7.
AMC	AMC 21.A.120A	Partially replaced by AMC1 21.A.7(b)	Instructions for continuing airworthiness (AUS)	Relevant parts incorporated into AMC1 21.A.7(b)
GM	GM 21.A.120A	Partially replaced by GM1 21.A.7(a)	Instructions for continuing airworthiness (AUS)	Relevant parts incorporated into GM1 21.A.7(a)

Table 6 – Overview of Changes to Subpart F

REG / AMC / GM	Existing DASR 21 Reference	Proposed Reference	Title	Change and Rationale
AMC	AMC2 21.A.130(b)	AMC2 21.A.130(b)	Statement of Conformity for Products (other than complete aircraft), parts, appliances and materials - The	Point d) of '5. Block 12' reworded to expand the possible exemption, and include the type of emission the exemption is for. Footnote included stating environmental protection requirements are not mandatory for military aviation.
GM	GM 21.A.130(b)(4)	GM 21.A.130(b)(4)	Considerations for determining environmental requirements, if required	Changes to ED Decisions references.

GM	N/A	GM1 21.A.130, 21.A.163 and 21.A.165	Performance of tasks in real time for the issuance of an 'EMAR Form 1' for prototype and new parts, appliances and products other than complete aircraft, using information and communication technologies (ICT)	Guidance on the suitability of conducting conformance verification remotely before issuing Form 1 under Subparts F or G.
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Table 7 – Overview of Changes to Subpart G

REG / AMC / GM	Existing DASR 21 Reference	Proposed Reference	Title	Change and Rationale
GM	N/A	GM1 21.A.139, 21.A.157, 21.A.239 and 21.A.257	The use of information and communication technologies (ICT) for performing remote audits	Guidance on the conduct of audits remotely. Applies to either Authority's audit of an approved organisation, or an approved organisation's audit of their supplier(s).
GM	GM 21.A.149	GM 21.A.149 and 21.A.249	Transferability	Updated guidance on circumstances in which transfer of approval is appropriate.
AMC	AMC2 21.A.163(c)	AMC2 21.A.163(c)	Privileges	Adds a requirement for exemption statement for 'References to aid traceability' in Block 12 of an EMAR Form 1 in cases where emissions exemptions for engines exists. Also uses the same text as AMC2 21.A.130(b) to describe the exemption.
AMC	AMC1 21.A.163(d)	AMC1 21.A.163(d)	Privileges	Change of title from 'Privileges - Maintenance' to 'Privileges' and moving 'Maintenance' as a heading within the body text. No other change.
GM	GM 21.A.165(c)(3)	GM1 21.A.165(c)(3)	Definitions of engine type certification date and production date	Changed heading and body text changes with further guidance.
AMC	AMC 21.A.165(c)(4)	AMC1 21.A.165(c)(4)	Applicable aircraft CO2 emissions requirements	Renamed AMC 21.A.165(c)(4) to AMC1 21.A.165(c)(4). EMAR reference to Vol 3 of ICAO Annex 16 as the basis for determining emission conformity not included, as not applicable for ADF context.

Table 8 – Overview of Changes to Subpart H

REG / AMC / GM	Existing DASR 21 Reference	Proposed Reference	Title	Change and Rationale
	Various			Editorial changes only

Table 9 – Overview of Changes to Subpart J

REG / AMC / GM	Existing DASR 21 Reference	Proposed Reference	Title	Change and Rationale
GM	GM1 21.A.239(a)	GM1 21.A.239(a)	Design assurance system	Mostly editorial changes to terminology and references. Additional note to describe link to stand-alone changes to ICA at 21.A.90C.
AMC	AMC1 21.A.243(a)	AMC1 21.A.243(a)	Handbook (Design Organisation Exposition) requirements	Changes are mostly editorial (formatting) and updated references. Expanded point 10. to include collecting and analysing reports of problems and collecting both mandatory and voluntary occurrence reports.
GM	GM 21.A.249	GM 21.A.149 and 21.A.249	Transferability	Updated guidance on circumstances in which transfer of approval is appropriate.
AMC	AMC1 21.A.263(c)(1)	AMC1 21.A.263(c)(1)	(Existing) Procedure for the classification of changes to a type certificate (TC) or a supplemental type certificate (STC) and of repair designs as minor and major (Proposed) Privileges	Title changed, old title moved to the body text as a heading. Lists have been expanded with additional requirements for items that should be identified by the procedure and further clarification on the what the end result of classification should determine.

AMC	AMC2 21.A.263(c)(1)	AMC2 21.A.263(c)(1)	(Existing) Organisations that design minor changes to a type certificate (TC) or a supplemental type certificate (STC) and minor repairs to products : Classification procedure (Proposed) Privileges	Title changed, old title moved to the body text as a heading. Lists have been expanded and OSD certification basis identification included, and further clarification on the what the end result of classification should determine.
AMC	AMC1 21.A.263(c)(2)	AMC1 21.A.263(c)(2)	(Existing) Procedure for the approval of minor changes to a type certificate (TC), APU AUSMTSO or a supplemental type certificate (STC), and minor repairs (Proposed) Privileges	Title changed, old title moved to the body text as a heading. Additions to 2.3.1 for items an approval document for a minor change under privilege should consider.
AMC	AMC2 21.A.263(c)(2)	AMC2 21.A.263(c)(2)	(Existing) Organisations designing minor changes to a type certificate (TC), APU AUSMTSO or a supplemental type certificate (STC) and minor repairs to products: procedure for the approval of minor changes to TC, APU AUSMTSO or minor repairs (Proposed) Privileges	Title changed, old title moved to the body text as a heading. Additions to 3.1 for items an approval document for a minor change under privilege should consider.
AMC	AMC 21.A.263(c)(6)	AMC1 21.A.263(c)(6)	(Existing) Procedure for the approval of the conditions for issue of a military permit to fly (Proposed) Privileges	Title changed, old title moved to the body text as a heading. Addition of guidance examples for changes to flight conditions.
AMC	N/A	AMC2 21.A.265(a)	Obligations of the holder	All new content. Description of the acceptable formats of a DOE and the elements it may consist of.
GM	GM 21.A.265(b)	GM 21.A.265(b)	(Existing) Use of the Handbook (Military Design Organisation Exposition) (Proposed) Obligations of the holder	Changed and additional guidance provided for clarity.

GM	GM 21.A.265(h)	GM 21.A.265(h)	Designation of data and information issued under the authority of a design organisation approval (DOA) holder	Addition of content guidance for the procedure and movement of content in point 4 to point 5.
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Table 10 – Overview of Changes to Subpart K

REG / AMC / GM	Existing DASR 21 Reference	Proposed Reference	Title	Change and Rationale
REG	21.A.307	21.A.307	The eligibility of parts and appliances for installation	Clause (a) is reworded, no change to requirements. Clause (b) has been updated, with an addition which allows for select parts and appliances to be installed without the need for a DASR Form 1. These include: parts and appliances identified by the type certificate holder (in ICA) that have a negligible affect on safety if non-conformant with their design data and parts or appliances exempted from airworthiness approval IAW operational rules. Note (b)(4) is 'Reserved' since this relates to standard changes at 21.A.90B, which will not be incorporated. Clause (c) is added which requires a document similar to a certificate of conformity in lieu of a DASR Form 1, for a part or appliance listed under (b).
AMC	N/A	AMC1 21.A.307(b)(3)	Verification activities to be conducted on the part or appliance or release documentation prior	All new content. The DAH or the Authority may identify in the ICA specific activities the installer of a part or appliance has to conduct before installation of a part with no DASR Form 1.
GM	N/A	GM1 21.A.307(b)(3) and (b)(4)	Meaning of 'negligible safety effect'	Further guidance on assessing 'negligible safety effect' when using this derogation. Refers to guidance in EASA CM-21.A-K-001.

GM	N/A	GM1 21.A.307(b)(4)	Airworthiness Codes in EMAR 21.A.307(b)(4)	Not to be incorporated, since standard changes have not been incorporated, and therefore 21.A.307(b)(4) is not incorporated.
GM	N/A	GM1 21.A.307(b)(5)	Equipment exempted from an airworthiness approval	References to EU operational rules which have no applicability in Defence updated to operational DASR clauses which meet a similar intent.
GM	N/A	GM1 21.A.307(b)(6)	Part or appliance that is part of a higher -level assembly	Further explanation of when a Form 1 is not required.

Table 11 – Overview of Changes to Subpart M

REG / AMC / GM	Existing DASR 21 Reference	Proposed Reference	Title	Change and Rationale
REG	21.A.433	21.A.433	Requirements for approval of a repair design	Clause (a)(5) added, which includes additional requirement for repair design approval. Structural integrity of the repair and affected structure needs to be demonstrated as being equivalent to the structure's baseline level of integrity or limitations must be applied.
AMC	AMC 21.A.433(a) and 21.A.447	AMC 21.A.433(b) and 21.A.5	Repair design and Record Keeping	Clause numbering change only. Change to 21.A.5 from 21.A.447 is due to 21.A.477 being consolidated into 21.A.5 with the other record keeping clauses. Correction of DASR numbering from AMC 21.A.433(a) to AMC 21.A.433(b) in line with EMAR 21 Ed 3.0.
REG	21.A.447	Replaced by 21.A.5	Record-keeping	Consolidated into 21.A.5.
REG	21.A.449	Replaced by 21.A.7	Instructions for continuing airworthiness	Consolidated into 21.A.7.

AMC	AMC 21.A.449	Partially replaced by AMC1 21.A.7(b)	Instructions for continuing airworthiness (AUS)	Relevant parts incorporated into AMC1 21.A.7(b)
GM	GM 21.A.449	Partially replaced by GM1 21.A.7(a)	Instructions for continuing airworthiness (AUS)	Relevant parts incorporated into GM1 21.A.7(a)

Table 12 – Overview of Changes to Subpart O

REG / AMC / GM	Existing DASR 21 Reference	Proposed Reference	Title	Change and Rationale
AMC	N/A	AMC1 21.A.609(c) and (d)	Obligations of holders of MTSO authorisations	All new content. If applicable airworthiness standards require the DAH or applicant to develop ICA for an MTSO article being integrated into a product, the DAH or applicant will have to develop ICA that describes the installation requirements of the article and review all maintenance instructions for potential inclusion in the ICA.
REG	21.A.613	Replaced by 21.A.5	Record-keeping	Consolidated into 21.A.5.
AMC	AMC 21.A.613	Replaced by AMC 21.A.5 (AUS)	Record keeping (AUS)	Consolidated into AMC 21.A.5 (AUS).

Table 13 – Overview of Changes to Subpart P

REG / AMC / GM	Existing DASR 21 Reference	Proposed Reference	Title	Change and Rationale
REG	21.A.701(a)(16)	21.A.701(a)(16)	Scope	New example at para 16 for flying aircraft for troubleshooting or checking functions after maintenance. Not included, since clause is to remain marked as 'Reserved'. Future inclusion of this element is dependent on inclusion of parallel requirements from EMAR M Edition 2.0 and EMAR 145 Edition 2.0 into DASR M & 145.
GM	GM 21.A.701	GM 21.A.701	Scope	New paragraph with additional guidance on ground runs or taxi trials.
GM	GM 21.A.701(a)	GM 21.A.701(a)	Military permit to fly when certificate of airworthiness or restricted certificate of airworthiness is not	Change to point 17 to make it clear that DASA considers characterisations of the risks associated with non-compliances can only be defensible if a Certification Program Plan has prior agreement with DASA.
AMC	N/A	AMC 21.A.701(a)(17)	Issue of an MPTF prior to completion of certification (AUS)	Addition of an AMC with additional requirements for the applicant for an MPTF for a new or modified capability to demonstrate to DASA that the applicant is conducting a certification program before the issue or extension of an MPTF. This is to allow flexibility for the applicant to operate to support capability requirements while completing certification while ensuring that the new capability or modified capability is going through certification and not relying only on an MPTF to manage risk.

GM	GM 21.A.703	GM 21.A.703	Applicant for a military permit to fly	Removal of the last sentence. In the Defence context, design organisations do not operate aircraft and should not be holders of MPTF.
AMC	AMC 21.A.709(b)	AMC1 21.A.709(b)	Application for the approval of flight conditions	Adds requirements for an applicant for approval of flight condition for a flight test involving armaments that the weapon design org has provided necessary evidence of limitations on release of the weapon. This is an update to the existing AMC and a redesignation to AMC1.

Table 14 – Overview of Changes to Subpart Q

REG / AMC / GM	Existing DASR 21 Reference	Proposed Reference	Title	Change and Rationale
REG	21.A.801	21.A.801	Identification of products	(a)4. Requires in situations where the Authority has granted an exemption from environment protection requirements an exempt mark on the engine. Clause is marked as 'reserved', as this is not applicable in the ADF context.
GM	N/A	GM1 21.A.801(a)(4)	Identification of products	Military aircraft engines do not need to comply with environmental protection requirements in our context, GM won't be incorporated.
REG	21.A.804	21.A.804	Identification of parts and appliances	Reference to 21.A.307(b) included, in line with changes to that clause in Subpart K.

GM	N/A	GM1 21.A.804(a)(3)	Identification of parts and appliances	Application of the requirement to use MPA markings for repair parts.
AMC	N/A	AMC1 21.A.804(b)	Identification of parts and appliances	All new content describing process for using an exception to 21.A.804(b) to allow complete or partial omission of markings.
GM	N/A	GM1 21.A.805	Identification of critical parts	New guidance on marking and serial number tracking of critical parts.

DCP-0068: Incorporation of EMAR 21 Edition 3.0 Amendments into DASR 21

Notes to readers:

This document shows the proposed changes to the regulation, AMC and GM wording as follows:

- Highlighted text marks an addition.
- ~~Strikethrough~~ formatting marks removal.
- Green text marks Australian-specific text.
- new EMAR Ed 3.0 (AMC/GM Ed 3.0) based text that will NOT be incorporated is highlighted grey with strikethrough.

This document does not contain the affected subparts in their entirety and only contains the sections that contain proposed changes. The changed sections have been marked by their header regulation, AMC/GM number and title, and split using “...” to represent unchanged text.

Where unchanged text spans across AMC/GMs, the delineation is further marked by a solid black line to denote a more significant gap between the changed sections.

21.1 - General

- When reference is given to ‘design organisation’ the following shall apply:
 - An organisation responsible for the design of products, parts and appliances or for changes or repairs thereto shall demonstrate its capability in compliance with national military airworthiness regulation being in accordance ~~to~~with this DASR, further referred to as DASR 21. In the case that governmental organisations undertake design activities with any other organisation responsible for the design of products, parts, and appliances or for changes or repairs thereto, they shall be treated as a single organisation when demonstrating their capability in accordance with DASR 21.
 - By way of exception from ~~point (1),~~ an organisation whose principal place of business is in a State that has not transposed EMAR 21 in their national military airworthiness regulations, may demonstrate its capability by holding a **relevant**-certificate or similar approval issued by an authority of that State for the product, part, and appliance for which it applies, provided:
 - that State is providing oversight as State of Design; and
 - through Recognition (EMAD—R) it can be determined, that the national airworthiness system of that State includes the same independent level of checking of compliance as provided by DASR 21, either through an equivalent system of approvals of organisations or through direct involvement of the authority of that State.
- All references to ‘aircraft’ throughout this DASR means ‘military aircraft’, defined as those that follow special laws and regulations and are designed with specific characteristics for military operations.
- ‘Authority’ shall be, unless otherwise specified in this DASR:
 - the Authority in charge of the type certification process:
 - for a multinational programme, the Military ~~Airworthiness~~ **Aviation** Authorities of the participating Nations/States; or
 - for a national programme, the Military Aviation Authority of this Nation/State,
 - The Authority in charge of the production—/design organisation approval:
 - for a multinational programme, the Military ~~Airworthiness~~ **Aviation** Authorities of the participating Nations/States; or
 - for a national programme, the Military Aviation Authority of this Nation/State,

3. the Authority in charge to issue the military permit to fly
 4. the registration Authority in charge to issue the Certificate of Airworthiness; or
 5. for unregistered aircraft, the Authority which prescribed the identification marks.
- d) 'Applicant' shall be:
1. the contractor which should comply with this DASR; or
 2. any organisation which must obtain from an Authority a ~~type-certificate~~ type certificate, a restricted ~~type-certificate~~ type certificate, a supplemental ~~type-certificate~~ type certificate, an Australian Military Technical Standard Order (AUSMTSO) authorisation, a major change or a major repair design approval based on this DASR. It should be included herein the ~~certificate of airworthiness certificates~~, as mentioned in DASR 21.A.172, and Military Permit to Fly /Flight Conditions, as mentioned in DASR 21.A.703.
 3. any organisation or operator or its representative which applies for an airworthiness certificate under Subpart H of this DASR.
- e) 'Certification' -means the process of recognition that a product, part or appliance, organisation or person complies with the applicable airworthiness requirements followed by the declaration of compliance.
- f) 'Continued (design) airworthiness-' means all tasks to be carried out to verify that the conditions under which a type -certificate or a supplemental type -certificate has been granted continue to be fulfilled at any time during its period of validity (Type Design)
- g) 'Continuing (preservation of) airworthiness-' means all of the processes ensuring that, at any time in its operating life, the aircraft complies with the airworthiness requirements in force and is in a condition for safe operation (Maintenance).
- h) All references to 'certificates' throughout this DASR means 'military certificates (Although credit can be taken from any prior Civil Certificate issued by a recognised Civil Authority).
- i) All references to '~~organisation approvals~~' 'organisation approvals' throughout this DASR means 'organisational approvals accepted or issued by military authorities'.
- j) Where this DASR requires specific DASR forms to be used, equivalent forms approved by the Authority are permitted.
- k) "Operational Suitability Data (OSD)" means data, which are part of an aircraft ~~type-certificate~~ type certificate, restricted ~~type-certificate~~ type certificate or supplemental ~~type-certificate~~ type certificate, which may consist of the following:
- i. the minimum syllabus of pilot type rating training, including determination of type rating;
 - ii. the definition of scope of the aircraft validation source data to support the objective qualification of simulators or the provisional data to support their interim qualification;
 - iii. the minimum syllabus of maintenance certifying staff type rating training, including determination of type rating;
 - iv. determination of type or variant for cabin crew and type specific data for cabin crew;
 - v. the master minimum equipment list.

SECTION A - TECHNICAL REQUIREMENTS

SUBPART A - GENERAL PROVISIONS

21.A.1 - Scope

This Section Subpart establishes general provisions governing the rights and obligations of the applicant for, and holder of, any certificate issued or to be issued in accordance with this Section.

21.A.3A - Failures, malfunctions and defects

AMC1 21.A.3A(a) System for collection, investigation and analysis of data for structure and propulsion systems from foreign Authorities (AUS).

~~Some risks and hazards associated with the type design may only become evident from a longer-term view of relevant data. The system for collecting, investigating and analysing reports of, and information related to, failures, malfunctions, defects or other occurrences should therefore include longer-term aggregation, trending and analysis of such reports and information.~~

~~Investigation and analysis should compare failures, malfunctions, defects and other occurrences with the design and certification assumptions to ensure that the type certificate continues to comply with the applicable Type Certification Basis and that the risk of failure has been eliminated or otherwise minimised SFARP. This may identify the need to change the type certificate, including new/amended operating limitations or new/amended airworthiness limitations (see DASR AMC 21.A.41), or revise the Instructions for Continuing Airworthiness furnished to operators (see DASR 21.A.61, DASR 21.A.107, DASR 21.A.120 and DASR 21.A.449).~~

~~Foreign Civil / Military Aviation Authorities (CAA/MAAs) may issue Airworthiness Directives (ADs), or equivalent mandatory continuing airworthiness information. These are not automatically applicable under DASR and should be treated in accordance with DASR 21.A.3A. Such documents should be assessed for applicability to the ADF type design by the design approval holder listed in DASR 21.A.3A(a). Those documents assessed as applicable should be treated as an occurrence in accordance with DASR 21.A.3A.~~

~~As a minimum, the design approval holder listed in DASR 21.A.3A(a) should monitor relevant information issued by any aviation authority whose prior certification was recognised by DASA in issuing that design approval.~~

AMC3 21.A.3A(a) – System for collection, investigation and analysis of data (AUS) Failures, malfunctions and defects

INVESTIGATION AND ANALYSIS

The 'collection', 'investigation' and 'analysis' functions of the system should include specific means to analyse the collected failures, malfunctions, defects or other occurrences, and the related available information, to identify adverse trends, to investigate the associated root cause(s), and to establish any necessary corrective action(s). It should also allow the determination of reportable occurrences as required under DASR 21.A.3A(b) — see DASR GM 21.A.3A(b). In addition, parts whose failure could lead to an unsafe condition, the 'analysis' function of the system should ensure that reports and information sent, or available, to the design approval holder are fully investigated so that the full nature of any damage, malfunction, or defect and its effect on continuing airworthiness is understood. Some risks and hazards associated with the type design may only

become evident from a longer-term view of relevant data. The system should therefore include longer-term aggregation, trending and analysis of such reports and information. Investigation and analysis should compare failures, malfunctions, defects and other occurrences with the design and certification assumptions to ensure that the type certificate continues to comply with the applicable Type Certification Basis and that the risk of failure has been eliminated or otherwise minimised SFARP. This may then result in changes to the design, to the instructions for continuing airworthiness (ICAs), new/amended operating limitations or new/amended airworthiness limitations (see DASR AMC 21.A.41), and/or in establishing a mitigation plan to prevent or minimise such occurrences in the future, as necessary, and is not limited to those requiring the involvement of the Authority under DASR 21.A.3A(c).

For aircraft structure and propulsion systems, longer-term aggregation, trending and analysis of relevant failures, malfunctions, defects and other occurrences should be conducted through the Aircraft Structural Integrity Program (ASIP) and Propulsion System Integrity Program (PSIP) for each aircraft (see DASR 21.A.65). Investigation and analysis of failures, malfunctions, defects and other occurrences for aircraft structure and propulsion systems also often requires specific skills due to the complex nature of these systems and their associated failure modes, and the specialised design methods and tools typically employed. Each failure, malfunction, defect or other occurrence related to aircraft structure and propulsion systems should therefore be promptly collected, investigated and analysed using the expertise available within the ASIP, PSIP and / or the responsible design organisation (if separate).

Foreign CAA/MAAs may issue Airworthiness Directives (ADs), or equivalent mandatory continuing airworthiness information. These are not automatically applicable under DASR and should be treated in accordance with DASR 21.A.3A. Such documents should be assessed for applicability to the ADF type design by the holder of the airworthiness authorisation listed in DASR 21.A.3A(a). Those documents assessed as applicable should be further treated in accordance with DASR 21.A.3A(b) and DASR 21.A.3A(c) to this regulation.

As a minimum, the holder of an airworthiness authorisation listed in DASR 21.A.3A(a) should monitor relevant information issued by any aviation authority whose prior certification was recognised by DASA in issuing that authorisation.

GM 21.A.3A(a) - System for collection, investigation and analysis of data (AUS) Failure, malfunctions and defects

GENERAL

In the context of this requirement The word 'Collection' means the setting up of systems and procedures which will enable relevant failures, malfunctions, failures and defects, or other occurrences, to be properly reported when they occur.

Considerations for the collection of information related to failures, malfunctions and defects, or other occurrences, should include the analysis of failure rates, the early rejection of parts from service, and comparison with the certification assumptions.

In the context of DASR 21.A.3A(a), the phrase '[...] or any other relevant approval deemed [...]' refers to 'grandfathered' design approvals under DASR 21. Approval holders of minor changes and minor repairs do not have to comply with the requirements in DASR 21.A.3A(a), since according to the classification criteria for design changes and repairs (see DASR 21.A.91 and DASR 21.A.435), minor

changes and minor repairs have no appreciable effect on the characteristics affecting the airworthiness of the product.

There are instances where a failure, malfunction or defect, or analysis of failures, malfunctions or defects represents an unknown level of design or production deficiency. In these situations, the design approval holder and the relevant supporting design organisation is to assess the risk with the available and known information in terms of a potential unsafe condition that exists in the design or due production.

Where the potential unsafe condition is tolerable in the context of the inherent certification basis of the type design, the design approval holder is to monitor and re-assess the risk as new information is gathered.

Where the potential unsafe condition presents a credible risk, the design approval holder must initiate actions to eliminate the hazard or otherwise reduce So Far As is Reasonably Practicable (SFARP) in accordance with the requirements of the Work Health and Safety Act 2011, the Work Health and Safety Regulations 2011 and DASR SMS.20(a)(2).

This may result in immediate communication to support the development of a Service Bulletin, Special Technical inspection, input into flight conditions for an MPTF or Command Clearance, or other operator decisions affecting ongoing flying.

As part of fulfilling requirements of DASR GR.40 and DASR SMS, the design approval holder is to have formal arrangements with operators of the product to ensure timely and effective characterisation and communication of risks when deficiencies are being managed. For example, an MTC Holder will communicate with operators to review current hazards and their associated risks.

~~This may constitute immediate communication in support of the development of a Service Bulletin, MPTF Flight Conditions, a Command Clearance, or other operator decisions affecting ongoing flying; or it may be periodic communication of shortfalls at the discretion of, or agreement with, the operator / down-stream duty holder.~~

GM 21.A.3A(b) - Occurrence reporting Failure, malfunctions and defects

OCCURRENCE REPORTING

~~For occurrence reporting,~~ guidance on the reporting of failures, malfunctions, defects or other occurrences which have resulted or may result in an unsafe condition, additional guidance material can be found in EASA AMC 20-8, ~~(part of EASA AMC 20 document)~~ together with the military specific considerations that can be found in EMAD 20-8 (part of EMAD 20). The GM available to determine an unsafe condition in accordance with DASR 21.A.3B(b) could be considered to the extent that DASR 21.A.3A(b)(1) also requires the reporting of occurrences that may result in an unsafe condition.

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21.A.3B - Airworthiness Directives

AMC1 21.A.3B(b) – Unsafe condition Failures, malfunctions and defects

UNSAFE CONDITION

...

GM1 21.A.3B(b) - ~~Determination of an unsafe condition~~ Failures, malfunctions and defects

DETERMINATION OF AN UNSAFE CONDITION

It is important to note that these guidelines are not exhaustive. However, this material is intended to provide guidelines and examples that will cover most cases, taking into account the applicable certification requirements.

1. INTRODUCTION

Certification or approval of a product, part or appliance is a demonstration of compliance with requirements which are intended to ensure an acceptable level of safety. This demonstration, however, includes certain accepted assumptions and predicted behaviours, such as:

- fatigue behaviour is based on analysis supported by test,
- modelling techniques are used for Aircraft Flight Manual (AFM) performances calculations,
- the systems safety analyses give predictions of what the systems failure modes, effects and probabilities may be,
- the system components' reliability figures are predicted values derived from general experience, tests or analysis,
- the crew is expected to have the skills to apply the procedures correctly, and
- the aircraft is assumed to be maintained in accordance with the prescribed instructions for continuing airworthiness (ICAs) (or maintenance programme, etc.).

In service experience, additional testing, further analysis, etc., may show that certain initially accepted assumptions are not correct. Thus, certain conditions initially demonstrated as safe, are revealed by experience as unsafe. In this case, it is necessary to mandate corrective actions in order to restore a level of safety consistent with the applicable certification requirements.

To support the determination of an unsafe condition, the investigation may need to include examinations of worn, damaged and time-expired parts / analysis / certification demonstration / tests / statistical analysis, and comparison with the certification assumptions.

See DASR AMC1 21.A.3B(b) for the definition of 'unsafe condition' used in DASR 21.A.3A(b)-2.

2. GUIDELINES FOR ESTABLISHING IF A CONDITION IS UNSAFE

The following paragraphs give general guidelines for analysing the reported events and determining if an unsafe condition exists, and are provided for each type of product, part or appliance subject to a specific airworthiness approval: ~~Military Type Certificates~~ Military Type Certificates (MTC) or Military Supplemental Type Certificates (MSTC) for aircraft, engines or propellers, or Australian Military Technical Standard Orders (AUSMTSO).

This analysis may be qualitative or quantitative, i.e. formal and quantitative safety analyses may not be available for older or small aircraft. In such cases, the level of analysis are to be consistent with that required by the airworthiness requirements and may be based on engineering judgement supported by service experience data.

...

21.A.5 - Record-keeping

All relevant design information, drawings and test reports, including inspection records for the product or article tested for the purpose of certification, shall be held by the holder of a type certificate, restricted type certificate, supplemental type certificate, design change or repair design approval or of an AUSMTSO authorisation at the disposal of the Authority and shall be retained in order to provide the information necessary to ensure the continued airworthiness, continued validity of the operational suitability data and the compliance with the applicable environmental protection requirements of the product or the article.

AMC 21.A.5 – Record-keeping (AUS)

Records should be retained for at least two years after the removal from service of the last aircraft of the type certified.

GM1 21.A.5 - Repair designs and record-keeping

For repair designs, the record-keeping requirement of DASR 21.A.5 applies to the data described in DASR AMC 21.A.433(a,b).

21.A.6 - Manuals

The holder of a type certificate, restricted type certificate, or supplemental type certificate shall produce, maintain and update master copies of all manuals or variations in the manuals required by the applicable type certification basis, the applicable operational suitability data certification basis and the environmental protection requirements for the product or article, and provide copies, on request, to the Authority.

AMC 21.A.6 - Manuals (AUS)

The system to produce, maintain and update manuals shall ensure:

- a. manuals are complete, current, and uniquely identified;
- b. manuals contain their authority for use, document name, date of issue, and document / amendment status details;
- c. manuals are provided in a medium compatible with user requirements;
- d. new issues, re-issues and/or amendments are approved and/or endorsed by appropriate appointments prior to their release, noting that the process to update a manual may be separate from the process to approve or authorise the content of the manual, eg approve AwL limitations in ICA;
- e. manual management records are maintained in accordance with DASR 21.A.5.
- f. manuals can be reproduced to any previous amendment status.

21.A.7 - Instructions for continuing airworthiness

- a) The holder of a type certificate, restricted type certificate, supplemental type certificate, design change or repair design approval shall develop or reference the instructions which are necessary for ensuring that the airworthiness standard related to the aircraft type and any associated part is maintained throughout the operational life of the aircraft, when demonstrating compliance

with the applicable type certification basis established and notified by the Authority in accordance with DASR 21.A.17A.

- b) At least one set of complete instructions for continuing airworthiness shall be provided by the holder of:
1. a type certificate or restricted type certificate to each known owner of one or more products upon its delivery or upon the issuance of the first certificate of airworthiness or restricted certificate of airworthiness for the affected aircraft, whichever occurs later,
 2. a supplemental type certificate or design change approval to all known operators of the product affected by the change upon the release to service of the modified product,
 3. a repair design approval to all known operators of the product affected by the repair upon the release to service of the product in which the repair design is embodied. The repaired product, part or appliance may be released into service before the related instructions for continuing airworthiness have been completed, but this shall be for a limited service period, and in agreement with the Authority.
- Thereafter, those design approval holders shall make those instructions available on request to any other person required to comply with those instructions.
- c) By way of exception from (b), the type certificate holder or restricted type certificate holder may delay the availability of a part of the instructions for continuing airworthiness, dealing with long lead accomplishment instructions of a scheduled nature, until after the product or modified product has entered into service, but shall make those instructions available before the use of this data is required for the product or modified product.
- d) The design approval holder, who is required to provide instructions for continuing airworthiness in accordance with (b), shall also make available changes to those instructions to all known operators of the product affected by the change and, on request, to any other person required to comply with those changes. That design approval holder shall demonstrate to the Authority, on request, the adequacy of the process of making changes to the instructions for continuing airworthiness available in accordance with this paragraph.

AMC1 21.A.7(a) - ICAs contents

(a) The instructions for continuing airworthiness (ICAs) should identify the following, in accordance with the applicable airworthiness codes and standards:

- (1) any limitations that are necessary for the continuing airworthiness of the product or article;
- (2) the means to determine when the product or article has deteriorated to the extent that it is no longer airworthy;
- (3) the minimum actions required to restore the airworthiness of the product or article before the limitations (as per point (1)) have been exceeded or before their deterioration (as per point (2)), as an alternative to the withdrawal of the product or article from service.

(b) The ICAs should, therefore, include, in accordance with the applicable airworthiness codes and standards:

- (1) any limitations determined through the certification of the product or article, and instructions on how to determine that the limitations have been exceeded;

(2) any inspection, servicing or maintenance actions determined to be necessary by the certification process;

(3) any inspection or troubleshooting actions determined to be necessary to establish the nature of faults and the necessary remedial actions;

(4) sufficient general information on the operation of the product or article to enable the understanding of the instructions in (a)(1) to (a)(3) above.

(c) At a minimum, ICA should include an approved airworthiness limitations section (ALS), that contains the limitations and actions identified at (a)(1) and (b)(1) and (2) of this AMC.

AMC2 21.A.7(a) Identification of ICAs

The instructions for continuing airworthiness (ICAs) may be provided together with other, additional or optional, maintenance information, as described in DASR 21.A.6, or in another acceptable format as per DASR GM1 21.A.7(a), with the following conditions:

(a) The information that is necessary for the continuing airworthiness is clearly identified (refer to DASR AMC1 21.A.7(b)).

(b) The ICAs may reference additional ICAs in separate publications, where necessary (for example, those produced by suppliers).

If the product ICAs reference the use of supplier's data (e.g. component maintenance manual (CMM) or section of it) as the appropriate location for the ICAs, those applicable instructions are incorporated by reference and become part of the complete set of the ICAs for the product.

(c) Additional or optional maintenance information not considered as ICAs but referenced by the design approval holder (DAH) together with the ICAs should be evaluated appropriately by the DAH in order to ensure that its use will not compromise the continuing airworthiness of the product or article.

(d) If the maintenance data made available by a DAH includes data from an operator (i.e. in order to customise the data for the operator, and created under the authority of the operator), the operator's data should be identified as such, and the DAH is not required to additionally evaluate it.

AMC3 21.A.7(a) - DAH responsibility to check the supplier data which is part of the ICA or referenced with the ICA

The DAH may carry out a complete check of the supplier data, or may choose to rely, in whole or in part, on the supplier's process. In the latter case, the DAH will propose a means to validate the supplier's process. Supplier data may also be issued by the supplier to the DAH under a contract or an arrangement, addressing the following:

(a) the accuracy and the adequacy of the technical documentation, which should be checked through verification processes (e.g. component workshop verification);

(b) evidence showing that workshop verification was performed should be kept by the supplier and a clear statement should be given in the introduction to the supplier data as a confirmation that component verification is complete;

(c) evidence that the supplier has taken into account all justified feedback and changes to data requested by any person required to use the ICA; typical examples would be the correction of reported errors, or mistakes.

In addition, some validation activities may be decided by the DAH, depending on the articles and the capability level of the supplier.

For articles subject to an MTSO authorisation, the validation of the supplier's process is not needed. This is also valid for other national TSO authorisations (e.g. ETSO, FAA TSOs) accepted by the national Authority.

GM1 21.A.7(a) - Scope of ICAs, their publication format and typical ICAs data

(a) ICAs can be published in documents or in a manner other than the traditional understanding of a document — for example, as a series of web pages, or Information Technology (IT) tools, or in a publishing format linked to tasks or data modules rather than pages.

(b) The design approval holder (DAH) can decide — within the framework provided by DASR 21.A.7 and its acceptable means of compliance and guidance material — to publish the ICAs in the most suitable location as part of all the information published to support the airworthiness of an aircraft. Publications typically produced by DAHs (e.g. for the demonstration of compliance with a certification basis established on the basis of CS-25), and which may therefore include ICAs, consist of:

- aircraft maintenance manuals (AMMs);
- scheduled maintenance requirements (e.g. MRBRs);
- off-wing component maintenance or overhaul manuals;
- parts catalogues;
- tooling manuals;
- wiring diagram manuals;
- weight and balance manuals;
- electrical loads analyses;
- extended range operations (ETOPS) configuration maintenance programs/plans;
- supplemental structural inspection documentation;
- certification maintenance requirements;
- Airworthiness Limitations items;
- ageing aircraft maintenance requirements;
- fuel tank safety related limitations (e.g. critical design configuration control limitation (CDCCL));
- electrical wiring interconnection system instructions;
- corrosion prevention and control programmes;
- troubleshooting manuals.

Note: The above is only an example of the publications that may contain ICAs according to CS-25; the list is not exhaustive, nor does it represent a minimum list of ICAs.

(c) The requirement for ICAs is not intended to ensure that all products or articles may be restored to an airworthy condition. A certain level of deterioration may require a product or an article to be permanently withdrawn from service, and restoration may not be reasonably achievable.

Notwithstanding the above, the existence of an MRBR task other than 'Discard (DS or DIS)' should be a clear indication of the necessity/obligation to produce a corresponding ICA.

Certain deteriorations or levels of deterioration may require specific instructions (e.g. inspection or restoration) that will only be developed and provided on a case-by-case basis, as needed, for a given product or article, and as such, will not be included in the ICAs. In some exceptional cases, product ICAs may ultimately instruct the user to contact the DAH in order to define the specific instructions on a case-by-case basis. This typically happens when the definition of generic instructions covering all possible cases is not possible. For example, following an aircraft hard landing, a detailed analysis may have to be carried out by the DAH to determine the specific instructions to be followed, which depends on the touchdown loads, recalculated postflight, based on recorded flight data.

GM2 21.A.7(a) - Determination of which supplier data is part of the ICAs

Note 1: For the purpose of this GM, the term ‘supplier data’ also applies to similar types of data when issued directly by the DAH (e.g. component maintenance manuals issued by the DAH).

Note 2: For the purpose of this GM, the term ‘supplier data’ has to be understood as data coming from the supplier and related to either a full CMM or to part of a CMM.

Note 3: The link between the aircraft ICAs and the engine/propeller CMM, as detailed below, is similar to the link between engine/propeller ICAs and the CMM of equipment fitted to the engine/propeller.

Note 4: If the supplier is also the DAH (for instance, an engine or propeller manufacturer), then the ICAs for these items will be made available by virtue of the DAH obligations as type certificate holder (TCH) and need not be included in the aircraft ICAs.

(a) When determining whether a supplier data is part of the ICAs, the following should be considered:

(1) Supplier data related to the Airworthiness Limitations Section (ALS) of the ICAs is part of the ICAs. A typical CS-25 example is critical design configuration control limitation (CDCCL) items that are included in CMMs.

(2) Supplier data related to instructions on how to accomplish the scheduled maintenance part of the aircraft ICAs (such as MRBR) are part of the aircraft ICAs. A typical case is the periodical removal of a component to perform a workshop task.

Example: Escape slide removal for restoration in accordance with the supplier data instructions.

(3) Supplier data related to scheduled maintenance on the component should be endorsed by the DAH before becoming part of the aircraft ICAs, to define and confirm that the supplier data is applicable and effective.

(4) If the ICAs are defined at aircraft level, the following principles apply to the other supplier data that is not related to the ALS nor to scheduled maintenance:

(i) If the supplier data includes a maintenance instruction for an action identified in the aircraft-level ICAs, including an engine or propeller, this supplier data should be referenced in the aircraft-level ICAs and should be made available like any other ICAs.

As an alternative to linking such supplier data to the aircraft-level ICAs (e.g. with cross references), it is possible to include the relevant data directly into the aircraft ICAs. In such a

case, the supplier data is not part of the aircraft ICAs since the aircraft ICAs already contain all the required information.

(ii) If an aircraft ICAs task only requires a replacement task for an engine, propeller, part or appliance (i.e. 'remove and replace' or 'discard') and does not refer to the supplier data for further maintenance of the removed engine, propeller, part or appliance, this means that the aircraft airworthiness may only be maintained by replacement action, and that the supplier data is not part of the ICAs for the aircraft. In such cases, the supplier data does not need to be referenced in the aircraft ICAs.

Example: If supplier data provides off-aircraft maintenance instructions for an engine, propeller, or other article (i.e. workshop maintenance), then this data may not be considered as part of the complete set of ICAs for the aircraft, but may be considered as part of the complete set of ICAs for the engine or propeller. However, the procedure for removal from / installation on the aircraft is necessarily part of the aircraft ICAs.

(b) However, for the above cases, aircraft-level ICAs can provide, as additional or optional maintenance information, the references to the supplier data even if it is not considered part of the ICAs. In such cases, it should be made clear that the supplier data references are provided as additional or optional maintenance information and is not part of the product ICAs. Besides, it should be ensured that the use of additional or optional maintenance information not considered as ICAs but referenced together with the ICAs will not compromise the continuing airworthiness of the product or article.

(c) For the supplier data identified as part of the ICAs, the DAH should:

- (1) identify the supplier data that is part of the ICAs; this can be achieved either by creating a listing or by any other acceptable means that allow to identify which data is part of the ICAs and which data is not part of the ICAs (refer to DASR AMC1 21.A.7(b));
- (2) just as for any other ICAs, ensure the publication of the supplier data;
- (3) ensure the accuracy and the adequacy of the technical content of the supplier data (refer to DASR GM No. 1 to 21.A.239(a), point 3.1.5).

GM3 21.A.7(a) - Non-ICA supplier data (e.g. component maintenance manuals (CMMs))

(a) Non-ICA supplier data referenced together with the ICA Supplier data, or parts of the supplier data, which is not considered to be part of the ICA but is additional or optional maintenance information referenced together with the product-level ICA, may be issued by the supplier to the DAH under a contract or an arrangement, using the methodology proposed in DASR AMC3 21.A.7(a).

(b) Other non-ICA supplier data, which is not referenced together with the ICA, but which can be used for the maintenance of components approved for installation by the DAH, should be acceptable to the DAH. This non-ICA supplier data may be documented in a list.

AMC1 21.A.7(b) - Identification of a complete set of instructions for continued airworthiness (ICA)

The design approval holder (DAH) should identify the complete set of ICA according to DASR 21.A.7(b) in such a way that the complete set can be:

(a) directly listed in the product TCDS; or

(b) indirectly referenced in the TCDS through other means, which allow the complete list of the ICA to be obtained (e.g. a complete listing of ICA contained in a 'principal manual' or a reference to a DAH's website); or

(c) directly listed in the product STC; or

(d) indirectly referenced in the STC through other means, which allow the obtainment of the complete list of the ICA; or

(e) if direct reference is made to the ICA in the TCDS or the STC, no reference to the revision level of the ICA should be made; in this case, the revision level should be available elsewhere (e.g. on the DAH's website).

For changes to type certificates and repairs, the identification of 'a complete set of the changes to the instructions for continuing airworthiness' should be performed by the DAH by a statement to provide this information, or by confirmation that there are no changes to the ICA. This statement can also be made in the accomplishment document (e.g. embodiment instructions).

(f) distributed to the organisations required to comply with the ICA and the details of the organisations that the ICA has been distributed to are recorded and maintained by the DAH.

~~For products and articles for which the DAH holds a design organisation approval (DOA), the ICA are considered to be issued under the authority of the DOA and, therefore, the approval of the ICA should be made explicit to the reader in accordance with DASR 21.A.265(h), unless otherwise agreed with the Authority.~~

GM1 21.A.7(b) - Other persons required to comply

For the purpose of this GM, 'any other person required to comply' means:

- any independent certifying staff who performs maintenance on a product or article, in accordance with DASR, in the framework of a contract (or work order) with the person or organisation responsible for the aircraft continuing airworthiness;
- any maintenance organisation approved to maintain a product or article, in accordance with DASR, in the framework of a contract (or work order) with the owner of the engine or article, or the person or organisation responsible for the aircraft continuing airworthiness;
- any organisation approved to manage the aircraft continuing airworthiness in accordance with DASR, in the framework of a contract with the aircraft owner or aircraft operator.

GM2 21.A.7(b) - ICA — format

ICA can be furnished or made available by various means (including paper copies, electronic documents, or web-based access). Regardless of the format, the design approval holder (DAH) is expected to furnish or make ICA available in a means that is readily accessible for and useable by the owner and any person required to comply with the ICA. Service documents, such as service information letters, may be used for transmitting ICA information and updates.(a) Formatting standards

Applicants may use the latest ATA, AECMA/ASD or GAMA formatting standards such as:

(1) AeroSpace and Defence Industries Association of Europe (ASD), ASD-S1000D, International Specification for Technical Publications Utilizing a Common Source Data Base, version 4 or higher;

(2) the Air Transport Association's (ATA) iSpec 2200, Information Standards for Aviation Maintenance, latest edition (ATA is now known as Airlines for America (A4A) but the standard is still listed as ATA); or

(3) General Aviation Manufacturers Association (GAMA) Specification No. 2, Specification for Manufacturers Maintenance Data, latest edition.

In regard to scheduled maintenance, applicants may also refer to the glossary of the ATA MSG-3 standard, latest revision, for standardised task definitions and designations.

(b) General considerations

ICA should be easy to read and to follow. All ICA should include a means to identify their applicability (model, type, etc.), and the associated revision status. Refer to sample formats in the Air Transport Association's iSpec 2200, Information Standards for Aviation Maintenance, latest edition, or AECMA/ASD standards. There is no requirement for any specific format or arrangement of the ICA in document or documents. However, the specific format selected by the applicant should be used and applied in a uniform manner. Empty pages in a document should contain a statement like 'Intentionally left blank' or similar.

At the beginning of each procedure, the ICA should contain cautions and warnings regarding possible mistakes that can be made when following the instructions.

Abbreviations, acronyms and symbolisation should be either avoided or explained as part of the ICA documentation.

ICA contain units of measurement. Measurements could be, for instance, instrument readings, temperatures, pressures, torque values with tolerances, limits, and ranges when applicable. If the ICA contain units of measurement of a system other than the metric, the ICA should include a conversion to the metric system for each measurement, tolerance, or torque value. A general conversion table alone should not be provided, as it may introduce an additional source of error.

The DAH should use a means to indicate changes to the ICA directly in relation to each item of the information/data of the ICA, e.g. using a vertical change bar in the margin next to the line.

(c) Publication of ICA in multiple documents

DAHs may prepare ICA as a document, or several documents, depending on how much data is necessary to provide a complete set of ICA.

If there are multiple documents, there should be a principal document that describes the general scope of all other documents, in order to provide an overview of the multiple document structure.

According to different standards, the Airworthiness Limitations Section (ALS) needs to be included in the principal document as a dedicated section. However, the Authority may also accept a separate Airworthiness Limitations document, when it is at least referenced as such in the principal document.

DAHs who decide to segregate information dedicated to a specific subject from a principal document into a separate document, e.g. 'Fuel Pipe Repair Manual', 'Cable Fabrication Manual', 'Duct Repair Manual' or 'Instrument Display Manual', should declare these documents to be ICA.

DAHs may decide to integrate certain information in a principal document (as, for example, troubleshooting information as part of the aircraft maintenance manual (AMM) instead of a separate troubleshooting manual (TSM)).

(d) Language

ICA should be provided in a language acceptable to the Authority.

Note: In certain countries, such as the USA, English is required for ICA. It is therefore recommended that DAHs include a version of the ICA in simplified technical English (e.g. in accordance with ASD Specification STE100).

(e) Electronic media

ICA may be provided in an electronic format (e.g. CDs, via the internet, etc.) instead of paper copies or microfilms (refer to DASR AMC1 21.A.7(b)).

When an electronic format is used, the DAH should consider aspects such as the traceability of updates, keeping previous versions (record-keeping), data security and the obligations of the person(s) or organisation(s) responsible for the aircraft continuing airworthiness, considering that the ICA form the basis of the data used for continuing airworthiness activities.

GM3 21.A.7(b) - Approval status of the manual for a component or article

When the ICA refer to a document for a specific component or article, it is possible that this document is used for products from more than one DAH. In such cases, instead of placing approval statements from each DAH in the same manual, it may be more practical to identify the approved status of the relevant document through its inclusion in lists managed by the DAH in accordance with the DASR AMC1 21.A.7(b).

GM4 21.A.7(b) - Integration of ICA between products (aircraft, engines, propellers)

The aircraft/engine/propeller type certificate holder (TCH) should ensure the availability of ICA to allow maintenance of the aircraft, including engines/propellers when installed on the aircraft.

When referring to engine/propeller ICA directly in the aircraft ICA, the aircraft TCH should not perform additional verification and validation. However, the integration and interface aspects between the aircraft and the engine/propeller are still under the responsibility of the aircraft TCH. If the ICA published by the aircraft TCH include some engine/propeller ICA developed by the engine/propeller TCH, the engine/propeller TCH should make an arrangement with the aircraft TCH setting out engine/propeller TCH and aircraft TCH shared responsibilities with respect to the ICA under DASR 21.A.7.

This arrangement should:

- define the part of the engine/propeller ICA which is published in the aircraft ICA; and
- address the development, publication and update processes of these ICA, including completeness and timely availability aspects.

The incorporated engine/propeller data content remains under the responsibility of the engine/propeller TCH, and the publication is under the responsibility of the aircraft TCH. Therefore, the aircraft TCH must coordinate with the engine/propeller TCH regarding any modification or alteration of the incorporated data.

AMC1 21.A.7(c) - Completeness and timely availability of the ICA

COMPLETENESS AND TIMELY AVAILABILITY OF THE ICA FOR TYPE CERTIFICATE (TC) AND RESTRICTED TYPE CERTIFICATE (RTC) APPLICANTS

(a) An applicant may wish to choose among the three options described below. Once the certification programme starts, it may be necessary to modify the initially selected option to accommodate programme changes. All such changes should be coordinated with the Authority.

(1) Option 1: Complete ICA are available at the time of the design approval (TC/RTC)

(i) The ICA will be made available at the time of the design approval. This option minimises the risk of incomplete ICA, especially for changes.

(ii) With all ICA available at the time of the design approval, they should also be furnished / made available to the aircraft operator / aircraft owner and made available to any other person required to comply with any of those instructions in accordance with DASR 21.A.21(e)(4), 21.A.44 and 21.A.7, without using the provision to delay certain parts of the ICA after the entry into service.

(iii) Frequently, there is only a short period of time between the design approval and the entry into service. Nevertheless, applicants/holders may still wish to apply Option 2 or 3 for a part of their ICA as stated below.

(2) Option 2: Complete ICA are available at entry into service (TC/RTC)

If an applicant plans to make part of the ICA available to the Authority at entry into service, the following approach is acceptable:

(i) For the Airworthiness Limitations Section (ALS), as part of the type design, notwithstanding the selection of Option 2: the applicant submits the ALS for approval prior to the design approval. Any ALS content that is incomplete, not yet demonstrated for compliance, or delayed beyond the design approval, requires to be compensated through an interim limitation to establish compliance within this limitation. The interim limitation is notified to the aircraft operator(s) concerned as a temporary operational limitation in a manner agreed with the Authority.

In this context, ALS content is understood as the task method (e.g. a detailed inspection), including its reference, title and applicability, and the associated threshold / interval / life-limit. The accomplishment procedure itself, i.e. how to carry out the task, is usually described in other parts of the ICA (e.g. in the AMM or NDT manual). However, the feasibility study of the accomplishment procedure is required for compliance with specific requirements (e.g. CS 25.611).

(A) This may typically apply when the aircraft structural full-scale fatigue testing required for compliance with the fatigue- and damage-tolerance requirements, considering the expected operational life, will not be completed prior to the type certificate being issued. In this case, a temporary operational limitation is assigned and stated in the ALS, dependent on the aircraft full-scale fatigue testing progress. The ALS is effectively incomplete beyond this temporary operational limitation, as the required justification and the resulting ICA are not yet available to support the safe operation of the aircraft beyond this limitation.

(B) A TCDS notation is not necessary, since the product is provided with complete ALS content up to the established temporary operational limitation.

(ii) A compliance plan identifying those parts of the ICA that are only to be made available at entry into service is produced, submitted to the Authority and agreed between the applicant and the Authority prior to the design approval (refer also to (iv) for ICA considered to be necessary at the time of the design approval).

(iii) A commitment is provided to produce, verify and submit (when requested) to the Authority the relevant ICA prior to entry into service. This commitment should be provided in a certification document (e.g. the compliance plan) and should also be addressed in a more general manner in a DOA procedure in accordance with DASR 21.A.239 and 21.A.263. If the respective DOA holder has not previously exercised the practice of delaying the ICA beyond the design approval in order for the DOA to demonstrate this capability in its design assurance system (DAS), the required procedural changes need to be addressed via a significant change to the DAS in accordance with DASR 21.A.247.

(iv) ICA considered to be necessary at the time of design approval are provided or made available in a format that adequately defines the data. Furthermore, the way the data is presented at the time of the design approval offers the same understanding of the data as in the final published format. The applicant should agree with the Authority, in a compliance plan, on all ICA necessary at the time of design approval. The Authority investigation may vary from no involvement or evaluating a limited sample of the ICA to performing a thorough review of specific parts of the ICA.

(v) In cases where the Authority has doubts as to whether the applicant/holder can fulfil the applicable requirements of DASR 21.A.44 to control and support delaying the ICA beyond the design approval, or TC/RTC, and until entry into service, the Authority can decide to assign a condition for entry into service for non-ALS ICA. As a condition for the entry into service, a note should be included in the type certificate data sheet (TCDS) as a result of these pending issues under the ICA paragraph as follows:

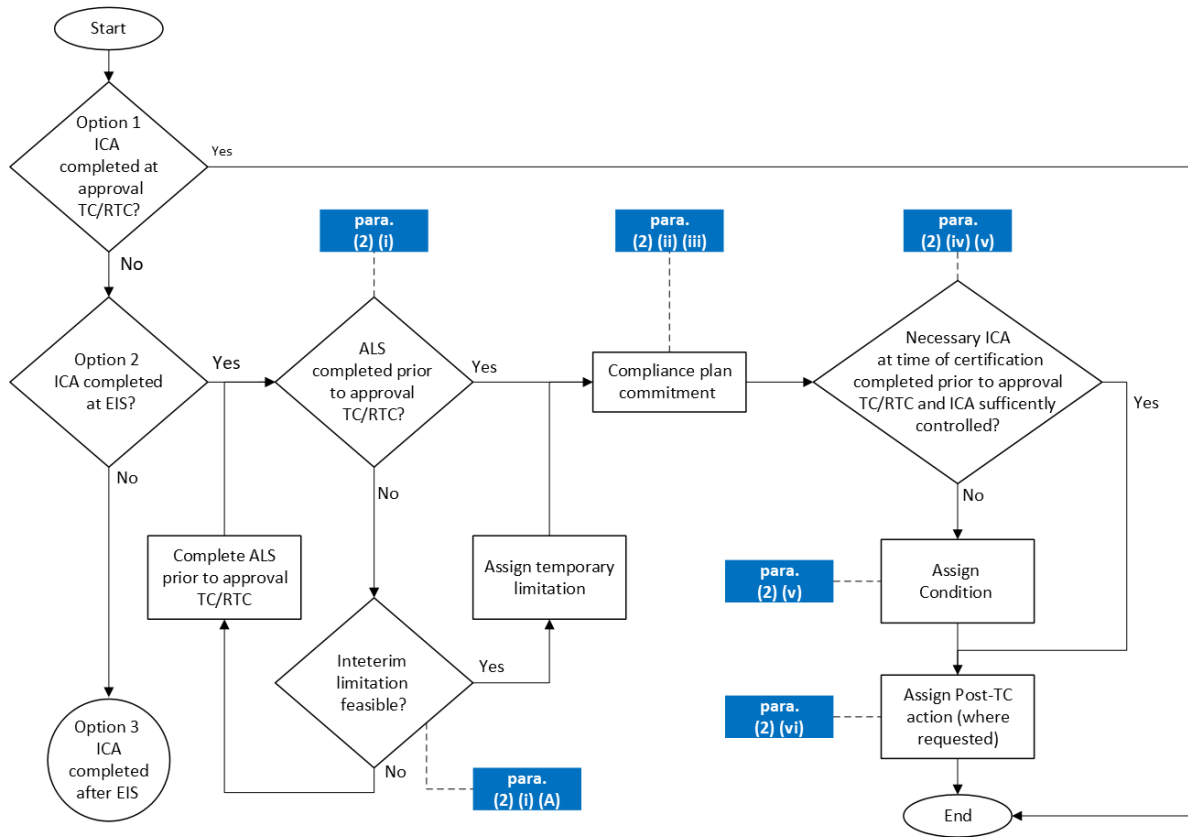
‘Note: The ICA are not complete. They must be completed before the entry into service of the aircraft. Contact the Authority for information on the status.’

The decision to assign a condition may be based on the applicant’s performance, e.g. if the applicant has already demonstrated in previous projects that it provided the complete set of ICA before the entry into service, if the applicant has already experienced difficulties in providing the ICA considered necessary at the time of the design approval, or has previously failed on a different project to meet its commitment to complete the ICA prior to entry into service, or if the applicant/holder has no previous experience with the practice of delaying the ICA beyond the design approval.

(vi) Post-TC action is established together with the Authority (if the Authority requests such a review) to review the ICA status at entry into service.

(vii) If all ICA are made available to the Authority at the time of entry into service, they should also be furnished at this time to the aircraft operator / aircraft owner and made available to any other person(s) required to comply with any of those instructions in accordance with DASR 21.A.21(c)(4), 21.A.44 and 21.A.7, without using the provision to delay certain parts of the ICA beyond the entry into service. This should be supported as part of the DOA/ADOA procedure.

Flow chart A — ‘Completeness of ICA’, Option 1 and 2



(3) Option 3: Complete ICA are available after the entry into service (TC/RTC)

As per DASR 21.A.7(c), certain ICA dealing with the ‘overhaul or other forms of heavy maintenance’ may be delayed until after the aircraft entry into service. Although there is no definition of what is meant by ‘overhaul or other forms of heavy maintenance’, the intention of the rule is to provide flexibility to applicants/holders for long-lead ICA of a scheduled nature.

If an applicant plans to make part of the ICA available only after the entry into service, the following is acceptable for the complete set of ICA:

(i) for the ALS, as it cannot be delayed until after the entry into service, point (i) of Option 2 applies;

(ii) for ICA considered to be necessary at the time of the design approval, point (iv) of Option 2 applies.

(iii) a detailed compliance plan identifying those parts of the ICA that are to be provided prior to and after the entry into service. For ICA made available after the entry into service, the plan should account for when the ICA are needed so that they can be complied with. This approach may only be used for scheduled maintenance accomplishment procedures, where threshold / interval / life-limit requirements of the related scheduled tasks are established. In that respect, the following aspects should be considered:

(A) The majority of the ICA are of an unscheduled nature; therefore, these items should be available at entry into service at the latest.

(B) Consideration should be given to the fact that a number of tasks are used for both scheduled and unscheduled maintenance (e.g. an operational check of a system is planned as a scheduled task at a

certain point in time, but is also required as part of the installation procedure to determine the operational status of the system).

(C) For ICA to be made available after entry into service, the detailed plan should contain threshold(s) controlled by the applicant/holder, stating the maximum value in flight hours (FH) / flight cycles (FC) or calendar time (CT), or a combination of them as applicable, by which point in time the delayed ICA should be made available.

(D) This detailed plan should be available prior to the time of the design approval and should be either directly integrated or cross-referenced in a compliance plan.

(E) Information on the format in which the ICA delayed until after entry into service will be made available in time (e.g. regular revisions or temporary revisions (TRs) or service information (SBs, SIL, etc.).

(iv) A procedure/programme that ensures a detailed plan is produced and implemented in the applicant's organisation in order to ensure the timely availability (to the aircraft operator / aircraft owner and to any other person required to comply with any of those instructions and to the Authority, if involved and when requested). This should be part of the design organisation approval (DOA) procedure in accordance with DASR 21.A.239 and 21.A.263.

(v) A commitment is made to produce, verify and provide the relevant ICA in accordance with the detailed plan. This commitment should be provided in a certification document (e.g. a compliance plan) and should also be addressed in a more general manner in a DOA procedure in accordance with DASR 21.A.239 and 21.A.263. If the respective DOA holder has not previously exercised the practice of delaying the ICA beyond the design approval in order for the DOA to demonstrate this capability in its design assurance system (DAS), the required procedural changes need to be addressed via a significant change to the DAS in accordance with DASR 21.A.247.

(vi) In order to ensure that the applicant/holder can meet their obligations as set out in DASR 21.A.44 to control and support delaying the ICA, the Authority may decide:

(A) for ICA delayed until entry into service, to assign a condition/notation for the entry into service to be included in the TCDS as a result of these pending issues under the ICA paragraph, as per point (v) of Option 2;

(B) for ICA delayed until after entry into service, to assign an interim limitation to be published and included in the ALS as a temporary operational limitation, also for non-ALS ICA, to compensate for the delayed ICA; this approach may only be used for scheduled maintenance accomplishment procedures, where task and interval requirements are available. The decision to assign a condition/limitation may be based on the applicant's performance, e.g. if the applicant has already demonstrated in previous projects that it provided the complete set of ICA before the entry into service, if the applicant had already difficulties in providing the ICA considered necessary at the time of the design approval, or has failed before in a different project to control and support delaying the ICA, or if the applicant/holder has not previously exercised the practice of delaying the ICA beyond the design approval.

(vii) Post-TC action should be established with the Authority to regularly review the ICA status, if the Authority requests such a review, taking into account the DOA oversight activities.

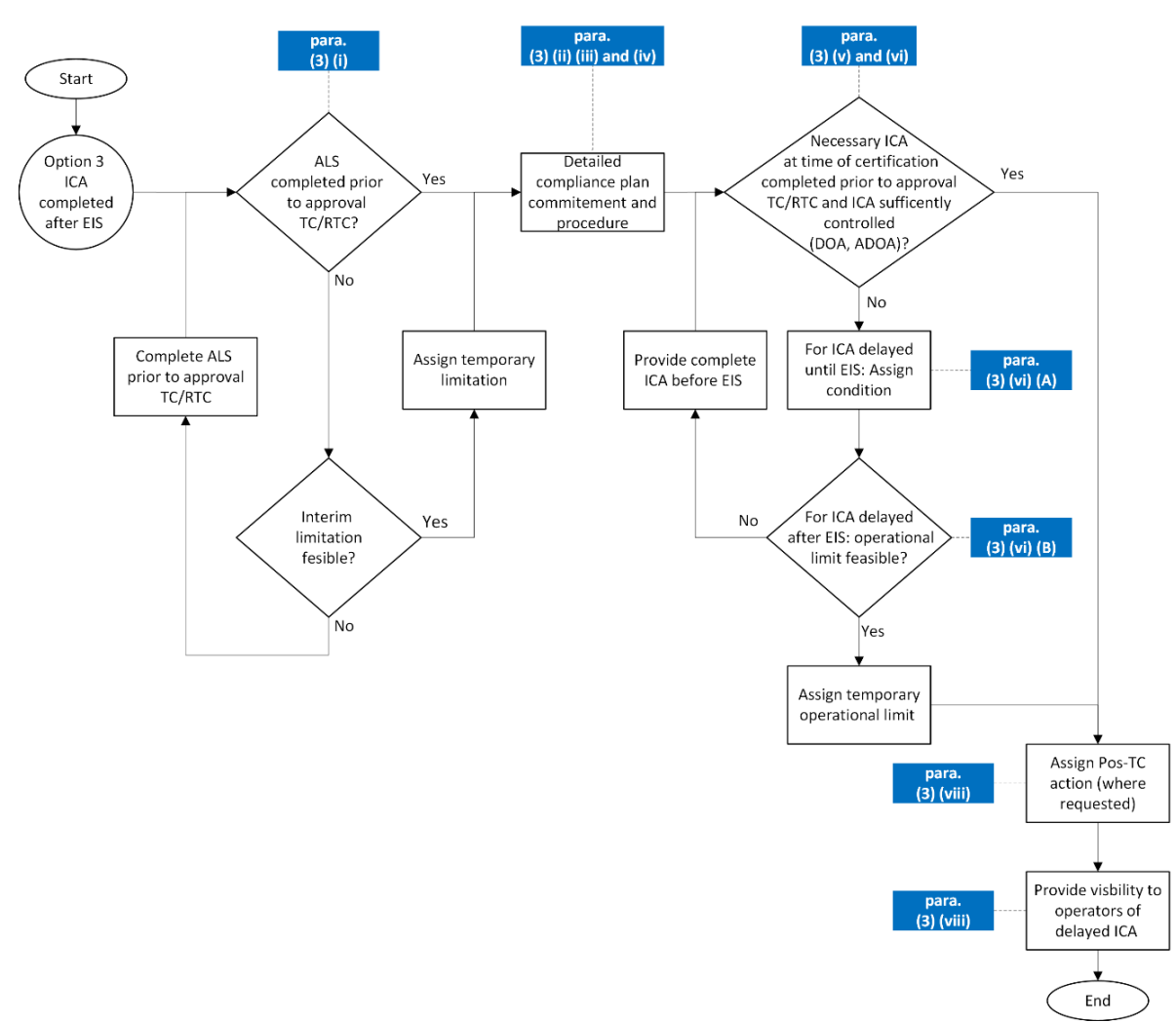
(viii) An applicant/holder should provide visibility, regarding the ICA that are delayed beyond entry into service, to the aircraft operator / aircraft owner and to any other person(s) required to comply

with any of those instructions. This can be achieved by providing this information, for example, on a website or in a document, such as an MPD or AMM, preferably in the principal ICA manual. This visibility information is then itself considered to be ICA information.

(ix) It is assumed that for those ICA that are made available to the Authority at the time of entry into service, they are also at the same time furnished to the aircraft operator / aircraft owner and made available to any other person(s) required to comply with any of those instructions in accordance with DASR 21.A.21(c)(4), 21.A.44 and 21.A.7.

This is to satisfy the Authority that such a delayed publication will not have an adverse effect on the continuing airworthiness of any individual aircraft. To allow the timely review and incorporation of a delayed part of the ICA into continuing airworthiness activities and processes (e.g. amendment of the aircraft Maintenance Programme) by the person or organisation responsible for the aircraft continuing airworthiness or for performing maintenance, the Authority considers that the delayed ICA should typically be made available two years before the actual ICA has to be used, when using normal revisions as a format. However, shorter time margins may be acceptable, provided that the format used ensures the prompt notification of the availability of the delayed ICA or the ICA itself, but they should not be less than 1 year before the ICA has to be used.

Flow chart B — 'Completeness of ICA', Option 3



(b) Completeness and timely availability of changes to the ICA (TC/RTC)

DASR 21.A.7(d) regulates the distribution of changes to the ICA required from the TC/RTC holder. Those changes to the ICA could result from the design change process (minor and major changes), in-service experience, corrections, and others.

For a TC/RTC holder/applicant, a programme showing how changes to the ICA are distributed is part of the respective procedures (e.g. design organisation procedures, or alternative procedures used to demonstrate capabilities). For changes to the ICA triggered by design changes, typically these procedures follow the same principles as those available for TC/RTC, Options 1 to 3, while taking into account the relevant privileges, e.g. that a DOA may approve minor changes in accordance with DASR 21.A.263(c)(2).

SUBPART B - MILITARY TYPE CERTIFICATES TYPE CERTIFICATES AND MILITARY RESTRICTED TYPE CERTIFICATES TYPE CERTIFICATES

AMC1 21.A.14(b) - Alternative procedures Demonstration capability

ALTERNATIVE PROCEDURES FOR THE DEMONSTRATION OF DESIGN CAPABILITY

Alternative procedures are an acceptable means to demonstrate design capability in the cases described in DASR 21.A.14, DASR 21.A.112B, or DASR 21.A.432B. In the context of specific projects, the implementation of procedures required for a design organisation approval in accordance with DASR 21 Subpart J will ensure that the applicant performs the relevant activities as expected by the Authority. The establishment of these alternative procedures may be seen as a starting phase for a DASR 21 Subpart J MDOA military design organisation approval, allowing at a later stage, at the discretion of the applicant, to move towards a full DASR 21 Subpart J MDOA military design organisation approval by the addition of the missing elements.

1. Scope

1.1 As alternative to DASR 21 Subpart J, a manual of procedures should set out specific design practices, resources and sequence of activities relevant for the specific projects, taking account of DASR 21 requirements.

1.2 These procedures should be concise and limited to the information needed for quality and proper control of activities by the applicant/holder, and by the Authority.

2. Management of the (supplemental) type certification type certification process

2.1 Certification programme: See DASR AMC 21.A.15(b) for type certification type certification and DASR AMC 21.A.93(b) for supplemental type certification type certification.

...

3.2 Classification

3.2.1 – Content

The procedure should address the following points:

- the identification of the product configuration(s) to which the change is to be made,
- the identification of the areas of the product that are changed or affected by the change,
- the identification of any reinvestigations that are necessary (see DASR 21.A.93(b)(2)), including the identification of the applicable airworthiness requirements, or environmental protection requirements, and means of compliance,

- changes initiated by subcontractors;
- documents to justify the classification;
- authorised signatories.

The criteria used for classification should be in compliance with DASR 21.A.91 and corresponding interpretations.

...

3.2.3 – Considerations of effects of the change

The procedure should show how the effects on airworthiness, operational suitability or environmental protection (where applicable) are analysed, from the very beginning, by reference to the applicable airworthiness codes and requirements.

If no specific airworthiness codes or requirements are applicable to the change, the above review should be carried out at the level of the part or system where the change is integrated and where specific airworthiness codes or requirements are applicable.

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3.2.5 – Documents to justify the classification

All decisions of classification of changes should be documented and approved by the Authority. It may be in the format of meeting notes or a register.

...

3.3.2 – Compliance documentation

For major changes and those minor changes where additional work to demonstrate compliance with the applicable type certification type certification basis, operational suitability data certification basis, and environmental protection requirements (hereinafter referred to as the 'certification basis') is necessary, compliance documentation should be established in accordance with DASR AMC 21.A.20(c).

3.3.3 – Approval process

A. For the approval of major changes, a certification programme as defined in DASR AMC 21.A.93(b) must be established.

B. For major changes and those minor changes where additional work to show compliance with the applicable certification basis is necessary, the procedure should define a document to support the approval process.

This document should include at least:

- identification and brief description of the change and its classification;
 - references to the applicable certification basis;
 - references to the compliance documents;
 - effects, if any, on limitations and on the approved design data;
 - the name of the authorised signatory.
- C. For the other minor changes, the procedure should define a means:
- to identify the change;

- to present the change to the Authority for approval.

...

4.2 Data related to changes

The data and information (including instructions) issued by the holder of a (military) design approval (an MTC, MSTC a TC, STC, approval of a change, approval of a repair design) are intended to provide the owners of a product with all necessary data to implement embody a change or repair on the product, or to inspect it.

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4.3 Procedure

The procedure should address the following points:

- preparation;
- verification of technical consistency with corresponding approved change(s), repair design(s) or approved data, including effectivity, description, effects on airworthiness or operational suitability, especially when limitations are changed;
- verification of the feasibility in practical applications; and
- approval for the release of the data and information.

The procedure should include the information or instructions prepared by subcontractors or vendors, and declared applicable to its products by the holder of the MTC, MSTC (military) TC, STC, approval of changes to type design or approval of repair design.

4.4 Statement

The data and information (including instructions) should contain include a statement showing Authority approval.

- confirming that the documentation has been produced by the design approval holder in accordance with the associated procedures accepted by the Authority; and
- containing a reference to the Authority approvals of related changes or repairs, when applicable¹.

...

21.A.15 - Application

- An application for a type -certificate or restricted type -certificate shall be made in a form and manner established by the Authority.
- An application for a type -certificate or restricted type -certificate shall include, as a minimum, preliminary descriptive data of the product, the intended use of the product and the kind of operations for which certification is requested. In addition, it shall include, or be supplemented after the initial application by, a certification programme for the demonstration of compliance in accordance with DASR 21.A.20, consisting of:

...

- a proposal for the assessment of the meaningful groups of compliance demonstration activities and data, addressing the likelihood of an unidentified non-compliance with the

~~type-certification~~ type certification basis, operational suitability data certification basis or environmental protection requirements and the potential impact of that non-compliance on product safety or environmental protection. The proposed assessment shall take into account at least the elements set out in **Section 3 of AMC 21.A.15(b)(6) - Level of Involvement**. Based on this assessment, the application shall include a proposal for the involvement of the Authority in the verification of the compliance demonstration activities and data; and

7. a project schedule including major milestones.
- c) After its initial submission to the Authority, the certification programme shall be updated by the applicant when there are changes to the certification project affecting any of the points 1 to 7 of (b).
- d) An application for a ~~type-certificate~~ type certificate or restricted ~~type-certificate~~ type certificate for an aircraft shall include, or be supplemented after the initial application by, an application supplement for approval of the operational suitability data.
- e) An application for a ~~type-certificate~~ type certificate or restricted ~~type-certificate~~ type certificate shall be valid for five years, unless the Authority agrees at the time of application that its product requires a longer time period for the applicant to demonstrate and declare compliance.
- f) In the case where a ~~type-certificate~~ type certificate or restricted ~~type-certificate~~ type certificate has not been issued, or it is evident that it will not be issued, within the time agreed in point (e), the applicant shall apply for an extension of the validity of the application and comply with any changes to the type -certification basis, operational suitability data certification basis and environmental protection requirements, as established and notified by the Authority in accordance with DASR 21.A.17A, DASR 21.A.17B and 21.A.18 for a new date that is in compliance with the time period established under (e).

GM1 21.A.15(d) - Operational Suitability Data (OSD)

Based on the OSD-Elements defined in DASR 21.1(k), any extension to an application for an ~~MTC~~ a TC or ~~MRTC~~ RTC should cover the following areas, also referred to as OSD-constituents, as applicable:

1. (Reserved)
2. (Reserved)
3. (Reserved)
4. (Reserved)
5. the master minimum equipment list; and
6. ~~other type-related operational suitability elements (where applicable).~~

General:

SCOPE OF OPERATIONAL SUITABILITY DATA: In the application for the approval of operational suitability data, the TC applicant may apply for the approval of different types of operations. If the aircraft is ~~certificated~~ certified for certain types of operations (e.g. **DLRO**, RNP, LVO, LLF, AAR), the impact on the OSD constituents should be addressed.

The five defined OSD constituents are listed in (1) to (5) above. They may not be all applicable to all aircraft types. The content of each of the OSD constituents is defined in the applicable airworthiness codes or standards, such as EASA certification specifications **(CS)** and will be approved under a

military type certificate (MTC), type certificate (TC), supplemental type certificate (STC) military supplemental type certificate (MSTC) or change to those certificates.

(Reserved)

Regarding other type-related operational suitability elements (6)

In addition to the five defined OSD constituents, there may be other data which could qualify as OSD when it is relevant for the operational suitability of the aircraft type, is not included in the type design and is specific to that aircraft type.

The term 'element' as used in this GM carries its normal dictionary meaning, i.e. part, portion, component, etc.

In order for this 'element' to qualify as 'other type-related operational suitability element', the following conditions should apply:

- it concerns data (not the approval of equipment);
- the data is type specific;
- the data is not already part of the 'classic' part of the military type certificate (MTC) (such as Airworthiness Limitations Section (ALS), aircraft flight manual (AFM), etc.);
- the data is relevant for the safe operation of the aircraft type; and
- conditions/criteria for the approval of the data can be established.

If data can be included in one of the five defined OSD constituents, it does not qualify as an additional operational suitability element. For example, the pilot training necessary to introduce an electronic flight bag (EFB) can be included in the OSD constituent flight crew data (FCD), and is not considered an additional operational suitability element.

GM21 21.A.15(d) - Application for a Military Type Certificate (AUS)

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AMC 21.A.20(c) – Compliance documentation

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3. Each compliance document should be unequivocally identified by its reference and issue date. The various issues of a document should be controlled and comply with ~~DASR 21.A.55~~ DASR 21.A.5.

21.A.41 - ~~Type certificate~~ Type certificate and restricted type certificate type certificate

The ~~type certificate~~ type certificate and restricted ~~type certificate~~ type certificate shall include the type design, the operating limitations, the instructions for continuing airworthiness, the ~~type certificate~~ type certificate data sheet for airworthiness, the applicable ~~type certification~~ type certification basis and environmental protection requirements (where applicable) with which the Authority records compliance, and any other conditions or limitations prescribed for the product in the applicable airworthiness requirements and environmental protection requirements. The aircraft type certificate and restricted type certificate shall include in addition the applicable operational suitability data certification basis, and the operational suitability data (where applicable) and the

~~type certificate data sheet for noise. The aircraft type certificate~~ type certificate and restricted type certificate type certificate data sheet shall include the record of CO₂ emissions compliance and the engine type certificate type certificate data sheet shall include the record of exhaust emissions compliance, ~~where applicable and~~ as established in accordance with DASR 21.A.18.

21.A.44 - Obligations of the holder

Each holder of a ~~type certificate~~ type certificate or restricted ~~type certificate~~ type certificate shall:

- a) undertake the obligations laid down in DASR 21.A.3A, DASR 21.A.3B, DASR 21.A.4, ~~DASR 21.A.55, DASR 21.A.57, DASR 21.A.61 and~~ DASR 21.A.5, DASR 21.A.6, DASR 21.A.7, DASR 21.A.62 and DASR 21.A.65; and, for this purpose, shall continue to meet the qualification requirements for eligibility of DASR 21.A.14; 13; and
- b) specify the marking in accordance with DASR 21 Subpart Q; ~~and,~~
- ~~c) Ensure the continued integrity of the aircraft structure and propulsion system through ongoing monitoring and periodic assessment.~~

AMC 21.A.44(c) Continued integrity of the Aircraft Structural and Propulsion System (AUS)

~~In order to demonstrate compliance with product integrity requirements in the Type Certification Basis (TCB), assumptions are made by OEMs during design regarding factors such as operational usage, loads and environment; material performance; and manufacturing and assembly processes.~~

~~The periodic assessments undertaken by the MTC holder should ensure that the assumptions made during design and certification that could affect the integrity of structural and propulsion system critical parts (see DASR AMC 21.A.41) remain valid for the Defence Configuration, Role and Environment (CRE). Periodic assessments should identify whether there is a need to update the type certificate (including Airworthiness Limitations (AwL)), Instructions for Continuing Airworthiness or monitoring provisions (e.g. life tracking or health monitoring) in order to ensure continued compliance with the TCB. These subsequent updates are separate to the periodic assessment process and should be conducted in accordance with the relevant DASR.~~

~~The MTC holder should undertake ongoing monitoring of service experience throughout the operational life of the fleet in order to determine the periodicity of assessments, and collect the data required for the assessments. Relevant service experience data should include, but is not limited to: operational usage; failures, malfunctions, defects and other occurrences (see DASR 21.A.3A(a)), and other unserviceabilities; maintenance findings, results of inspections and repair data; health monitoring data; and detailed inspection or testing of parts with service history. Where available, service experience from other operators should also be considered. The MTC holder should define the data required and establish a relationship with the operator(s) to collect this data.~~

~~Ongoing monitoring and periodic assessment for aircraft structures should include capture and routine evaluation of data through usage monitoring and structural condition monitoring, as well as periodic structural integrity assessments.~~

~~Ongoing monitoring and periodic assessment for propulsion systems should be achieved through the periodic conduct of a mission analysis. The mission analysis should be undertaken by the respective Original Equipment Manufacturer (OEM) or a suitably experienced organisation with access to necessary type design data. The mission analysis should explicitly confirm (through formal written~~

correspondence from the OEM/organisation) that the propulsion system critical part AwLs (defined in DASR-AMC 21.A.41) remain valid for the Defence CRE.

The Defence Aviation Safety Design Requirements Manual (DASDRM) includes essential design requirements related to ongoing monitoring and periodic assessment for aircraft structures and propulsion systems. Compliance with these DASDRM essential design requirements ensures that the relevant system and process requirements are clearly defined up-front as part of type certification.

The MTC holder obligations under DASR 21.A.44(c) should be implemented as part of the Aircraft Structural Integrity Program (ASIP) and Propulsion System Integrity Program (PSIP) for each aircraft. The Aircraft Structural / Propulsion System Integrity Management Plan (ASIMP/PSIMP) for each platform should detail the systems, processes and responsibilities for ongoing monitoring and periodic assessment.

21.A.55—Record keeping

All relevant design information, drawings and test reports, including inspection records for the product tested, shall be held by the type-certificate or restricted type-certificate holder at the disposal of the Authority and shall be retained in order to provide the information necessary to ensure the continued airworthiness, continued validity of the operational suitability data and compliance with applicable environmental protection requirements of the product.

GM 21.A.55—Record keeping (AUS)

Records should be retained for at least two years after the removal from service of the last aircraft of the type certified.

21.A.57—Manuals

The holder of a type-certificate or restricted type-certificate shall produce, maintain and update master copies of all manuals required by the applicable type-certification basis, the applicable operational suitability data certification basis and environmental protection requirements for the product, and provide copies, on request, to the Authority.

AMC 21.A.57—Manuals (AUS)

The system to produce, maintain and update manuals shall ensure:

- a. manuals are complete, current, and uniquely identified;
- b. manuals contain their authority for use, document name, date of issue, and document / amendment status details;
- c. manuals are provided in a medium compatible with user requirements;
- d. new issues, re-issues and/or amendments are approved and/or endorsed by appropriate appointments prior to their release, noting that the process to update a manual may be separate from the process to approve or authorise the content of the manual, eg approve AwL limitations in ICA;
- e. manual management records are accurately maintained, controlled, traceable and are accessible; and
- f. manuals can be reproduced to any previous amendment status.

21.A.61—Instructions for continuing airworthiness

a) The holder of the type certificate or restricted type certificate shall furnish at least one set of complete instructions for continuing airworthiness, comprising descriptive data and accomplishment instructions prepared in accordance with the applicable type certification basis, to each known operator of one or more aircraft, engine or propeller upon its delivery or upon issue of the first certificate of airworthiness for the affected aircraft, whichever occurs later and thereafter make those instructions available on request to any other operator required to comply with any of the terms of those instructions. The availability of some manual or portion of the instructions for continuing airworthiness, dealing with overhaul or other forms of heavy maintenance, may be delayed until after the product has entered into service, but shall be available before any of the products reaches the relevant age or flight hours/cycles.

b) In addition, changes to the instructions for continuing airworthiness shall be made available to all known operators of the product and shall also be provided on request to any other operator required to comply with any of those instructions. A programme showing how changes to the instructions for continuing airworthiness are distributed shall be submitted to the Authority.

AMC 21.A.61—Instructions for Continuing Airworthiness (AUS)

Instructions for Continuing Airworthiness (ICA) shall be distributed in accordance with DASR AMC 21.A.57—Manuals.

The system for distributing ICA and their amendments to users shall ensure that:

- a. details of the authorised distribution of ICA to each user is recorded; and
- b. ICA are accessible to organisations and personnel.

GM 21.A.61 – Instructions for Continuing Airworthiness (AUS)

Instructions for Continuing Airworthiness (ICA) details the methods, inspections, processes, and procedures necessary for the air operator to keep aircraft and / or engine, propeller, parts and appliances airworthy during its intended life.

The contents of ICA can be divided into two categories:

- a. an approved airworthiness limitations (AWL) section as defined by the applicable airworthiness codes during the certification process, which forms part of the type design / type certificate (DASR 21.A.31(a)(3) and DASR 21.A.41):
 - i. any limitations determined through the certification of the product, and instructions on how to determine that these limits have been exceeded.
 - ii. any inspection, servicing or maintenance actions determined to be necessary by the certification process.
- b. sections that do not contain approved data from the certification process and are not considered as part of type design/type certificate:
 - i. any inspection or troubleshooting actions determined to be necessary to establish the nature of faults and the necessary remedial actions.
 - ii. sufficient general information on the operation of the product to enable an understanding of the instructions in paragraphs (a)(i), (a)(ii), and (b)(i) above.

21.A.65 - Continued integrity of aircraft structures and propulsion systems

The holder of the type certificate or restricted type certificate shall ensure that the continued integrity of the aircraft structures and propulsion systems remains valid throughout the operational life of the aircraft through ongoing monitoring and periodic assessment.

AMC1 21.A.65 - Continued integrity of aircraft structures and propulsion systems

Type certificate (TC) or restricted type certificate (RTC) holders should implement processes to ensure the continued integrity of aircraft structures and propulsion systems following its entry into service.

The process should be established considering the points described below:

(a) Overall objectives

The objective of DASR 21.A.65 is to ensure that the continued integrity of aircraft structures and propulsion system critical parts (see DASR AMC 21.A.41) remains valid throughout the operational life of the aircraft and will preclude unsafe levels of degradation.

The intent is for (R)TC holders for aircraft to monitor the continued validity of the assumptions upon which the ICA related to the aircraft structures and propulsion systems are based, and to ensure that unsafe levels of degradation will be precluded in service.

To achieve this objective, (R)TC holders are expected to work together with aircraft operators.

(b) Description of the process for ongoing monitoring and periodic assessment

In order to demonstrate compliance with product integrity requirements in the Type Certification Basis (TCB), assumptions are made by OEMs during design regarding factors such as operational usage, loads and environment; material performance; and manufacturing and assembly processes.

The periodic assessments undertaken by the TC holder should ensure that the assumptions made during design and certification that could affect the integrity of structural and propulsion system critical parts (see DASR AMC 21.A.41) remain valid for the Defence Configuration, Role and Environment (CRE). Periodic assessments should identify whether there is a need to update the type certificate (including Airworthiness Limitations (AwLs) and/or Instructions for Continuing Airworthiness) or monitoring provisions (e.g. life tracking or health monitoring) in order to ensure continued compliance with the TCB. These subsequent updates are separate to the periodic assessment process and should be conducted in accordance with the relevant DASR.

The TC holder should undertake ongoing monitoring of service experience throughout the operational life of the fleet in order to determine the periodicity of assessments, and collect the data required for the assessments. Relevant service experience data should include, but is not limited to: operational usage; failures, malfunctions, defects and other occurrences (see DASR 21.A.3A(a)), and other unserviceabilities; maintenance findings, results of inspections and repair data; health monitoring data; and detailed inspection or testing of parts with service history. Where available, service experience from other operators should also be considered. The TC holder should define the data required and establish a relationship with the operator(s) to collect this data.

Ongoing monitoring and periodic assessment for aircraft structures should include capture and routine evaluation of data through usage monitoring and structural condition monitoring, as well as periodic structural integrity assessments.

Ongoing monitoring and periodic assessment for propulsion systems should be achieved through the periodic conduct of a mission analysis. The mission analysis should be undertaken by the respective Original Equipment Manufacturer (OEM) or a suitably experienced organisation with access to necessary type design data. The mission analysis should explicitly confirm (through formal written correspondence from the OEM/organisation) that the propulsion system critical part AwLs (defined in DASR AMC 21.A.41) remain valid for the Defence Configuration, Role and Environment (CRE).

Established processes must ensure that periodic assessments are conducted at a frequency that ensures critical part (see DASR AMC 21.A.41) AwLs will not be exceeded, even in the case of a significant underestimation of actual usage severity. The frequency of periodic assessments may need to vary throughout life of the aircraft based on CRE evolution, and dedicated analysis should be conducted whenever a significant CRE change is planned. Ongoing monitoring of usage and environment parameters should be conducted to identify any CRE changes that may trigger amendment to assessment intervals.

The Defence Aviation Safety Design Requirements Manual (DASDRM) includes essential design requirements related to ongoing monitoring and periodic assessment for aircraft structures and propulsion systems. Compliance with these DASDRM essential design requirements ensures that the relevant system and process requirements are clearly defined up-front as part of type certification.

The TC holder obligations under DASR 21.A.65 should be implemented as part of the Aircraft Structural Integrity Program (ASIP) and Propulsion System Integrity Program (PSIP) for each aircraft. The Aircraft Structural / Propulsion System Integrity Management Plan (ASIMP/PSIMP) for each platform should detail the systems, processes and responsibilities for ongoing monitoring and periodic assessment.

SUBPART C – MILITARY TYPE-CERTIFICATE HOLDER ORGANISATION

GM 21.A.76(a) – (Type) Continued Airworthiness System

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3.1.5 Maintenance and Operating Instructions

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(b) In accordance with DASR 21.A.6 and DASR 21.A.7, ~~DASR 21.A.57, DASR 21.A.61, DASR 21.A.107, DASR 21.A.119, DASR 21.A.120A and DASR 21.A.449~~, ensuring that these documents are provided to all known operators and all involved authorities.

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GM 21.A.79 – Significant changes in the Continued Airworthiness System

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3. Procedures

Change to the principles of procedures related to

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- the issue of information and instructions under the obligation of **DASR 21.A.6 and DASR 21.A.7** ~~DASR 21.A.57 & DASR 21.A.61~~;

...

SUBPART D – CHANGES TO MILITARY ~~TYPE CERTIFICATES~~ TYPE CERTIFICATES AND MILITARY RESTRICTED ~~TYPE CERTIFICATES~~ TYPE CERTIFICATES

21.A.90B – Reserved ~~Standard changes~~

~~(Reserved)~~ **(Reserved)**

- ~~a) Standard changes are changes to a type certificate:~~
 - ~~1. in relation to:~~
 - ~~i. aeroplanes of 5 700 kg Maximum Take Off Mass (MTOM) or less;~~
 - ~~ii. rotorcraft of 3 175 kg MTOM or less;~~
 - ~~iii. reserved.~~
 - ~~2. that follow design data issued or accepted by the Authority, containing acceptable methods, techniques and practices for carrying out and identifying standard changes, including the associated instructions for continuing airworthiness; and~~
 - ~~3. that are not in conflict with TC holders data.~~
- ~~b) DASR 21.A.91 to DASR 21.A.109 are not applicable to standard changes.~~
- ~~c) by way of exception from (a) 1. the Authority can authorise standard changes for other aircraft, in accordance with its national regulation.~~

GM1 21.A.90B Standard Changes – Airworthiness Codes

With reference to DASR 21.A.90B(a)2 the Authority may use the Certification Specifications for Standard Changes and Standard Repairs (CS-STAN) as guidance.

21.A.90C - Stand-alone changes to the Instructions for Continuing Airworthiness

- a) Stand-alone changes to the instructions for continuing airworthiness are changes that are not directly prepared as a result of a change to the type design or repair design.
- b) Stand-alone changes to the instructions for continuing airworthiness can only be made by the holder of the design approval for which those instructions have been established.
- c) DASR 21.A.91 to DASR 21.A.109 shall not apply to stand-alone changes to the instructions for continuing airworthiness that:
 - 1. do not affect the airworthiness limitations section of the instructions for continuing airworthiness, and
 - 2. do not require the design approval holder to perform any additional demonstration of compliance with the certification basis.
- d) Stand-alone changes to the instructions for continuing airworthiness referred to in (c) shall be approved by the design approval holder under procedures agreed with the Authority.

GM1 21.A.90C - Stand-alone changes

Changes to the ICA are considered to be stand-alone changes when they are not directly prepared together with a change to the type design. Stand-alone changes to the ICA are usually prepared and

issued, for example, for the purpose of making corrections, improvements, to include feedback from users, or to provide alternatives.

Also, when the ICA are completed after the product (or change to the product) was approved, this is considered to be a stand-alone change to the ICA.

When a non-ALS ICA change is triggered by a change to the type design, this does not affect the overall classification of the type certificate change as per DASR 21.A.91.

Stand-alone changes are usually straightforward changes, and are not considered to require additional work in order to show compliance. However, they must be managed in accordance with a process accepted by Authority under DASR 21.A.239 or DASR 21.A.14(b), for discharging the obligation to keep the ICA up to date.

Examples of changes that may require additional activities in order to show compliance are changes to the Critical Design Configuration Control Limitations (CDCCL), and Electrical Wiring Interconnection System (EWIS) ICA.

GM 21.A.91 - Classification of changes to a Military Type Certificate (MTC)

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Appendix A to GM 21.A.91 - Examples of ~~MAJOR~~ Major Changes per discipline

The information below is intended to provide a few major change examples per discipline, resulting from application of DASR 21.A.91 and ~~GM 21.A.91~~ paragraph 3.4 3.3 conditions. It is not intended to present a comprehensive list of all major changes. Examples are categorised per discipline and are applicable to all products (aircraft, engines and propellers). However, a particular change may involve more than one discipline, e.g., a change to engine controls may be covered in engines and systems (software).

Those involved with classification are to always be aware of the interaction between disciplines and the consequences this will have when assessing the effects of a change (i.e., operations and structures, systems and structures, systems and systems, etc.; see example in paragraph 2-b (ii).

Specific rules may exist which override the guidance of these examples.

~~In the DASR DASR 21 contains only a negative definition is given of definition for a change classification as a minor changes-only change.~~ However, in the following list of examples it was preferred to give examples of major changes.

Where in this list of examples the words 'has effect' or 'affect(s)' are used, they have always to be understood as being the opposite of 'no appreciable effect' as in the definition of minor change in DASR 21.A.91. Strictly speaking the words 'has appreciable effect' and 'appreciably affect(s)' would have been used, but this has not been done to improve readability.

1. Structure

- a) (i) changes such as a cargo door cut-out, fuselage plugs, change of dihedral, addition of floats;
- b) (ii) changes to materials, processes or methods of manufacture of primary structural elements, such as spars, frames and critical parts;
- c) (iii) changes that adversely affect fatigue or damage tolerance or life limit characteristics;
- d) (iv) changes that adversely affect aero-elastic characteristics;
- e) (v) changes that affect primary structural element loads and their path.

2. Cabin Safety

a) (i) changes which introduce a new cabin layout of sufficient change to require a re-assessment of emergency evacuation capability or which adversely affect other aspects of passenger or crew safety.

Items to consider include, but are not limited to:

- changes to or introduction of dynamically tested seats;
- change to the pitch between seat rows;
- change of distance between seat and adjacent obstacle like a divider;
- changes to cabin layouts that affect evacuation path or access to exits;
- installation of new galleys, toilets, wardrobes, etc.;
- installation of new type of electrically powered galley insert.

b) (ii) changes to the pressurisation control system which adversely affect previously approved limitations.

3. Flight

a) (i) changes which adversely affect the approved performance, such as high altitude operation, brake changes that affect braking performance, deck landing, operation with night vision devices, air to air refuelling, low level flight.

b) (ii) changes which adversely affect the flight envelope.

c) (iii) changes which adversely affect the handling qualities of the product including changes to the flight controls function (gains adjustments, functional modification to software) or changes to the flight protection or warning system.

4. Systems

For systems assessed under the applicable airworthiness requirements, e.g. EASA CS 25.1309, the classification process is based on the functional aspects of the change and its potential effects on safety:

a) (i) Where failure effect is 'Catastrophic' or 'Hazardous', the change is to be classified as major.

b) (ii) Where failure effect is 'major', the change is to be classified as major if:

- aspects of the compliance demonstration use means that have not been previously accepted for the nature of the change to the system; or
- the change affects the pilot/system interface (displays, controls, approved procedures); or
- the change introduces new types of functions/systems such as GPS primary, TCAS, Predictive wind-shear, HUD.

The assessment of the criteria for software changes to systems also needs to be performed.

When software is involved, account is to be taken also of the following guidelines:

Where a change is made to software produced in accordance with the guidelines of EUROCAE ED-12C/RTCA DO-178C 'Software Considerations in Airborne Systems and Equipment Certification', (refer EASA AMC 20-115 and EMAD 20), the change is to be classified as major if either of the following apply, and the failure effect is ~~CATASTROPHIC~~ Catastrophic, ~~HAZARDOUS~~ Hazardous or ~~MAJOR~~ Major:

- a) (i) the executable code for software, determined to be Level A or Level B in accordance with the guidelines, is changed unless that change involves only a variation of a parameter value within a range already verified for the previous certification standard; or
- b) (ii) the software is upgraded to or downgraded from Level A, Level B or Level C; or
- c) (iii) the executable code, determined to be level C, is deeply changed, eg after a software re-engineering process accompanying a change of processor.

For software developed to guidelines other than EUROCAE ~~ED-12C~~ ED-12C/ RTCA DO-178C, the applicant is to assess changes in accordance with the foregoing principles.

For other codes the principles noted above may be used. However, due consideration is to be given to specific requirements/interpretations.

In the context of a product information security risk assessment (PISRA), a change that may introduce the potential for unauthorised electronic access to product systems should be considered to be 'major' if there is a need to mitigate the risks for an identified unsafe condition. The following examples do not provide a complete list of conditions to classify a modification as major, but rather they present the general interactions between security domains. Examples of modifications that should be classified as 'major' are when any of the following changes occur:

- A new digital communication means, logical or physical, is established between a more closed, controlled information security domain, and a more open, less controlled security domain.
 - For example, in the context of large aircraft, a communication means is established between the aircraft control domain (ACD) and the airline information services domain (AISD), or between the AISD and the passenger information and entertainment services domain (PIESD) (see ARINC 811). As an exception, new simplex digital communication means (e.g. ARINC 429) from a controlled domain to a more open domain is not considered as major modification, if it has been verified that the simplex control cannot be reversed by any known intentional unauthorised electronic interaction (IUEI).
- A new service is introduced between a system of a more closed, controlled information security domain and a system of a more open, less controlled security domain, which allows the exploitation of a vulnerability of the service that has been introduced, creating a new attack path.

For example:

- opening and listening on a User Datagram Protocol (UDP) port in an end system of an already certified topology;
- activating a protocol in a point-to-point communication channel.
- The modification of a service between a system of a more closed, controlled security domain and a system of a more open, less controlled security domain.
- The modification of a security control between a system of a more closed, controlled information security domain and a system of a more open, less controlled security domain.

5. Propellers

Changes to:

- a) diameter;

- ~~b)~~ airfoil;
- ~~c)~~ planform;
- ~~d)~~ material;
- ~~e)~~ blade retention system, etc.

6. Engines

Changes:

- a) (i) that adversely affect operating speeds, temperatures, and other limitations;
- ~~b)~~ (ii) that affect or introduce parts (as identified by the applicable airworthiness requirements) where the failure effect has been shown to be hazardous;
- ~~c)~~ (iii) that affect or introduce engine critical parts (as identified by the applicable airworthiness requirements) or their life limits;
- ~~d)~~ (iv) to a structural part which requires a re-substantiation of the fatigue and static load determination used during certification;
- ~~e)~~ (v) to any part of the engine which adversely affects the existing containment capability of the structure;
- ~~f)~~ (vi) that adversely affect the fuel, oil and air systems, which alter the method of operation, or require reinvestigation against the ~~type certification~~ type certification basis;
- ~~g)~~ (vii) that introduce new materials or processes, particularly on critical components.

7. Rotors and drive systems

Changes that:

- a) (i) adversely affect fatigue evaluation unless the service life or inspection interval are unchanged. This includes changes to materials, processes or methods of manufacture of parts, such as:
 - rotor blades;
 - rotor hubs including dampers and controls;
 - gears;
 - drive shafts;
 - couplings.
- ~~b)~~ (ii) affect systems the failure of which may have hazardous or catastrophic effects. The design assessment will include:
 - cooling system;
 - lubrication system;
 - rotor controls.
- ~~c)~~ (iii) adversely affect the results of the rotor drive system endurance test, such as the rotor drive system required in EASA CS 27/29-~~917~~.

d) (iv) adversely affect the results of the shafting critical speed analysis such as required by EASA CS 27/29-931.

8. Environment (where applicable)

A change that introduces an increase in noise or emissions. Where a change is made to an aircraft or aircraft engine for which compliance with ICAO Standards and Recommended Practices for environmental protection (ICAO Annex 16) is required or stated, the effect of the change on the product's environmental characteristics should be taken into account. Examples of changes that might have an appreciable effect on the product's environmental characteristics, and might therefore be classified as major changes, can be found in Appendix A to EASA GM 21.A.91. The examples are not exhaustive and will not, in every case, result in an appreciable change to the product's environmental characteristics, and therefore, will not **always** per se and in every case result in a 'major change' classification.

9. Power plant Installation

Changes which include:

- a) (i) control system changes which affect the engine/propeller/airframe interface;
- b) (ii) new instrumentation displaying operating limits;
- c) (iii) modifications to the fuel system and tanks (number, size and configuration);
- d) (iv) change of engine/propeller type.

10. Operational capabilities

~~Integration or modification of mission equipment that could adversely affect safety of third parties include, but are not limited to:~~

Changes to operational capabilities that have an appreciable impact on third party safety, such as

- a) (i) in-flight refuelling capabilities;
- b) (ii) external stores and tanks, including jettison devices;
- c) (iii) armament, including high power laser;
- d) (iv) equipment that ~~may affect~~ has an appreciable effect on Electromagnetic Environmental Effects (E3) integrity, (e.g. new radar);
- e) (v) aerial delivery systems;
- f) (vi) flare and chaff system;

11. Stand-alone changes to non-Airworthiness Limitation Section (ALS) ICA that require additional work to demonstrate compliance with the applicable certification basis as follows:

(i) changes related to accomplishment instructions (e.g. to the aircraft maintenance manual) related to the CDCCL, or the EWIS ICA, for which the technical content (e.g. gaps, steps) of the procedures is changed;

(ii) the introduction of novel technology for inspection purposes related to an ALS task;

(iii) changes that adversely affect the certification assumptions: e.g. some specific inspection procedures, such as inspection procedures for use after a hard landing, may include a decision-making chart based on the level of exceedance of the load in comparison with the certified limit loads; such criteria, and adverse changes, need to be agreed with Authority.

A classification process would be:

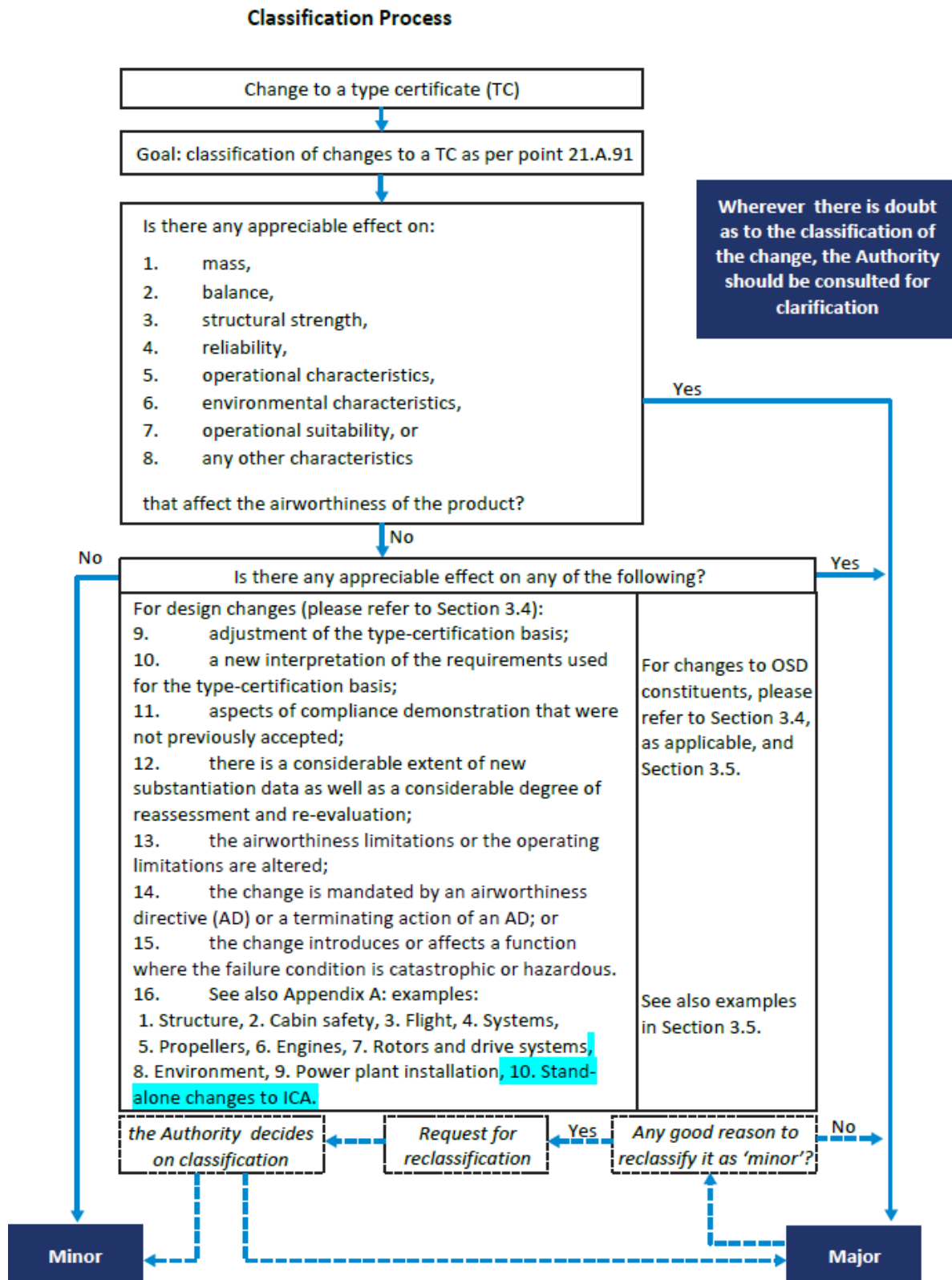


Figure 1 - Classification Process

21.A.93 - Application

- a) An application for approval of a change to a type -certificate shall be made in a form and manner established by the Authority.
- b) An application shall include, or be supplemented after the initial application with, a certification programme for the demonstration of compliance in accordance with DASR 21.A.20, consisting of:
 - 1. a description of the change identifying:
 - i. the configuration(s) of the product in the type -certificate upon which the change is to be made;
 - ii. all areas of the product in the type -certificate, including the approved manuals, that are changed or affected by the change; and
 - iii. when the change affects the operational suitability data, any necessary changes to the operational suitability data;
 - 2. an identification of any reinvestigations necessary to demonstrate compliance of the change and areas affected by the change with the type -certification basis, operational suitability data certification basis and environmental protection requirements; and
 - 3. for a major change to a type -certificate:
 - i. a proposal for the initial type -certification basis, operational suitability data certification basis and environmental protection requirements, prepared in accordance with the requirements and options specified in DASR 21.A.101;
 - ii. a proposal for a breakdown of the certification programme into meaningful groups of compliance demonstration activities and data, including a proposal for the means of compliance and related compliance documents;
 - iii. a proposal for the assessment of the meaningful groups of compliance demonstration activities and data, addressing the likelihood of an unidentified non-compliance with the type -certification type certification basis, operational suitability data certification basis or environmental protection requirements and the potential impact of that non-compliance on product safety or environmental protection; and
 - iv. a project schedule including major milestones.

...

AMC 21.A.93(b) - Certification programme for a change to a TC or an STC

...

Identification of reinvestigations referred to in DASR 21.A.93(b)(2), necessary to demonstrate compliance, does not mean the demonstration of compliance itself, but the list of affected items of the applicable certification basis for which a new demonstration is necessary, together with the means (e.g. calculation, test or analysis) by which it is proposed to demonstrate compliance. The applicant should include justifications for the exclusion of items of the certification basis where the reason for exclusion may not be immediately apparent or contentious to the Authority.

Before submitting the application for a change, the analysis and classification activities of DASR 21.A.91 and 21.A.101 should be performed using the corresponding GM.

For repair designs, the analysis of DASR 21.A.91 should be performed using GM 21.A.435(a). For a major change, AMC 21.A.15(b) should be used as applicable to the change.

21.A.101 - ~~Type-certificate~~ Type certification basis, operational suitability data certification basis and environmental protection requirements for a major change to a type -certificate

- a) A major change to a ~~type-certificate~~ type certificate and areas affected by the change shall comply with either the **airworthiness requirements** applicable to the changed product on the date of the application for the change or **airworthiness requirements** which became applicable after that date in accordance with (f) below. The validity of the application shall be determined in accordance with DASR 21.A.93(c). In addition, the changed product shall comply with the environmental protection requirements **established in accordance** with DASR 21.A.18.
- b) By way of exception from (a), an earlier amendment to an **airworthiness requirement** referred to in (a), and to any other **airworthiness requirement** which is directly related may be used in any of the following situations, unless the earlier amendment became applicable before the date at which the corresponding **airworthiness requirements** incorporated by reference in the a ~~type-certificate~~ type certificate became applicable:
 - 1. a change that the Authority finds not to be significant. In determining whether a specific change is significant, the Authority considers the change in context with all previous relevant design changes and all related revisions to the applicable **airworthiness requirements** incorporated by reference in the a ~~type-certificate~~ type certificate for the product. Changes meeting one of the following criteria shall automatically be considered significant:
 - i. the general configuration or the principles of construction are not retained;
 - ii. the assumptions used for certification of the product to be changed do not remain valid.
 - 2. each area, system, part or appliance that the Authority finds not affected by the change.
 - 3. each area, system, part or appliance that is affected by the change, for which the Authority finds that compliance with the **airworthiness requirements** described in (a) would not contribute materially to the level of safety of the changed product or is impractical.
- c) (Reserved)
- d) If the Authority finds that the **airworthiness requirements** applicable on the date of the application for the change do not provide adequate standards with respect to the proposed change, the applicant shall also comply with any special conditions, and amendments to those special conditions, prescribed by the Authority in accordance with DASR 21.A.16B, to provide a level of safety equivalent to that established in the **airworthiness requirements** applicable on the date of the application for the change.
- e) By way of exception from (a) and (b), the change and areas affected by the change may comply with an alternative to an applicable **airworthiness requirement** if proposed by the applicant, provided that the Authority finds that the alternative provides a level of safety which is:
 - 1. in the case of a type -certificate:
 - i. equivalent to that of the airworthiness requirements designated under (a) or (b) above; or
 - ii. compliant with the essential requirements of Annex A to DASP Manual Volume 1 Chapter 4.
 - 2. in the case of a restricted type -certificate, adequate with regard to the intended use.

- f) If an applicant chooses to comply with **airworthiness requirements** set out in an amendment that becomes applicable after submitting the application for a change to a type -certificate, the change and areas affected by the change shall also comply with any **other airworthiness requirement** which is directly related.
- g) When the application for a change to a ~~military type-certificate~~ **type certificate** for an aircraft includes, or is supplemented after the initial application to include, changes to the operational suitability data, the operational suitability data certification basis shall be established in accordance with (a)-(f).
- h) (Reserved)

21.A.105—Record keeping

a) For each change, all relevant design information, drawings and test reports, including inspection records for the changed product tested, shall be held by the applicant at the disposal of the Authority and shall be retained in order to provide the information necessary to ensure the continued airworthiness, continued validity of the operational suitability data and compliance with applicable environmental protection requirements of the changed product.

b) Unless otherwise laid down by the Authority, the records must be retained for at least two years after the removal of service of the last aircraft of the type certified.

21.A.107—Instructions for Continuing Airworthiness

a) The holder of a minor change approval to a type—certificate shall furnish at least one set of the associated variations, if any, to the instructions for continuing airworthiness of the product on which the minor change is to be installed, prepared in accordance with the applicable type—certification basis, to each known operator of one or more aircraft, engine, or propeller incorporating the minor change, upon its delivery, or upon issuance of the first certificate of airworthiness for the affected aircraft, whichever occurs later, and thereafter make those variations in instructions available, on request, to any other person or organisation required to comply with any of the terms of those instructions.

b) In addition, changes to those variations of the instructions for continuing airworthiness shall be made available to all known operators of a product incorporating the minor change and shall be made available, on request, to any person or organisation required to comply with any of those instructions.

AMC 21.A.107—Instructions for Continuing Airworthiness (AUS)

Instructions for Continuing Airworthiness (ICA) shall be distributed in accordance with DASR-AMC 21.A.57—Manuals (AUS).

The system for distributing ICA and their amendments to users shall ensure that:

- a) details of the authorised distribution of ICA to each user is recorded; and**
- b) ICA are accessible to organisations and personnel.**

GM 21.A.107—Instructions for Continuing Airworthiness (AUS)

Instructions for Continuing Airworthiness (ICA) details the methods, inspections, processes, and procedures necessary for the air operator to keep aircraft and / or engine, propeller, parts and appliances airworthy during its intended life.

The contents of ICA can be divided into two categories:

- a. an approved airworthiness limitations (AWL) section as defined by the applicable airworthiness codes during the certification process, which forms part of the type design / type certificate (DASR 21.A.31(a)(3) and DASR 21.A.41);
- i. any limitations determined through the certification of the product, and instructions on how to determine that these limits have been exceeded.
- ii. any inspection, servicing or maintenance actions determined to be necessary by the certification process.
- b. sections that do not contain approved data from the certification process and are not considered as part of type design/type certificate:
 - i. any inspection or troubleshooting actions determined to be necessary to establish the nature of faults and the necessary remedial actions.
 - ii. sufficient general information on the operation of the product to enable an understanding of the instructions in paragraphs (a)(i), (a)(ii), and (b)(i) above.

21.A.109 - Obligations and Australian Military Parts Approval marking

The holder of a minor change approval to a type certificate shall:

- a) undertake the obligations laid down in DASR 21.A.4, DASR 21.A.105, DASR 21.A.107, DASR 21.A.7 and DASR 21.A.108; and
- b) specify the marking, including AUSMPA (herein 'Australian Military Part Approval') letters, in accordance with DASR 21.A.804.

SUBPART E - MILITARY SUPPLEMENTAL TYPE CERTIFICATES

GM 21.A.112B - Demonstration of capability for Military supplemental type certificate cases

DEMONSTRATION OF CAPABILITY FOR SUPPLEMENTAL TYPE CERTIFICATE (STC) CASES

See also DASR AMC 21.A.14(b) for the details of the alternative procedures.

The following examples of major changes to type design (see DASR 21.A.91) are classified in two groups. Group 1 contains cases where a design organisation approved under DASR 21 Section A Subpart J ('Subpart J MDOA') will be required, and Group 2 cases where the alternative procedure may be accepted. They are typical examples but each MSTC case is to be addressed on its merits and there would be exceptions in practice. This classification is valid for new MSTCs, not for evolution of MSTCs, and may depend upon the nature of the MSTC (complete design or installation).

PRODUCT	DISCIPLINE	KIND OF MSTC	GROUP
SMALL AIRCRAFT (products where Subpart J MDOA is required for MTC)			
NOTES: * MSTC which leads to reassess the loads on large parts of primary structure will be in Group 1. * 2/1 means that an assessment of consequences in terms of handling qualities, performance or complexity of demonstration of compliance may lead to classification in Group 1.			
	Aircraft		
All aircraft			
	OSD		
		Major stand-alone change to any OSD constituent	1
Products for which an alternative procedure may be accepted according to EMAR 21.A.14(b)	All disciplines		2
All disciplines 2 Small Aircraft, e.g. EASA CS-23 (products where a Subpart J DOA is required for TC)			
Notes: 1) An STC which leads to a reassessment of the loads on large parts of the primary structure should be in Group 1. 2) '2/1' means that an assessment of consequences in terms of handling qualities, performance or complexity of demonstration of compliance may lead to classification in Group 1.			
	Aircraft		
		Conversion to tail wheel configuration	1
		Auxiliary fuel tank installations	2/1
		Glass fibre wing tips	2/1
		Fairings: nacelle, landing gear	2
		Gap seals: aileron, flap, empennage, doors	2
		Vortex generators	2/1
		Spoiler installation	1
		Increase in MTOW	1
	Structures		
		Stretcher installation	2
		Change to seating configuration	2
		Windshield replacement (heated, single piece, etc.)	2
		Lightweight floor panels	2
		Ski installations	2/1
	Propulsion		
		Engine model change	1

	Fixed pitch propeller installation	2
	Constant speed propeller installation	2/1
	Installation of exhaust silencer	2
	Installation of graphic engine monitor	2
	Installation of fuel flow meter	2
	Accessory replacement (alternator, magnetos, etc.)	2
	Inlet modifications: oil cooler; induction air	2
	Equipment	
	Avionics upgrades (EFIS, GPS, etc.)	2/1
	Engine instrument replacements	2
	Carburettor ice detection system	2
	Autopilot system installation	1
	Wing tip landing light; recognition lights	2
	WX radar installation	2
	Aeromedical system installations	2
	De-icing and anti-icing system installations	1
	Emergency power supply installations	2
Large aircraft, e.g. EASA CS-25		
	Cabin Safety	
Note: Basically, all changes related to cabin configuration should be in Group 2.	Cabin layout (installation of seats (16G), galleys, single class or business / economy class, etc.)	2
	Floor path marking	2
	Crew rest compartment	1
	Change of cargo compartment classification (from class D to class C)	1
	Structure	
Note: An MSTC which leads to a reassessment of the loads on large parts of the primary structure should be in Group 1.	Cargo door	1
	Change from passenger to freighter configuration	1

	Avionics		
Notes: For large aircraft, the existence of an AUSMTSO is not taken into account for the classification. The impact on aircraft performance, and influence of aircraft performance are criteria to assess the classification. Subjective assessment of human factors is considered for determination of the classification.		CVR	2
		VHF	2
		NAV (ADF, VOR, GPS, BRNAV)	2
		Autopilot, HUD, EFIS, FMS	1
		DFDR	2/1
		Meteo radar	2
		ILS Cat 3	1
		RVSM	1
		TCAS, EGPWS	1
		GPWS	2
	Powerplant		
		Auxiliary fuel tanks	1
		Thrust reverser system	1
		Hushkit	1
		Fire detection	1
		Fuel gauging	1
		Change of engine or propeller	1
Helicopters, e.g. EASA CS-27 or CS-29	All disciplines		
Note: 2/1 means that an assessment of consequences in terms of handling qualities and performance may lead to classification in Group 1.		Replacement of main rotor or tail rotor blades	1
		Autopilot	1
		Engine type change	1
		GPS installation	2
		Jettisonable overhead raft installation	2
		Utility basket installation	2/1
		Nose or side mount camera installation	2/1
		Passenger access step installation	2/1
		Protection net & handle installation (parachuting)	2
		VIP cabin layout	2
		Navigation system installation	2
		Fuel boost pump automatic switch-on installation	2
		Decrease of maximum seating capacity	2

	Agricultural spray kit installation	2/1
	Long exhaust pipe installation	2
	Flotation gear installation	2/1
	Wipers installation	2
	Engine oil filter installation	2
	Skid gear covering installation	2/1
	Gutter installation (top pilot door)	2
	Cable cutter installation	2
	Auxiliary fuel tank fixed parts installation	2/1
	Cabin doors windows replacement	2
	Radio altimeter aural warning installation	2
	Standby horizon autonomous power supply	2
	Fire attack system	2/1
	Hoisting system installation	2/1
	External loads hook installation	2
	Emergency flotation gear installation	2/1
	Heating/demisting (P2 supply)	2

21.A.118A - Obligations and Australian Military Parts Approval marking

Each holder of a supplemental ~~type certificate~~ **type certificate** shall:

- a) undertake the obligations:
 1. laid down in DASR 21.A.3A, DASR 21.A.3B, DASR 21.A.4, DASR 21.A.1055, DASR 21.A.1196, 21.A.120A7 and DASR 21.A.120B;
 2. implicit in the collaboration with the ~~type certificate~~ **type certificate** holder under DASR 21.A.115(b)(5); and for this purpose continue to meet the criteria of DASR 21.A.112B.
- b) specify the marking, including **AUSMPA** letters, in accordance with DASR 21.A.804(a).

21.A.119 – Manuals

~~The holder of a supplemental type certificate shall produce, maintain, and update master copies of variations in the manuals required by the applicable type certification basis, the applicable operational suitability data certification basis and environmental protection requirements for the product, necessary to cover the changes introduced under the supplemental type certificate, and furnish copies of these manuals to the Authority, on request.~~

AMC 21.A.119—Manuals (AUS)

The system to produce, maintain and update manuals shall ensure:

- a. manuals are complete, current, and uniquely identified;
- b. manuals contain their authority for use, document name, date of issue, and document / amendment status details;
- c. manuals are provided in a medium compatible with user requirements;
- d. new issues, re-issues and/or amendments are approved and/or endorsed by appropriate appointments prior to their release, noting that the process to update a manual may be separate from the process to approve or authorise the content of the manual, eg approve AwL limitations in ICA;
- e. manual management records are accurately maintained, controlled, traceable and are accessible; and
- f. manuals can be reproduced to any previous amendment status.

21.A.120A—Instructions for Continuing Airworthiness

a) The holder of the supplemental type certificate for an aircraft, engine, or propeller, shall furnish at least one set of the associated variations to the instructions for continuing airworthiness, prepared in accordance with the applicable type certification basis, to each known operator of one or more aircraft, engine, or propeller incorporating the features of the supplemental type certificate, upon its delivery, or upon issuance of the first certificate of airworthiness for the affected aircraft, whichever occurs later, and thereafter make those variations in instructions available, on request, to any other operator required to comply with any of the terms of those instructions. Availability of some manual or portion of the variations to the instructions for continuing airworthiness, dealing with overhaul or other forms of heavy maintenance, may be delayed until after the product has entered into service, but shall be available before any of the products reaches the relevant age or flight hours/cycles.

b) In addition, changes to those variations of the instructions for continuing airworthiness shall be made available to all known operators of a product incorporating the supplemental type certificate and shall be made available, on request, to any operators required to comply with any of those instructions. A programme showing how changes to the variations to the instructions for continuing airworthiness are distributed shall be submitted to the Authority.

AMC 21.A.120A—Instructions for Continuing Airworthiness (AUS)

Instructions for Continuing Airworthiness (ICA) shall be distributed in accordance with DASR AMC 21.A.57—Manuals (AUS).

The system for distributing ICA and their amendments to users shall ensure that:

- a. details of the authorised distribution of ICA to each user is recorded; and
- b. ICA are accessible to organisations and personnel.

GM 21.A.120A—Instructions for Continuing Airworthiness (AUS)

Instructions for Continuing Airworthiness (ICA) details the methods, inspections, processes, and procedures necessary for the air operator to keep aircraft and / or engine, propeller, parts and appliances airworthy during its intended life.

The contents of ICA can be divided into two categories:

a) an approved airworthiness limitations (AWL) section as defined by the applicable airworthiness codes during the certification process, which forms part of the type design / type certificate (DASR 21.A.31(a)(3) and DASR 21.A.41):

i. any limitations determined through the certification of the product, and instructions on how to determine that these limits have been exceeded.

ii. any inspection, servicing or maintenance actions determined to be necessary by the certification process.

b) sections that do not contain approved data from the certification process and are not considered as part of type design/type certificate:

i. any inspection or troubleshooting actions determined to be necessary to establish the nature of faults and the necessary remedial actions.

ii. sufficient general information on the operation of the product to enable an understanding of the instructions in paragraphs (a)(i), (a)(ii), and (b)(i) above.

SUBPART F - PRODUCTION WITHOUT MILITARY PRODUCTION ORGANISATION APPROVAL

21.A.130 - Statement of conformity

...

- b) A statement of conformity shall include all of the below:
 - 1. for each product, part or appliance a statement that the product, part or appliance conforms to the approved design data and is in condition for safe operation;
 - 2. for each aircraft, a statement that the aircraft has been ground and flight checked in accordance with DASR 21.A.127(a);
 - 3. For each engine, or variable pitch propeller, a statement that the engine or propeller has been subjected by the manufacturer to a final functional test, in accordance with DASR 21.A.128, and
 - 4. additionally, in the case of environmental protection requirements:
 - i. a statement that the completed engine is in compliance with the applicable engine exhaust emissions requirements on the date of manufacture of the engine, and
 - ii. a statement that the completed aircraft is in compliance with the applicable CO₂ emissions requirements on the date its first certificate of airworthiness is issued.
- c) Each manufacturer of such a product, part or appliance shall present a current statement of conformity, for validation by the Authority:
 - 1. Upon the initial transfer by it of the ownership of such a product, part or appliance; or AMC
 - 2. Upon application for the original issue of an aircraft certificate of airworthiness; or

3. Upon application for the original issue of an airworthiness release document for an engine, a propeller, a part or appliance.

...

AMC2 21.A.130(b) - Statement of Conformity for Products (other than complete aircraft), parts, appliances and materials - The Authorised Release Certificate (DASR Form 1)

...

5. COMPLETION OF THE CERTIFICATE BY THE ORIGINATOR

...

Block 12 - Remarks (see also point 4)

Examples of conditions which would necessitate statements in Block 12 are:

- a) When the certificate is used for prototype purposes, the following statement must be entered at the beginning of Block 12:

'NOT ELIGIBLE FOR INSTALLATION ON IN-SERVICE ~~TYPE-CERTIFICATED~~ TYPE CERTIFICATED AIRCRAFT'.

...

- c) When a new certificate is issued to correct error(s), the following statement must be entered in Block 12:

'THIS CERTIFICATE CORRECTS THE ERROR(S) IN BLOCK(S) [enter block(s) corrected] OF THE CERTIFICATE [enter original tracking number] DATED [enter original issuance date] AND DOES NOT COVER CONFORMITY/CONDITION/RELEASE TO SERVICE'.

Additionally, for production under Subpart F, this block must include the Statement of Conformity by the manufacturer under DASR 21.A.130. For this purpose, the appropriate Block 13a statement must be included in the Block 12 and not referenced in a separate document. The statement may be pre-printed, computer generated or stamped, and must be followed by the signature of the manufacturer's authorised person under DASR 21.A.130(a), the name and the position/identification of such person and the date of the signature.

- d) In case of an engine, when the Authority has granted an ~~emissions production cut-off~~ exemption from the environmental protection requirements, the following statement must be entered in Block 12:

~~["NEW" OR "SPARE"] ENGINE EXEMPTED FROM NOx [REFERENCE TO THE TYPE OF EMISSION] EMISSIONS PRODUCTION CUT-OFF REQUIREMENT.~~ ENVIRONMENTAL PROTECTION REQUIREMENT¹

...

Block 13c - Approval/Authorisation Number

Enter the authorisation number reference. This number or reference is given by the Authority to the manufacturer working under DASR 21 Subpart F.

¹ Emissions environmental protection requirements are not mandatory. Military aviation is not within the scope of the environmental requirements of the Chicago Convention, for applicability see also GM 21.A.130(b)(4) and AMC 21.B.85.

GM 21.A.130(b)(4) - Considerations for determining environmental requirements, if required

...

2. Applicable engine exhaust emissions requirements

If not otherwise specified by the Authority, EASA AMC 21.A.130(b)(4)(i) as per ED Decision 2019/018 2021/011/R could be used to determine compliance to DASR 21.A.130(b)(4)(i).

3. Applicable aeroplane CO₂ emissions requirements

If not otherwise specified by the Authority, EASA AMC 21.A.130(b)(4)(ii) as per ED Decision 2019/018 2021/011/R could be used to determine compliance to DASR 21.A.130(b)(4)(ii).

GM1 21.A.130, 21.A.163 and 21.A.165 - Performance of tasks in real time for the issuance of a 'DASR Form 1' for prototype and new parts, appliances and products other than complete aircraft, using information and communication technologies (ICT)

This GM provides technical guidance on the use of remote ICT to support the issuance of a 'DASR Form 1' for prototype and newly produced parts, appliances and products other than complete aircraft.

It is the responsibility of the production organisation to assess whether the use of remote ICT constitutes a suitable alternative to the physical inspection of the part, appliance or product in accordance with the applicable requirements. The production organisation that intends to use the remote ICT for such purposes should first discuss the feasibility aspects with its competent authority.

(a) Terminology

In the context of this GM, the following terminology is used:

- 'issue of an DASR Form 1' means the issuance of an DASR Form 1 under Part DASR 21 Subpart G by a certifying staff, raise an DASR Form 1 under Part DASR 21 Subpart F by an authorised person, and the validation of an DASR Form 1 under Part DASR 21 Subpart F by a competent authority inspector, except in the case of issuance of an DASR Form 1 for the correction of error(s) on a previously issued certificate and for the recertification of an item from 'prototype' to 'new' provided that the design data has not changed;
- 'authorised staff' means certifying staff as defined in Part DASR 21 Subpart G, and 'authorised person' and 'competent authority inspector' as defined in Part DASR 21 Subpart F;
- 'item' means any part, appliance or product other than a complete aircraft;
- 'applicable design data' means non-approved design data for a prototype item and approved design data for a newly produced item;
- 'task' means any inspection, test and/or verification, as described in a documented procedure, which is needed to be performed by an authorised staff before signing an DASR Form 1;

- ‘remote ICT’ means any real-time video and audio communication tools using information and communication technologies (ICT) whose aim is to enable the performance of the task(s) by the authorised staff from a location different from that where the item is located (on-site).

(b) Regulatory context

The following entities may issue a DASR Form 1 for produced items in order to certify their conformity to the applicable design data and, for new items, their condition for safe operation:

- the holder of a letter of agreement (LoA) that is issued in accordance with ~~Part~~ DASR 21 Subpart F (refer to DASR 21.A.130(a));
- the competent authority in the context of ~~Part~~ DASR 21 Subpart F (refer to DASR 21.A.130(d));
- the holder of a production organisation approval (POA) in accordance with ~~Part~~ DASR 21 Subpart G (refer to DASR 21.A.163(c)).

A DASR Form 1 has to be issued by appropriately qualified authorised staff. DASR 21 does not require authorised staff to be on-site when issuing an DASR Form 1, nor how the production organisation and the competent authority shall determine whether the part/appliance/product other than a complete aircraft conforms to the applicable design data and, for a new item, is in a condition for safe operation. These should be detailed in a documented procedure accepted by the competent authority.

DASR 21 requires:

- in DASR 21.A.130(d) that the competent authority validate the DASR Form 1 following inspections performed ~~in accordance with DASR 21.B.135(b)~~ if it finds after the inspection that the product, part or appliance conforms to the applicable design data and is in condition for safe operation;
- in DASR 21.A.165(c) that the POA holder has to determine that:
- other products, parts or appliances are complete and conform to the approved design data and are in a condition for safe operation before issuing an DASR Form 1;
- other products, parts or appliances conform to the applicable data before issuing an DASR Form 1.

Typically, compliance with these requirements is ensured through the on-site presence of the authorised staff in order to guarantee they have appropriate access to the item, as needed.

However, compliance with these requirements may be also ensured in certain circumstances, determined as per the considerations described in point (c) below, by remotely conducting the tasks which are needed before the issuance of a DASR Form 1 by the use of remote ICT. The following considerations should be used as guidelines when the on-site presence of the authorised staff is to be replaced by virtual presence, using remote ICT.

(c) The use of remote ICT to support the issuance of a DASR Form 1

Remote ICT may have limitations that could render it unsuitable for some applications. Accordingly, careful consideration and risk management should be applied when determining when to use remote ICT. These considerations, listed below, are however not exhaustive and should not be treated as a checklist.

(1) General considerations

- As an overarching principle, it needs to be determined whether the nature of the tasks to be performed by the authorised staff allows the use of remote ICT.
- The facility where the item is located:
 - should be referred to in DASR Form 65 or DASR Form 55, directly or indirectly by reference to the corresponding section of the manual or production organisation exposition (POE); or
 - for a POA, should be a facility from where a POE procedure related to DASR 21.A.139(b)(1)(xv) authorises the issuance of a DASR Form 1.
- The complexity, novelty and safety criticality of the item to be released with the DASR Form 1 should be taken into account.
- The level of competence and experience of the personnel in the use of the particular procedures and equipment that will be used to perform the tasks before issuing DASR Form 1.
- Previous experience of the organisation / confidence in the organisation's inspection system / quality system / management system.
- The appropriateness of the inspection and test instruments and/or equipment, especially if used to evaluate qualitative aspects of a product, part or appliance.

(2) Equipment and set-up considerations

- The suitability of video resolution, fidelity, and field of view for the task being performed.
- The need for multiple cameras, imaging systems or microphones, and whether the person that performs or witnesses the tasks can switch between them, or direct them to be switched, and has the possibility to stop the process, ask a question, move the equipment, etc.
- The controllability of viewing direction, zoom, and lighting.
- The appropriateness of audio fidelity for the evaluation being conducted.
- Whether real-time, uninterrupted communication between the person(s) authorised to remotely witness the activity (authorised staff) and the personnel performing it exists at the location where the item is located.
- The need for unique testing devices or equipment (for example, fast-frame cameras, special lighting conditions, sensitive listening devices, mobile phones with cameras for HD video calls).
- Whether personnel have been adequately trained in the proper set-up, validation and use of the technology, tools and/or equipment to be used.
- The need for the recording of audio and video data, as well for its retention or for the retention of other information.

(3) Cybersecurity considerations

There are cases where the facilities where the tasks have to be performed are subject to strict security limitations. When using remote ICT for the tasks needed before issuing a DASR Form 1, it is the responsibility of the organisation to provide an equivalent level of security, therefore the person that is responsible for IT security within the organisation should concur to the ICT technology before proceeding.

(4) Documenting the use of the remote ICT

The documented processes (procedures) developed by the holder of a letter of agreement (LoA) or a POA should be accepted by the competent authority, and should describe the following:

- the risk assessment process required to determine the appropriateness of the remote ICT taking into account the above-mentioned considerations;
- the tasks to be performed, including preparation activities, inspections, tests, verifications to be done, personnel involved in the remote ICT activities and their level of competence;
- that it is necessary to guarantee that authorised staff have access to all necessary data (e.g. drawings, schematics, datasheets, etc.) they require in order to determine that the item conforms to the applicable design data, and how this can be ensured;
- how remote ICT will be used in real time (not pre-recorded) so that authorised staff may direct the performance of the tasks as if it were conducted in-person, on-site, with the aid of the equipment or the personnel supporting the activity at the remote location;
- the procedures for conducting a reinspection in case the equipment malfunctions or the process fails to yield acceptable results; a reinspection using remote ICT may be accomplished after correcting the malfunction or process, or by an actual onsite inspection;
- how authorised staff should record and communicate any difficulties or concerns regarding the process so that the organisation can improve its programme;
- how the use of the remote ICT will be documented in the required records; and
- how the organisation's IT security is ensured throughout the remote ICT process (data protection and intellectual property of the organisation also need to be safeguarded).

SUBPART G - MILITARY PRODUCTION ORGANISATION APPROVAL

GM1 21.A.139, 21.A.157, 21.A.239, 21.A.257, ~~21.B.120, 21.B.140, 21.B.220, 21.B.235 and 21.B.240~~ - The use of information and communication technologies (ICT) for performing remote audits

This GM provides technical guidance on the use of remote information and communication technologies (ICT) to support:

- competent authorities when overseeing regulated organisations;
- regulated organisations when conducting internal audits / monitoring compliance of their organisation with the relevant requirements, and when evaluating vendors, suppliers and subcontractors.

In the context of this GM:

- 'remote audit' means an audit that is performed with the use of any real-time video and audio communication tools in lieu of the physical presence of the auditor on-site; the specificities of each type of approval / letter of agreement (LoA) need to be considered in addition to the general overview (described below) when applying the 'remote audit' concept;
- 'auditing entity' means the competent authority or organisation that performs the remote audit;
- 'auditee' means the entity being audited/inspected (or the entity audited/inspected by the auditing entity via a remote audit);

It is the responsibility of the auditing entity to assess whether the use of remote ICT constitutes a suitable alternative to the physical presence of an auditor on-site in accordance with the applicable requirements.

The conduct of a remote audit

The auditing entity that decides to conduct a remote audit should describe the remote audit process in its documented procedures and should consider at least the following elements:

- The methodology for the use of remote ICT is sufficiently flexible and non-prescriptive in nature to optimise the conventional audit process.
- Adequate controls are defined and are in place to avoid abuses that could compromise the integrity of the audit process.
- Measures to ensure that the security and confidentiality are maintained throughout the audit activities (data protection and intellectual property of the organisation also need to be safeguarded).

Examples of the use of remote ICT during audits may include but are not limited to:

- meetings by means of teleconference facilities, including audio, video and data sharing;
- assessment of documents and records by means of remote access, in real time;
- recording, in real time during the process, of evidence to document the results of the audit, including non-conformities, by means of exchange of emails or documents, instant pictures, video or/and audio recordings;
- visual (livestream video) and audio access to facilities, stores, equipment, tools, processes, operations, etc.

An agreement between the auditing entity and the auditee should be established when planning a remote audit, which should include the following:

- determining the platform for hosting the audit;
- granting security and/or profile access to the auditor(s);
- testing platform compatibility between the auditing entity and the auditee prior to the audit;
- considering the use of webcams, cameras, drones, etc., when the physical evaluation of an event (product, part, process, etc.) is desired or is necessary;
- establishing an audit plan which will identify how remote ICT will be used and the extent of their use for the audit purposes to optimise their effectiveness and efficiency while maintaining the integrity of the audit process;
- if necessary, time zone acknowledgement and management to coordinate reasonable and mutually agreeable convening times;
- a documented statement of the auditee that they shall ensure full cooperation and provision of the actual and valid data as requested, including ensuring any supplier or subcontractor cooperation, if needed; and
- data protection aspects.

The following equipment and set-up elements should be considered:

- the suitability of video resolution, fidelity, and field of view for the verification being conducted;
- the need for multiple cameras, imaging systems, or microphones, and whether the person that performs the verification can switch between them, or direct them to be switched and has the possibility to stop the process, ask a question, move the equipment, etc.;

- the controllability of viewing direction, zoom, and lighting;
- the appropriateness of audio fidelity for the evaluation being conducted; and
- real-time and uninterrupted communication between the person(s) participating to the remote audit from both locations (on-site and remotely).

When using remote ICT, the auditing entity and the other persons involved (e.g. drone pilots, technical experts) should have the competence and ability to understand and utilise the remote ICT tools employed to achieve the desired results of the audit(s)/assessment(s). The auditing entity should also be aware of the risks and opportunities of the remote ICT used and the impacts they may have on the validity and objectivity of the information gathered.

Audit reports and related records should indicate the extent to which remote ICT have been used in conducting remote audits and the effectiveness of remote ICT in achieving the audit objectives, including any item that it has not been able to be completely reviewed.

21.A.145 - Approval requirements

The production organisation shall demonstrate, on the basis of the information submitted in accordance with DASR 21.A.143 that:

- a) with regard to general approval requirements, facilities, working conditions, equipment and tools, processes and associated materials, number and competence of staff, and general organisation are adequate to discharge obligations under DASR 21.A.165.
- b) with regard to all necessary airworthiness and environmental protection data:
 1. the production organisation is in receipt of such data from the Authority, and from the holder of, or applicant for, the a ~~type certificate~~ type certificate, restricted a ~~type certificate~~ type certificate or design approval, including any exemption granted against the ~~CO₂ production cut-off~~ environmental protection requirements, to determine conformity with the applicable design data;
 2. the production organisation has established a procedure to ensure that airworthiness and environmental data are correctly incorporated in its production data; and
 3. such data are kept up to date and made available to all personnel who need access to such data to perform their duties.

...

21.A.147 - Changes to the approved production organisation

- a) After the issue of a production organisation approval, each change to the approved production organisation that is significant to the showing of conformity or to the airworthiness and environmental protection characteristics of the product, part or appliance, particularly changes to the quality system, shall be approved by the Authority. An application for approval shall be submitted in writing to the Authority and the organisation shall demonstrate to the Authority before implementation of the change that it will continue to comply with this Subpart.

...

GM 21.A.149 and 21.A.249 - Transferability

GENERAL

Transfer of approval would normally be agreed in cases where the ownership changes but the organisation itself remains effectively unchanged. For example:

An acceptable transfer situation could be a change of company name (supported by appropriate evidence from the [Australian Business Register \(ABR\)](#) or [Australian Securities and Investments Commission \(ASIC\)](#) or equivalent) but with no changes to site address, facilities, type of work, staff, Accountable Manager or person nominated under DASR 21.A.145 – Approval Requirements.

Alternatively, in the event of receivership (bankruptcy, insolvency or another equivalent legal process) there may be good technical justification for continuation of the approval provided that the company continues to function in a satisfactory manner in accordance with their MPOE. It is likely that at a later stage the approval might be voluntarily surrendered or the organisation transferred to new owners in which case the former paragraphs apply. If it does not continue to operate satisfactorily then the Authority could suspend or revoke the approval.

In order for the Authority to agree to a transfer of approval, it will normally prescribe it as a condition in accordance with DASR 21.A.147(b) – Changes to the approved production organisation that the obligations and responsibilities of the former organisation should be transferred to the new organisation, otherwise transfer is not possible and application for a new approval will be required.

A transfer of approval to another production or design organisation is, by default, excluded by DASR 21.A.149 or 21.A.249 respectively. These DASR references only allow it exceptionally if it is a direct consequence of a transfer of ownership in an approved production or design organisation, which is then considered a significant change to the existing approval (to which DASR 21.A.147 or 21.A.247 applies).

As a consequence, and in order to apply this exception, the production or design organisation has to demonstrate to the competent Authority the existence of a change in ownership which resulted in the fact that a different legal entity is now conducting the approved production or design functions while remaining effectively unchanged.

An example of such an exception is a change of ownership that leads to a re-registration of the organisation (supported by the appropriate evidence from the [Australian Business Register \(ABR\)](#) or [Australian Securities and Investments Commission \(ASIC\)](#) or equivalent). In order to demonstrate that the organisation remains effectively unchanged, the organisation needs to demonstrate that there are no changes affecting the initial demonstration of compliance of the organisation with Subpart G or Subpart J. If, for instance, the change of ownership would, in addition, lead to a change of address, facilities, type of work, staff, accountable manager or persons nominated under DASR 21.A.145 or 21.A.245, then it is not an acceptable transfer situation; the exception does not apply in this case. A new investigation by the competent Authority would be necessary. The new organisation would have to apply for its own approval. In such a case where the organisation applies for a new approval, the demonstration of compliance in accordance with DASR 21.A.135 or 21.A.235 may be limited to the demonstration that the changes in the organisation comply with the Subpart G or Subpart J requirements, while referring for the rest to the compliance demonstration of the previous approval holder.

A pure name change, where the ownership does not change, does not require a transfer of the approval. In this case, the natural or legal person that holds the approval remains the same. However, as a consequence of the name change, the approval document needs to be amended to

reflect the new company name. This is a significant change, to which DASR 21.A.147 or 21.A.247 applies.

Another example of a transfer of ownership, which may be exceptionally accepted under DASR 21.A.149 or 21.A.249, may be the event of receivership (bankruptcy, insolvency or another equivalent legal process). In this case, there is no change to the production or design organisation, except that the custodial responsibility for its property, including its tangible and intangible assets and rights, is a receiver or insolvency administrator. The receivership aims to continue the business of the same organisation.

AMC No 2 to AMC2 21.A.163(c) - Completion of DASR Form 1

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DASR Form 1 Block 12 'Remarks'

Examples of conditions which would necessitate statements in Block 12 are:

- When the certificate is used for prototype purposes the following statement must be entered at the beginning of block 12:

'NOT ELIGIBLE FOR INSTALLATION ON IN-SERVICE ~~MILITARY TYPE-CERTIFICATED~~ TYPE CERTIFICATED AIRCRAFT'.

- Re-certification of items from 'prototype' (conformity only to non-approved data) to 'new' (conformity to approved data and in a condition for safe operation) once the applicable design data is approved.

The following statement must be entered in block 12:

RE-CERTIFICATION OF ITEMS FROM 'PROTOTYPE' TO 'NEW':

THIS DOCUMENT CERTIFIES THE APPROVAL OF THE DESIGN DATA [insert MTC/MSTC number, revision level], DATED [insert date if necessary for identification of revision status], TO WHICH THIS ITEM (THESE ITEMS) WAS (WERE) MANUFACTURED.

- When a new certificate is issued to correct error(s) the following statement must be entered in block 12:

'THIS CERTIFICATE CORRECTS THE ERROR(S) IN BLOCK(S) [enter block(s) corrected] OF THE CERTIFICATE [enter original tracking number] DATED [enter original issuance date] AND DOES NOT COVER CONFORMITY/ CONDITION/RELEASE TO SERVICE'.

Examples of data to be entered in this block as appropriate:

- For complete engines, a statement of compliance with the applicable emissions requirements current on the date of manufacture of the engine.
- For AUSMSTO articles, state the applicable AUSMSTO number.
- Modification standard.
- Compliance or non-compliance with airworthiness directives or service bulletins.
- Details of repair work carried out, or reference to a document where this is stated.
- Shelf-life data, manufacture date, cure date, etc.
- Information needed to support shipment with shortages or reassembly after delivery.

- References to aid traceability, such as batch numbers. In the case of an engine, if the Authority has granted an engine exhaust emissions production cut-off exemption, the record: '[New or Spare] engine exempted from NOx emissions production cut-off requirements', exemption from the applicable engine environmental protection requirements, the record: 'ENGINE EXEMPTED FROM [REFERENCE TO THE TYPE OF EMISSION] EMISSIONS ENVIRONMENTAL PROTECTION REQUIREMENT'.

AMC1 21.A.163(d) - Privileges

MAINTENANCE

...

MAINTENANCE OF COMPONENTS OUTSIDE THE MPOA CAPABILITY

Such a maintenance activity outside the capability of the aircraft MPOA holder may still be accomplished under the production approval of the original release organisation. In such circumstances, the engine(s), propeller(s), parts and appliances will require re-release in accordance with DASR AMC 21.A.163(c) (DASR Form 1—Authorised Release Certificate).

Records relevant to continued airworthiness or retirement lives, such as engine runs, flight hours, landings, etc., which affect part retirement of maintenance schedules should be specified on any re-release.

As an alternative the engine, propeller, part or appliance may be maintained by the holder of an approval in accordance with DASR 145, classified and released as 'used'.

GM1 21.A.165(c)(3) Definitions of engine type certification date and production date

In case the Authority requires compliance with civil environmental requirements, Volume II of Annex 16 to the Chicago Convention contains ~~two~~ three different references to applicability dates:

1. The 'date of manufacture for the first individual production model' which refers to the date when the type certificate is issued for the engine type certification ~~date or model~~;
2. the 'date of application for a type certificate', which refers to the application date to the certifying Authority of the State of Design of the engine type certification; and
2. 3. the 'Date of manufacture for the individual engine' which refers to the production date of a specific engine serial number (date of Form 1).

The ~~second~~ third reference refers to the date of the first engine EMAR Form 1 (or equivalent) issued after the completion of the engine production pass-off test.

The third reference is used in the application of engine ~~NOx~~ emissions production cut-off requirement which specifies a date after which all in-production engine models must meet a certain ~~NOx~~ emissions standard.

DASR 21.A.165(c)(3) includes the production requirements for engine exhaust emissions. ICAO Doc 9501 'Environmental Technical Manual' Volume II provides guidance on these applicability dates.

AMC1 21.A.165(c)(4) - Applicable aircraft CO2 emissions requirements

This determination is made according to the data provided by the aircraft type certificate holder. This data should allow the determination of whether the aircraft complies with the CO2 emissions requirements established by the Authority, ~~using as a reference Volume III of Annex 16 to the Chicago Convention.~~

SUBPART H - MILITARY CERTIFICATES OF AIRWORTHINESS AND MILITARY RESTRICTED CERTIFICATES OF AIRWORTHINESS

21.A.174 - Application

- a) Pursuant to DASR 21.A.172, an application for an airworthiness certificate shall be made in a form and manner established by the Authority of the State of registry.
- b) Each application for a certificate of airworthiness or restricted certificate of airworthiness shall include:
 1. the class of airworthiness certificate applied for;
 2. with regard to new aircraft:
 - i. a statement of conformity:
 - issued under DASR 21.A.163(b); or
 - issued under DASR 21.A.130 and validated by the Authority; or
 - for an imported aircraft, any acceptable evidence to support that the aircraft conforms to a design approved by the Authority of the State of registry.
 - ii. a weight and balance report with a loading schedule;
 - iii. the flight manual and any other manuals, as required by the Authority of the State of registry.
 3. with regard to used aircraft:
 - i. originating from a **State applying EASA / EMAR / DASR**, a military airworthiness review certificate issued in accordance with **EASA Part M / EMAR M / DASR M**;
 - ii. in any other case:
 - a statement by the Authority of the State where the aircraft is, or was, registered, reflecting the airworthiness status of the aircraft on its register at time of transfer;
 - a weight and balance report with a loading schedule;
 - the flight manual and any other manuals, as required by the Authority of the State of registry;
 - historical records to establish the production, modification, and maintenance standard of the aircraft, including all limitations associated with a restricted certificate of airworthiness;
 - a recommendation for the issuance of a certificate of airworthiness or restricted certificate of airworthiness and for a Military Airworthiness Review Certificate following an airworthiness review in accordance with DASR M-;
 - the date on which the first certificate of airworthiness was issued and, if the standards of Volume III of Annex 16 to the Chicago Convention apply, the CO2 metric value data.

...

21.A.181 - Duration and continued validity

- a) An airworthiness certificate shall be issued for an unlimited duration. It shall remain valid subject to:
 1. compliance with the applicable type-design, ~~airworthiness directives~~ **airworthiness directives**, continued and ~~instructions for continuing airworthiness~~ **requirements**; and
 2. the aircraft remaining on the same register;
 3. the ~~a type certificate~~ **type certificate** or restricted ~~a type certificate~~ **type certificate** under which it is issued not being previously invalidated under DASR 21.A.51; and
 4. the certificate not being surrendered or revoked **by the Authority**.
- b) Upon surrender or revocation, the certificate shall be returned to the Authority of the State of registry.

SUBPART J - MILITARY DESIGN ORGANISATION APPROVAL

GM1 21.A.239(a) - Design assurance system

1. Purpose

This GM~~1~~ outlines some basic principles and objectives of DASR 21.A.239(a).

2. Definitions

...

2.3 The 'Type Investigation' means the tasks of the organisation in support of the ~~type certificate~~ **type certificate**, supplemental ~~type certificate~~ **type certificate** or other design approval processes necessary to demonstrate and verify and to maintain compliance with the applicable airworthiness ~~requirements~~ **codes and standards** and environmental protection requirements (**where applicable**).

3. Design Assurance

The complete process, starting with the airworthiness ~~codes and standards~~ and environmental protection (**where applicable**) requirements and product specifications and culminating with the issuing of a ~~type certificate~~ **type certificate**, is shown in the diagram on Figure 31. This identifies the relationship between the design, the Type Investigation and design assurance processes.

Effective Design Assurance demands a continuing evaluation of factors that affect the adequacy of the design for intended applications, in particular that the product, or part, complies with applicable airworthiness ~~codes and standards~~ and environmental protection (**where applicable**) requirements and will continue to comply after any change.

Two main aspects should therefore be considered:

- How the planned and systematic actions are defined and implemented, from the very beginning of design activities up to and including the continued airworthiness activities;
- How these actions are regularly evaluated and corrective actions implemented as necessary.

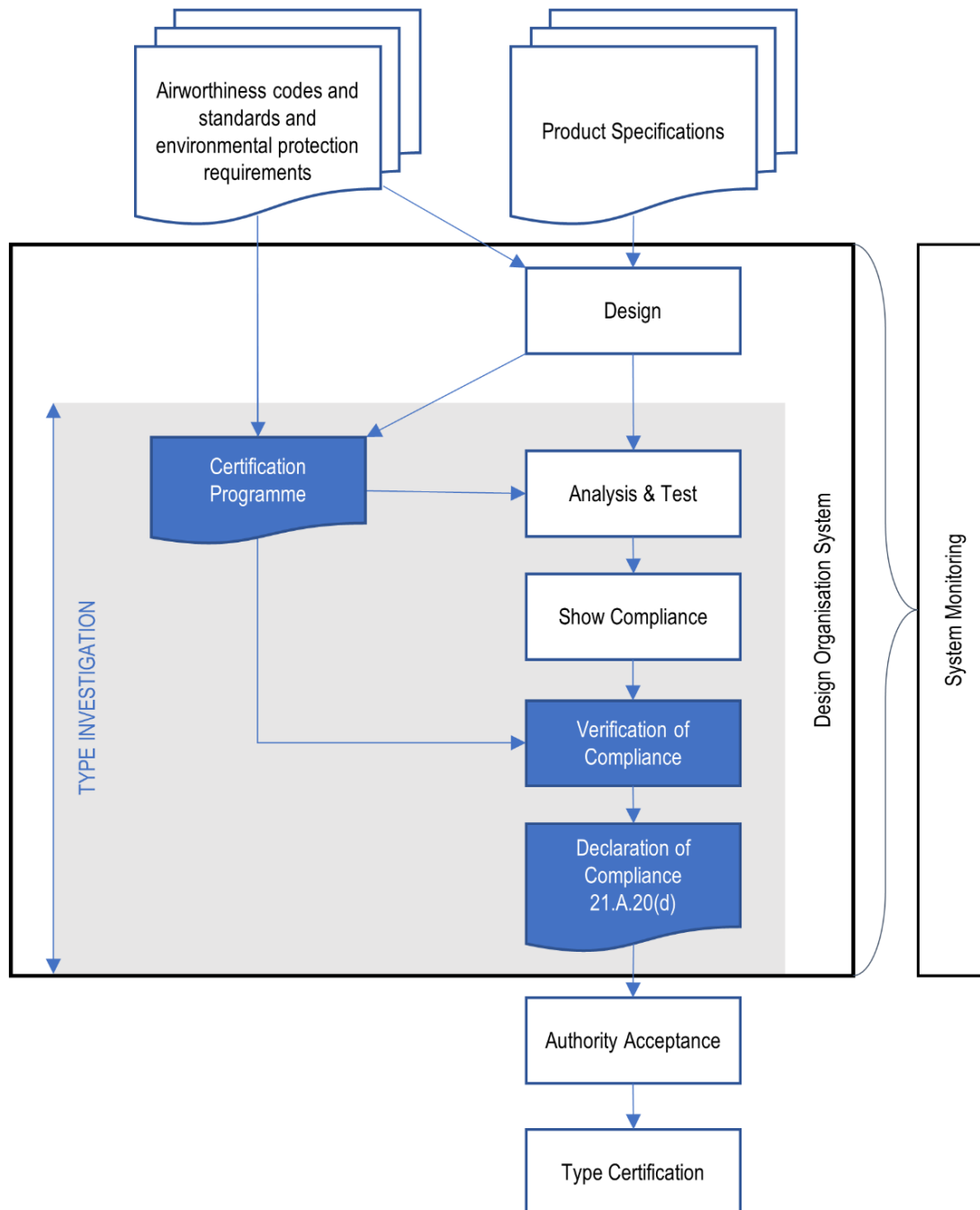


Figure 1 - Relationships between design, design assurance and type investigation

3.1 Planned and Systematic Actions

For design organisations carrying out Type Investigation of products, the planned and systematic actions should cover the following tasks and procedures should be defined accordingly:

3.1.1 General

a) To issue or, where applicable, supplement or amend the design organisation handbook in accordance with DASR 21.A.243, in particular to indicate the initiation of design activities on a product.

...

3.1.2 Chief Executive and Head of design organisation (or their Deputy)

- a) The Chief Executive should provide the necessary resources for the proper functioning of the design organisation.
- b) The Head of the design organisation, or an authorised representative, should sign a declaration of compliance (see DASR 21.A.20(d)) with the applicable airworthiness codes and standards and environmental protection (where applicable) requirements after verification of satisfactory completion of the Type Investigation. In accordance with DASR 21.A.20(e), their signature on the declaration of compliance confirms that the procedures as specified in the handbook have been followed (see also DASR GM 21.A.265(b)).
- c) The functions of Chief Executive and Head of the design organisation may be performed by the same person.

3.1.3 Compliance Verification

- a) Approval by signing of all compliance documents, including test programmes and data, necessary for the verification of compliance with the applicable airworthiness codes and standards and environmental protection (where applicable) requirements as defined in the certification programme.
- b) Approval of the technical content (completeness, technical accuracy...), including any subsequent revisions, of the manuals approved by the Authority (Aircraft Flight Manual, (AFM), the Airworthiness Limitations Section (ALS) of the Instructions for Continuing Airworthiness and the Certification Maintenance Requirements (CMR) document, where applicable).

3.1.4 Office of Airworthiness

- a) Liaison between the design organisation and the Authority with respect to all aspects of the certification programme.
- b) Ensuring that a handbook is prepared and updated as required in DASR 21.A.243.
- c) Co-operation with the Authority in developing procedures to be used for the type-certification process.
- d) Issuing of guidelines for documenting compliance.
- e) Co-operation in issuing guidelines to ensure compliance with the regulations for the preparation of the manuals required by the applicable regulations, Service Bulletins, drawings, specifications, and standards.
- f) Ensuring procurement and distribution of applicable airworthiness and codes or standards, environmental protection (where applicable) requirements and other specifications.
- g) Co-operating with the Authority in proposing the type-certification basis.
- h) Interpretation of applicable airworthiness codes or standards and environmental protection (where applicable) requirements and requesting decisions of the Authority in case of doubt.
- i) Advising of all departments of the design organisation in all questions regarding airworthiness, operational suitability, environmental protection (where applicable) approvals and certification.

- j) Preparation of the certification programme and co-ordination of all tasks related to Type Investigation in concurrence with the Authority.
- k) Regular reporting to the Authority about Type Investigation progress and announcement of scheduled tests in due time.
- l) Ensuring co-operation in preparing inspection and test programmes needed for demonstration of compliance.
- m) Establishing the compliance checklist and updating for changes.
- n) Checking that all compliance documents are prepared as necessary to demonstrate compliance with all airworthiness codes and standards and environmental protection-(where applicable) requirements, as well as for completeness, and signing for release of the documents.

...

3.1.5 Maintenance and Operating Instructions

a) Ensuring the preparation and updating of all maintenance and operating/installation instructions (including instructions for continuing airworthiness and services bulletins) needed to maintain airworthiness (continuing airworthiness) in accordance with the relevant airworthiness requirements codes and standards. For that purpose, the applicant should:

- establish the list of all documents it is producing produces and that are to be delivered to the operator, such as Flight Manual, ICA, engine configuration and interface documentation (e.g. as required to comply with the applicable airworthiness requirements EASA CS 2X.1581, EASA CS 2X.1529, EASA CS-E 20/25 or EASA CS-P 30/40);
- establish a system to collect in-service experience to be used for the improvement of the instructions;
- define its procedures and the organisation to produce and issue these documents, under the obligation of DASR 21.A.265(h); the procedures should cover:
 - preparation, including the format and language (available industrial standards can be referred to and used);
 - proofreading (checking for clarity, readability, typos, etc.);
 - checking verification of technical consistency with the corresponding approved change(s), repair(s) or approved data, including the effectivity, description, effects on airworthiness and environmental protection, especially when limitations are changed;
 - checking verification of feasibility in practical applications when relevant and feasible; and
 - responsibilities and authorised signatories.

Note: The compliance verification, as described in 3.1.3(b) of this GM, applies to the manuals approved by the Authority (Aircraft Flight Manual, the Airworthiness Limitations Section of the Instructions for Continuing Airworthiness (ICA) and the Certification Maintenance Requirements (CMR) document, where applicable). For the other ICA or other maintenance instructions, the procedure required by 3.1.5(a) provides a sufficient level of verification and does not require specific compliance verification unless, in line with DASR 21.A.90C, additional work to demonstrate compliance is required. In this case, where additional showing of compliance is required, DASR 21.A.91 to 21.A.109 apply and then the independent checking function of the showings of compliance as per DASR 21.A.239(b) applies.

b) In accordance with ~~DASR 21.A.57, DASR 21.A.61, DASR 21.A.107, DASR 21.A.119, DASR 21.A.120A and DASR 21.A.449~~ DASR 21.A.6, DASR 21.A.7 and, where applicable, DASR 21.A.609, ensuring that these documents are provided to all known operators and all involved authorities. made available in accordance with DASR 21.A.7(b).

3.1.6 Operational Suitability Data (OSD)

a) Ensuring the preparation and updating of all OSD in accordance with the relevant airworthiness codes and standards. For that purpose, the applicant should:

- establish the list of all the documents it is producing produces to comply with relevant requirements (e.g. EASA CS-MMEL or CS-GEN-MMEL, CS-FCD, CS-CCD, CS-SIMD and CS-MCSD), as applicable;
- define its procedures and the organisation to produce and issue these documents under the obligation of DASR 21.A.265(h); these procedures should cover the aspects described in 3.1.5(a) above.

b) In accordance with ~~DASR 21.A.57, DASR 21.A.62, DASR 21.A.108, DASR 21.A.119 and DASR 21.A.120B~~ DASR 21.A.6, and 21.A.7, ensuring that these documents are provided to all affected operators and training organisations and all involved authorities.

...

AMC1 21.A.243(a) - Handbook (Design Organisation Exposition) requirements

...

4. A general description of the way in which the organisation performs all the design functions in relation to airworthiness, operational suitability and environmental protection (where applicable) approvals including:

a. the procedures followed and forms used in the Type Investigation process to ensure that the design of, or the change to the design of, the product as applicable is identified and documented, and complies with the applicable airworthiness codes and standards and environmental protection (where applicable) requirements, including specific requirements for import by importing authorities;

...

9. A description of the record keeping system to comply with ~~DASR 21.A.5~~ DASR 21.A.55 and DASR 21.A.105.

10. A description of the means by which the organisation collects, monitors, analyses, and responds to reports of problems affecting which cause or might cause an adverse effect on the airworthiness or operational suitability of its product, part or appliance during design, production and in service, in particular to comply with DASR 21.A.3A (see also ~~DASR GM1~~ DASR AMC3 to 21.A.3A(a) and DASR GM1 21.A.239(a), paragraphs 3.1.4(s) and 3.1.4(u)). These collected reports should include both mandatory and voluntary occurrence reports from organisations and natural persons involved in the operation and maintenance of the product, part or appliance.

...

14. A description of the procedures for the establishment and the control of the maintenance and operating instructions (see ~~DASR 21.A.57, DASR 21.A.61, DASR 21.A.107, DASR 21.A.119, DASR 21.A.120A and DASR 21.A.449~~ DASR 21.A.6, DASR 21.A.7 and, where applicable, DASR 21.A.609)

15. A description of the means by which the continuing evaluation (system monitoring) of the design assurance system will be performed in order to ensure that it remains effective.

16. A description of the procedures for the establishment and control of the operational suitability data (see DASR 21.A.5, ~~DASR 21.A.57, DASR 21.A.62, DASR 21.A.108, DASR 21.A.119 and DASR 21.A.120B~~).

GM 21.A.249 – Transferability

1. ~~Transfer of the approval would normally only be agreed in cases where the organisation itself remains substantially unchanged.~~

2. ~~An acceptable transfer situation could be for example a change of company name supported by the appropriate certificate from the Australian Securities and Investments Commission (ASIC) but with no changes to site address or Chief Executive. However, if the same legal entity were to relocate to new premises with a new Chief Executive and/or new departmental heads, then a substantial investigation by the Authority would be necessary such that the change would be classified as a re-approval.~~

3. ~~In the event of receivership there may be good technical justification for continuation of the approval provided that the company continues to function in a satisfactory manner. It is likely that at a later stage the approval might be surrendered by the receiver or transferred to another organisation in which case the former paragraphs apply.~~

GM 21.A.149 and 21.A.249 - Transferability

GENERAL

A transfer of approval to another production or design organisation is, by default, excluded by DASR 21.A.149 or 21.A.249 respectively. These DASR references only allow it exceptionally if it is a direct consequence of a transfer of ownership in an approved production or design organisation, which is then considered a significant change to the existing approval (to which DASR 21.A.147 or 21.A.247 applies).

As a consequence, and in order to apply this exception, the production or design organisation has to demonstrate to the competent Authority the existence of a change in ownership which resulted in the fact that a different legal entity is now conducting the approved production or design functions while remaining effectively unchanged.

An example of such an exception is a change of ownership that leads to a re-registration of the organisation (supported by the appropriate evidence from the Australian Business Register (ABR) or Australian Securities and Investments Commission (ASIC) or equivalent). In order to demonstrate that the organisation remains effectively unchanged, the organisation needs to demonstrate that there are no changes affecting the initial demonstration of compliance of the organisation with Subpart G or Subpart J. If, for instance, the change of ownership would, in addition, lead to a change of address, facilities, type of work, staff, accountable manager or persons nominated under DASR 21.A.145 or 21.A.245, then it is not an acceptable transfer situation; the exception does not apply in

this case. A new investigation by the competent Authority would be necessary. The new organisation would have to apply for its own approval. In such a case where the organisation applies for a new approval, the demonstration of compliance in accordance with DASR 21.A.135 or 21.A.235 may be limited to the demonstration that the changes in the organisation comply with the Subpart G or Subpart J requirements, while referring for the rest to the compliance demonstration of the previous approval holder.

A pure name change, where the ownership does not change, does not require a transfer of the approval. In this case, the natural or legal person that holds the approval remains the same. However, as a consequence of the name change, the approval document needs to be amended to reflect the new company name. This is a significant change, to which DASR 21.A.147 or 21.A.247 applies.

Another example of a transfer of ownership, which may be exceptionally accepted under DASR 21.A.149 or 21.A.249, may be the event of receivership (bankruptcy, insolvency or another equivalent legal process). In this case, there is no change to the production or design organisation, except that the custodial responsibility for its property, including its tangible and intangible assets and rights, is a receiver or insolvency administrator. The receivership aims to continue the business of the same organisation.

AMC1 21.A.263(c)(1) - Procedure for the classification of changes to a type certificate (TC) or a supplemental type certificate (STC) and of repair designs as minor and major Privileges

1. INTENT

1 PROCEDURE FOR THE CLASSIFICATION OF CHANGES TO A MILITARY TYPE CERTIFICATE (MTC) OR TO A MILITARY SUPPLEMENTAL TYPE CERTIFICATE (MSTC), AND OF REPAIR DESIGNS AS 'MINOR' OR 'MAJOR'

This AMC provides means to develop a procedure for the classification of changes to a TC, APU AUSMTSO or to that part of the product covered by an STC, and repair designs.

Each military design organisation approval (MDOA) applicant should develop its own internal classification procedure following this AMC, in order to obtain the associated privilege under DASR 21.A.263(c)(1).

2- PROCEDURE FOR THE CLASSIFICATION OF CHANGES TO A TC, APU MTSO, OR TO THAT PART OF THE PRODUCT COVERED BY AN STC, AND REPAIR DESIGNS

2.1 Content

The procedure should address the following points:

- a) the identification of changes to a TC, APU AUSMTSO or to that part of the product covered by an STC, and repair designs;
- b) classification;
- c) justification of the classification;
- d) acceptance of the classification by authorised signatories; and

e) supervision of changes to a TC, APU **AUSMTSO** or to that part of the product covered by an STC, and repair designs initiated by subcontractors.

~~For changes to TC, APU **AUSMTSO** or to that part of the product covered by an STC, criteria used for classification should be in compliance with DASR 21.A.91 and DASR GM 21.A.91.~~

~~For repairs, criteria used for classification should be in compliance with DASR 21.A.435 and DASR GM 21.A.435.~~

2.2 Identification of changes to a TC, APU **AUSMTSO** or to that part of the product covered by an STC, and repair designs

The procedure should indicate how the following are identified:

- ~~— major changes to a TC, APU **AUSMTSO** or to that part of the product covered by an STC or major repairs;~~
- ~~— those minor changes to a TC, APU **AUSMTSO** or to that part of the product covered by an STC or minor repairs where additional work is necessary to demonstrate compliance with the applicable airworthiness and environmental protection requirements; and~~
- ~~— other minor changes to a TC, APU **AUSMTSO** or to that part of the product covered by an STC or minor repairs requiring no further demonstration of compliance.~~
- items (consisting of areas, systems, parts, or appliances) to be affected by the change or repair following the definitions provided in paragraph 3.9 of DASR GM 21.A.101;
- airworthiness directives which have, or might have, an impact on any of the identified items affected by the change or repair;
- other constituents of the TC and of the pre-existing change(s) to the TC as applicable to the affected items (for instance, operating limitations, OSD constituents, manuals — see also DASR 21.A.90A and the associated GM) to be affected by the change or repair;
- the existing type-certification basis of the affected items containing, as applicable, the certification specifications, special conditions, deviations from the applicable certification specifications and the equivalent level of safety findings incorporated by reference in the TC of the product to be changed;
- the existing OSD certification basis;
- the definition of the change or repair to the affected items and to the other affected constituents of the TC and of the pre-existing change(s) to the TC, if applicable, in accordance with the provisions of DASR 21.A.31 and 21.A.91;

the certification basis of the change or repair determined in accordance with DASR 21.A.101 with the support of DASR GM 21.A.101 (DASR 21.A.433 for repairs); this might lead to preclassification of the change as ‘major significant’ as per the associated definitions (see point 2.3 below). The procedure should request the applicant to record a justification that the information, on which those identifications are based, is adequate. This may be done either by using the DOA holder’s own resources, or through an arrangement with the TC holder, or any other design approval holder as relevant.

The procedure should address cases where the pre-existing configuration of the type design is the result of multiple changes or repairs applied to the same areas, systems, parts, equipment or appliances.

2.3 Classification

The procedure should show how the effects on airworthiness, as well as operational suitability and environmental protection are analysed, from the very beginning, by reference to the specific applicable requirements of the affected items.

If no specific airworthiness codes, standards or environmental protection requirements are applicable to the change or repairs affected items, the above review should be carried out at the level of the part or system where the change or repair is affected items are integrated and where specific airworthiness codes, standards or environmental protection requirements are applicable.

For changes to a TC, the criteria used for the classification should be in compliance with DASR 21.A.91 and follow the guidelines provided in DASR GM 21.A.91.

For repairs, the criteria used for the classification should be in compliance with DASR 21.A.435 and follow the guidelines provided in DASR GM 21.A.435(a).

The procedure should define provisions to contact Authority in case of doubts regarding the classification.

The procedure should take into consideration that a change to a TC may have been found to be significant according to DASR 21.A.101 and following the definitions provided in DASR GM 21.A.101.

Therefore, it is already preclassified at the stage of the determination of the certification basis (see point 2.2 above).

2.4 Justification of the classification

All decisions on the classification of changes to a TC, APU AUSMTSO or to that part of the product covered by an STC, and repair designs classified as 'major' or 'minor' should be recorded, and, for those which are not straightforward, also documented. justified according to the procedure and criteria in point 2.3 above. These records should be easily accessible to the Authority for sample checking.

2.5 Acceptance of the classification by the authorised signatories

All classifications of changes to a TC, APU AUSMTSO or to that part of the product covered by an STC, and repair designs should be accepted by an appropriately authorised signatory, belonging to or tasked by the office of airworthiness, as explained in GM1-DASR GM1 21.A.239(a)(3.1.4)(r).

The procedure should indicate the authorised signatories for the various products listed in the terms of approval.

For those changes or repairs that are handled by subcontractors, as described under paragraph 2.6, it a description should be described provided of how the MDOA holder manages its classification responsibility.

The final classification may be:

- major changes significant to a TC;
- major changes not significant to a TC or major repairs;
- minor changes to a TC or minor repairs where additional work is necessary to demonstrate compliance with the certification basis, the operational suitability data certification basis, where applicable, and the environmental protection requirements; or
- minor changes to a TC or minor repairs requiring no further demonstration of compliance.

The procedure should indicate how the above four classes of changes/repairs are identified, taking into consideration the requirements laid down in DASR 21.A.31.

2.6 Supervision of changes to a TC, APU **AUSMTSO** or to that part of the product covered by an STC, and repairs designs initiated by subcontractors

The procedure should indicate, directly or by cross-reference to written procedures, how changes to TC, or that part of the product covered by an STC, and repair designs may be initiated and classified by subcontractors, and are controlled and supervised by the MDOA holder, taking into consideration the requirements laid down in EMAR 21.A.239(c) and the associated GM to EMAR 21.A.239(c).

AMC2 21.A.263(c)(1) – Privileges – ~~Organisations that design minor changes to a type certificate (TC) or a supplemental type certificate (STC) and minor repairs to products~~

ORGANISATIONS THAT DESIGN MINOR CHANGES TO A MILITARY TYPE CERTIFICATE (MTC) OR A MILITARY SUPPLEMENTAL TYPE CERTIFICATE (MSTC), AND MINOR REPAIRS TO PRODUCTS:
CLASSIFICATION PROCEDURE

1. Content

The procedure should address the following points:

- the configuration control rules, especially the identification of changes to a TC, APU **AUSMTSO** or to that part of the product covered by an STC, and repair designs;
- the classification, in compliance with DASR 21.A.91 and DASR GM 21.A.91 for changes and DASR GM 21.A.435(a) for repairs;
- the justification of the decisions for the classification; and
- the acceptance of the classification by authorised signatories.

2. Identification of changes to a TC, APU **AUSMTSO or to that part of the product covered by an STC, and repair designs**

The procedure should indicate how the following ~~minor changes to a TC or minor repairs~~ are identified:

- ~~— those minor design changes to type design or minor repairs where additional substantiation data is necessary to demonstrate compliance with the airworthiness or environmental protection requirements (where applicable);~~
- ~~— other minor design changes to a TC or minor repairs requiring no further demonstration of compliance.~~
- the items (consisting of areas, systems, parts, or appliances) to be affected by the change or repair as per the definitions provided in paragraph 3.9 of DASR GM 21.A.101; these include the parts, appliances, systems or areas affected, and also the other TC constituents (see definitions in DASR GM 21.A.90A; for instance, operating limitations, OSD constituents, manuals, etc.);
- airworthiness directives which have, or might have, an impact on any of the identified items affected by the change or repair;
- the existing type-certification basis of the affected items containing, as applicable, the certification specifications, special conditions, deviations from the applicable certification

specifications and the equivalent level of safety findings incorporated by reference in the TC of the product to be changed;

3. the existing OSD certification basis

- the definition of the change or repair to the affected items in accordance with the provisions of DASR 21.A.31;
- the certification basis of the change or repair determined in accordance with DASR 21.A.101 with the support of DASR GM 21.A.101 (DASR 21.A.433 for repairs); this might lead to preclassification of the change as 'major significant' as per the associated definitions (see paragraph 3 below).

~~3.~~ 4. Classification

The procedure should show how the effects on airworthiness as well as on operational suitability and environmental protection are analysed, from the very beginning, by reference to the specific applicable requirements of the affected items.

If no specific airworthiness codes, standards or environmental protection requirements are applicable to the ~~change or the repair~~ affected item, the above review should be ~~done~~ carried out at the level of the part or system where the ~~change or repair~~ affected items are integrated and where specific airworthiness codes or standards or environmental protection requirements are applicable.

~~For repair, see also DASR GM 21.A.435.~~

For repairs, the criteria used for the classification should be in compliance with DASR 21.A.435 and follow the guidelines provided in DASR GM 21.A.435(a).

The procedure should define provisions to contact the Authority in case of doubts regarding the classification.

~~4.~~ 5. Justification of the classification

All decisions ~~of~~ on the classification of the changes to a TC, APU AUSMTSO or to that part of the product covered by an STC, and repair designs classified as 'minor' should be recorded, and, for those which are not straightforward, also ~~documented~~ justified according to the procedure and the criteria defined in paragraph 3 above.

These records should be easily accessible to the Authority for sample checking.

~~†~~ The justification may be in the format of meeting notes or register.

~~5.~~ 6. Acceptance of the classification by the authorised signatories

All classifications of changes to a TC, APU AUSMTSO or to that part of the product covered by an STC, and repair designs should be accepted by an appropriate authorised signatory.

The procedure should indicate the authorised signatories for the various products listed in the terms of approval.

The final classification may be:

- minor changes to a TC or minor repairs where additional work is necessary for the demonstration of compliance with the certification basis, the operational suitability data certification basis (where applicable), and the environmental protection requirements; or
- minor changes to a TC or minor repairs that require no further demonstration of compliance.

AMC1 21.A.263(c)(2) – Privileges Procedure for the approval of minor changes to a type certificate (TC), APU AUSMTSO or a supplemental type certificate (STC), and minor repairs

PROCEDURE FOR THE APPROVAL OF MINOR CHANGES AND MINOR REPAIRS TO A MILITARY TYPE CERTIFICATE (MTC), AN AUXILIARY POWER UNIT AUSTRALIAN MILITARY TECHNICAL STANDARD ORDER (APU AUSMTSO) OR A MILITARY SUPPLEMENTAL TYPE CERTIFICATE (MSTC)

1- INTENT

This AMC provides means to develop a procedure for the approval of minor changes to a TC, APU AUSMTSO or to that part of the product covered by an STC, and minor repairs.

Each military design organisation approval (MDOA) applicant should develop its own internal procedures following this AMC, in order to obtain the associated privilege under DASR 21.A.263(c)(2).

2- PROCEDURE FOR THE APPROVAL OF MINOR CHANGES TO A MTC, AN APU AUSMTSO OR TO THAT PART OF THE PRODUCT COVERED BY AN STC, AND MINOR REPAIRS

2.1 Content

The procedure should address the following points:

- compliance documentation;
- approval under the MDOA privilege;
- authorised signatories; and
- supervision of minor changes to a TC, an APU AUSMTSO or to that part of the product covered by an STC, and minor repairs handled by subcontractors.

2.2 Compliance documentation

For those minor changes to a TC, an APU AUSMTSO or to that part of the product covered by an STC, and minor repairs where additional work to demonstrate compliance with the applicable airworthiness codes and standards and environmental protection (where applicable) requirements is necessary, compliance documentation should be established and independently checked as required by DASR 21.A.239(b).

The procedure should describe how the compliance documentation is produced and checked. For compliance documentation, see also DASR AMC 21.A.20(c).

2.3 Approval under the MDOA privilege

2.3.1 For those minor changes to a TC, an APU AUSMTSO or to that part of the product covered by an STC, and minor repairs where additional work to demonstrate compliance with the applicable airworthiness codes and standards and environmental protection requirements is necessary, the procedure should define a document to formalise the approval under the MDOA privilege.

This document should include at least:

- identification and a brief description of the change or repair and reasons for change or repair;
- identification of the initial configuration of the affected area and other items (which determines the eligibility for installation of the change or repair into an aircraft);
- identification of the final configuration of the affected area, and of supplements to manuals and to OSD constituents
- applicable airworthiness codes or standards or environmental protection requirements and methods of compliance;
- reference to the compliance documents;
- the effects, if any, on the limitations and on the approved documentation;
- evidence of the independent checking function of the demonstration of compliance;
- evidence of the approval under the privilege of DASR 21.A.263(c)(2) by an authorised signatory;
- date of the approval.

For repairs, see DASR AMC 21.A.433(b) and DASR AMC 21.A.4475.

...

2.5 Supervision of minor changes to a TC, APU AUSMTSO or to that part of the product covered by an STC, and minor repairs handled by subcontractors

For the minor changes to a TC, APU AUSMTSO or to that part of the product covered by an STC, and minor repairs described in paragraph 2.3.2, that are handled by subcontractors, the procedure should indicate, directly or by cross-reference to written procedures how these minor changes to type design or a TC, APU MTSO or to that part of the product covered by an STC, and minor repairs are approved at the subcontractor level and the arrangements made for supervision by the MDOA holder.

AMC2 21.A.263(c)(2) – Privileges – Organisations designing minor changes to a type certificate (TC), APU AUSMTSO or a supplemental type certificate (STC) and minor repairs to products: procedure for the approval of minor changes to TC, APU AUSMTSO or minor repairs

ORGANISATIONS THAT DESIGN MINOR CHANGES TO A MILITARY TYPE CERTIFICATE (MTC), AN AUXILIARY POWER UNIT AUSTRALIAN MILITARY TECHNICAL STANDARD ORDER (APU AUSMTSO) OR A MILITARY SUPPLEMENTAL TYPE CERTIFICATE (MSTC) AND MINOR REPAIRS TO PRODUCTS:
PROCEDURE FOR THE APPROVAL OF MINOR CHANGES TO A MTC, AN APU AUSMTSO OR MINOR REPAIRS

1. Content

The procedure should address the following points:

- compliance documentation;
- approval under the MDOA privilege; and
- authorised signatories.

2. Compliance documentation

For those minor changes to a TC, an APU AUSMTSO or to that part of the product covered by an STC, and minor repairs where additional work to demonstrate compliance with the applicable airworthiness codes and standards and environmental protection requirements (where applicable) is necessary, compliance documentation should be established and independently checked as required by DASR 21.A.239(b).

The procedure should describe how the compliance documentation is produced and checked. For compliance documentation, see also DASR AMC 21.A.20(c).

3. Approval under the MDOA privilege

3.1 For those minor changes to a TC, an APU AUSMTSO or to that part of the product covered by an STC, and minor repairs where additional work to demonstrate compliance with the applicable airworthiness and codes or standards or environmental protection requirements is necessary, the procedure should define a document to formalise the approval under the MDOA privilege.

This document should include at least:

- a) identification and a brief description of the change or the repair and reason for change or repair;
- b) identification of the initial configuration of the affected area and other items (which determines the eligibility for installation of the change or repair into an aircraft);
- c) identification of the final configuration of the affected area, and of supplements to manuals and to OSD constituents;
- d) the applicable airworthiness and codes or standards or environmental protection requirements and methods of compliance;
- e) reference to the compliance documents;
- f) the effects, if any, on the limitations and on the approved documentation;
- g) evidence of the independent checking function of the demonstration of compliance;
- h) evidence of the approval under the privilege of DASR 21.A.263(c)(2) by an authorised signatory; and
- i) the date of the approval.

For repairs, see also DASR AMC 21.A.433(b) and DASR 21.A.4475.

...

AMC 21.A.263(c)(6) - Procedure for the approval of the conditions for issue of a military permit to fly Privileges

PROCEDURE FOR THE APPROVAL OF THE CONDITIONS FOR THE ISSUE OF A MILITARY PERMIT TO FLY (MPtF)

1- INTENT

- This AMC provides the means to develop a procedure to determine that an aircraft can fly, under the appropriate restrictions compensating for non-compliance with the airworthiness requirements applicable to the specific aircraft category.

- Each MDOA applicant or DOA holder should develop its own internal procedure following this AMC, in order to obtain the privilege to make this determination and approve the associated conditions without Authority involvement, under DASR 21.A.263(c)(6). When the privilege does not apply, the MDOA applicant or the DOA holder will prepare all necessary data required for the determination in accordance with the same procedure required for the privilege, and will apply for the Authority approval.
- The establishment of flight conditions may include conditions related to engines/propellers without a type certificate or with unapproved changes that are fitted to the aircraft, for which a military permit to fly (MPTF) is requested. These conditions (i.e. the installation, operating limitations, maintenance conditions or limitations) should be defined by the organisation responsible for the design of the engine/propeller and provided to the organisation responsible for the design of the aircraft. In this context, the organisation responsible for the design of the engine/propeller acts as a supplier of the organisation responsible for the design of the aircraft.
- These conditions should be established and substantiated under an arrangement between the organisation responsible for the design of the aircraft and the organisation responsible for the design of the engine/propeller. However, the establishment and substantiation of the flight conditions for the aircraft, including its engine(s), is ultimately the responsibility of the organisation responsible for the design of the aircraft.

2- PROCEDURE FOR THE APPROVAL OF THE CONDITIONS FOR THE ISSUE OF A MILITARY PERMIT TO FLY (MPTF)

2.1 Content

The procedure should address the following points:

- the decision to use exercise the privilege;
- management of the aircraft configuration;
- determination of the conditions that should be complied with to safely perform safely a flight;
- documentation of substantiations of flight conditions substantiation;
- approval under the MDOA privilege, when applicable; and
- the authorised signatories.

2.2 Decision to use exercise the privilege of DASR 21.A.263(c)(6)

The procedure should include a decision to determine: the flights for which the privilege of DASR 21.A.263(c)(6) will be exercised.

~~– flights for which the privilege of DASR 21.A.263(c)(6) will be exercised.~~

2.3 Management of the aircraft configuration

The procedure should indicate:

- how the aircraft, for which an application for a military permit to fly is made, is identified; and
- how changes to the aircraft will be managed.

2.4 Determination of the conditions that should be complied with to safely perform safely a flight.

The procedure should describe the process used by the MDOA holder to justify that ~~an~~ the aircraft can perform the intended flight(s) safely. This process should include:

- with reference to DASR 21.A.701(a), identification of ~~deviations from the~~ applicable airworthiness requirements ~~which the aircraft does not meet, or non-compliance with DASR 21~~ has not been shown to meet, if applicable, and of the purpose of the flight(s); for flight conditions ~~for~~ raised to cover unapproved changes, the ~~issue~~ identification of a certificate of the applicable airworthiness requirements which the aircraft does not meet, or has not been shown to meet, can be fulfilled by referring to the certification programme of the unapproved changes;
- the analysis, calculations, tests or other means used to determine under which conditions or restrictions the aircraft can safely perform ~~safely~~ a flight (the flights);
- the establishment of specific maintenance instructions and conditions to perform these instructions;
- ~~an~~ independent technical verification of the analysis, calculations, tests or other means used to determine under which conditions or restrictions the aircraft can perform the intended flight(s) safely;
- a statement by the Office of Airworthiness (or equivalent), that the determination has been made in accordance with the related procedure and that the aircraft has no features and characteristics ~~making that render it unsafe for the intended operation(s) under the identified conditions and restrictions; and~~
- approval by an authorised signatory.

2.5 Documentation of flight conditions substantiations

- ~~1.~~ The analysis, calculations, tests, or other means used to determine under which conditions or restrictions the aircraft can safely perform ~~safely~~ a flight (or the flights), should be compiled in compliance documents. These documents should be signed by the author and by the person performing the independent technical verification.
- ~~2.~~ Each compliance document should have a number and ~~an~~ issue date. The various issues of a document should be controlled.
- ~~3.~~ The data submitted and approved by the ~~type-certificate TC~~ holder can be used as substantiations. In that case, the independent technical verification referred to in ~~paragraph~~ 2.4 is not required.

2.6 Approval under the MDOA privilege

If a Category 1 or Category 2 flight test is to be conducted by an organisation outside of the MDOA holder approving the MPTF, flight conditions may only be approved by a Delegate of the Safety Authority (DoSA) - Flight Test (DoSA(FT)).

2.6.1 Initial approval

The procedure should include DASR Form 18A—Flight Conditions, (see DASR Forms document) (as an alternative, the DOA holder should provide an equivalent template containing the same level of information) to support the approval under the MDOA privilege.

When the privilege of DASR 21.A.263(c)(6) is not applicable, the signed form should be presented by the Office of Airworthiness (or equivalent) to the Authority.

2.6.2 Approval of changes

Except for changes that do not affect the conditions approved for the issue of the military permit to fly, the procedure should specify how changes will be approved by the MDOA Holder. The DASR Form 18A or equivalent should be updated.

NOTE: The following gives further guidance on the possible way to manage approval of flight condition under privileges for a Military Air System modified with a non-approved change to the type design.

Examples of limited changes to the flight conditions:

- Mass and balance changes remaining in the limit of the manual.
- Configuration adaptation (such as mistake correction, bug correction, installation/removal of equipment belonging on the initial FC).
- Changes to the flight test installation that do not invalidate the substantiation documents issued with the initial flight conditions, accepted non conformity.

Examples of not limited changes to the flight conditions:

- Mass and balance changes out of the limit taken into account for the initial FC.
- Change to the flight domain, change of the nature of test (new).
- New information (result of test or occurrence, etc) or change to the configuration or the conditions that invalid FC substantiations or that will prevent the respect of the limitations.
- Airworthiness Directive that could not be applied.

This is to be captured in the Applicant procedure submitted to and approved by the relevant Authority, so that it becomes the reference for actual practical application.

2.7 Authorised signatories

The person(s) authorised to sign the approval form should be identified (name, signature and scope of authority) in the procedure, or in an appropriate document linked to the MDOA handbook.

21.A.265 - Obligations of the holder

The holder of a design organisation approval shall, within the scope of its terms of approval, as established by the Authority:

- (a) maintain the handbook required under DASR 21.A.243 in conformity with the design assurance system;
- (b) ensure that this handbook or relevant procedures included by cross-reference are used as a basic working document within the organisation;
- (c) determine that the design of products, or changes or repairs thereof, comply with applicable specifications and requirements and have no unsafe features;
- (d) provide to the Authority with statements and associated documentation confirming compliance with paragraph (c), except for approval processes carried out in accordance with DASR 21.A.263(c);
- (e) provide to the Authority data and information related to the required actions under DASR 21.A.3B;
- (f) determine, in accordance with DASR 21.A.263(c)(6), the flight conditions under which a military permit to fly can be issued; and

...

AMC1 21.A. 265(a) - Administration of the Handbook (Military Design Organisation Exposition) Obligations of the holder

ADMINISTRATION OF THE HANDBOOK (DESIGN ORGANISATION EXPOSITION)

1. The handbook (Military Design Organisation Exposition) of the applicant must be in the language which will permit the best use of it by all personnel charged with the tasks performed for the purpose of the design organisation. The applicant may be requested to provide an English translation of the handbook and other supporting documents as necessary for the investigation.

...

AMC2 21.A.265(a) - Obligations of the holder

HANDBOOK (DESIGN ORGANISATION EXPOSITION) FORMAT AND PUBLICATION MEANS

The term 'handbook' is meant to describe a means to document the design organisation's processes and procedures. This may be in an electronic or paper format, as a stand-alone document or integrated in a management system. It may consist of:

- an online integrated management system with flowcharts and descriptions embedded in it;
- an online system referring to single documents;
- a classic handbook with references to online procedures; or
- any other combination of the above.

In any case, as required by point (c) of DASR 21.A.243, independently of the system chosen by the design organisation, the relevant content and the means to update the system should be clearly identified.

GM 21.A.265(b) - Use of the Handbook (Military Design Organisation Exposition) Obligations of the holder

USE OF HANDBOOK (DESIGN ORGANISATION EXPOSITION)

1. The handbook should be signed by the chief executive and the head of the design organisation and declared as a binding instruction for all personnel charged with the development and type investigation of products. This binding statement should be provided independently of the means chosen by the design organisation to document its processes and procedures.

2. All procedures referenced in the handbook are considered as parts of the handbook and therefore as basic working documents.

GM 21.A.265(h) - Designation of data and information issued under the authority of a military design organisation approval (MDOA) holder

...

2. SCOPE

The term 'data and information' as used in DASR 21.A.265(h) also includes instructions.

Data and information referred to in DASR 21.A.265(h) are issued by a MDOA holder and cover the following:

- embodiment instructions for design changes or repairs (usually in the form of a service bulletin, a modification bulletin, repair instructions or engineering order, etc.);
- manuals required by DASR 21 or the applicable airworthiness codes and standards (such as the aircraft flight manual (AFM), rotorcraft flight manual, instructions for continued airworthiness (ICAs), etc.);
- operational suitability data (OSD);
- continued-airworthiness instructions (usually in the form of service bulletins) which may be covered by airworthiness directives (ADs);
- additional data to be defined by the MDOA holder (e.g. alternative maintenance instructions that are not, per se, ICAs).

Note: This data and information may be issued in a digital or paper format.

The obligation does not apply to, and the statement provided with the data and information should not be used on, the following documents:

- certification documents (e.g. the certification programme, compliance checklist, etc.);
- compliance documents;
- design data transferred to production organisations; and
- production deviations (also referred to as ‘unintended deviations’ or ‘concessions’).

3. RATIONALE

The purpose of this obligation is to give certainty to the end users about the approval status of the data and information issued by the DOA holder.

4. STATEMENT PROCEDURE

~~The statement provided with the data and information should also cover those items prepared by subcontractors or vendors that the MDOA holder has declared as applicable to their products. The technical content of the statement is related to the type certificate data and information.~~

The approval included in the statement means that:

- ~~— the type certificate data has been appropriately approved; and~~
- ~~— the information contains practical and well-defined installation or inspection methods, and, when those methods are implemented, the product is in conformity with the approved type certificate data.~~

~~Note: Data and information related to the measures required by DASR 21.A.3B(b) (airworthiness directives (ADs)) are submitted to the Authority to ensure their compatibility with the content of an AD (see DASR 21.A.265(e)), and contain a statement that they are, or will be, subject to an AD issued by the Authority.~~

For the information and instructions issued under DASR 21.A.265(h), the DOA holder should establish a procedure that addresses the following aspects:

- their preparation;
- verification of their technical consistency with the corresponding approved change(s), repair(s) or approved data, including their effectivity, description, effects on airworthiness and environmental protection, especially when limitations are changed;
- verification of their feasibility in practical applications, when relevant and feasible;

- the authorised signatories.

The procedure should include the information or the instructions prepared by suppliers, and declared applicable to its products by the DOA holder.

Note: The Authority does not directly approve information or instructions. These are approved as part of the TC, STC, change approval or repair design approval. When stand-alone changes (i.e. not related to a TC change or repair design) to the issued information or instructions (e.g. to take in-service experience into account) are needed, these should be prepared, verified and approved according to the agreed procedures.

5. STATEMENT

The statement provided with the data and information should also cover those items prepared by subcontractors or vendors that the MDOA holder has declared as applicable to their products. The technical content of the statement is related to the type certificate data and information.

The approval included in the statement means that:

- the type certificate data has been appropriately approved; and
- the information contains practical and well-defined installation or inspection methods, and, when those methods are implemented, the product is in conformity with the approved type certificate data.

Note: Data and information related to the measures required by EMAR 21.A.3B(b) (airworthiness directives (ADs)) are submitted to the Authority to ensure their compatibility with the content of an AD (see EMAR 21.A.265(e)), and contain a statement that they are, or will be, subject to an AD issued by the Authority.

SUBPART K - PARTS AND APPLIANCES

21.A.307 - Release The eligibility of parts and appliances for installation

- A part or appliance shall be eligible for installation in a type-certificated product when it is in a condition for safe operation, and it is marked in accordance with DASR 21 Subpart Q and accompanied by an authorised release certificate (DASR Form 1—Authorised Release Certificate), certifying that the item was manufactured in conformity with approved design data and is marked in accordance with DASR 21 Subpart Q.
- By way of exception from (a) and provided that the conditions in (c) are met, the following parts or appliances do not require a DASR Form 1 in order to be eligible for installation in a type-certified product:
 - a standard part; or
 - Reserved;
 - Reserved; a part or appliance for which the consequences of a non-conformity with its approved design data has a negligible safety effect on the product, and which is identified as such by the holder of the design approval in the instructions for continuing airworthiness. In order to determine the safety effects of a non-conforming part or appliance, the design approval holder may establish in the instructions for continuing airworthiness specific verification activities to be conducted by the installer of the part or appliance on the product;
 - Reserved; in the case of the embodiment of a standard change in accordance with DASR 21.A.90B or a standard repair in accordance with DASR 21.A.431B, a part or appliance, for

which the consequences of a non-conformity with its design data have a negligible safety effect on the product, and which is identified as such in the airworthiness codes and equivalent standards for standard changes and standard repairs issued or accepted in accordance with DASR 21.A.90B (a)(2) and DASR 21.A.431B (a)(2). In order to determine the safety effects of a non-conforming part or appliance, specific verification activities to be conducted by the person that installs the part or appliance on the product may be established in the airworthiness codes and equivalent standards referred to above;

5. a part or appliance that is exempted from an airworthiness approval in accordance with the applicable rules governing the intended operations; and
6. a part or appliance that is an item of a higher assembly identified in (b)(1) to (b)(5).

c) (reserved)

Parts and appliances listed in (b) are eligible for installation in a type certified product without being accompanied by a DASR Form 1, provided that the installer holds a document issued by the person or organisation that manufactured the part or appliance, which declares the name of the part or appliance, the part number, and the conformity of the part or appliance with its design data, and which contains the issuance date.

d) (reserved)

AMC1 21.A.307(b)(3) and (b)(4) – Verification activities to be conducted on the part or appliance or release documentation prior to installation

To prevent a non-negligible safety effect on the product, due to the installation of a part or appliance referred to in DASR 21.A.307(b)(3) and (b)(4) that could potentially not conform to its design, the design approval holder or the Authority may identify in the ICA (in the case of 21.A.307(b)(3)) or Standard Change (in the case of EMAR 21.A.307(b)(4)) any specific verification activities to be conducted by the installer on the part or appliance before installing it on the product in accordance with the procedures approved by the Authority.

When assessing the safety effect of a part or appliance identified in EMAR 21.A.307(b)(3) or (b)(4), the DAH or the Authority should assume that the installer would conduct, any specific verification activities on the part or appliance or release documentation, as identified in the ICA or in the standard Change.

Example: Information from the DAH contained in the ICA: 'Part XXX-YY must comply with flammability requirement JJJ-KKK'.

GM1 21.A.307(b)(3) and (b)(4) – Meaning of 'negligible safety effect'

For the purpose of DASR 21.A.307(b)(3) and (b)(4), when 'a part or appliance for which the consequences of non-conformity to its design has a negligible safety effect when installed on the product' is mentioned, it means that any non-conformity of the part or appliance not identified by the installer that conducted the specific verification activities mentioned in DASR 21.A.307 (c):

(a) (Reserved)

(b)

(1) has no effect on the operational or functional certified capabilities of the aircraft, or on its safety margins;

(2) causes no physical discomfort to the occupants; and

~~(3) has no effect on the flight crew.~~

~~Additional information could be found in the Certification Memorandum Installation of new parts and appliances without an EASA Form 1 EASA CM No.: CM-21.A-K-001.~~

GM1 21.A.307(b)(4) – Airworthiness Codes in DASR 21.A.307(b)(4)

~~The airworthiness codes and equivalent standards mentioned in DASR 21.A.307(b)(4) are the ones issued or accepted by the Authority. The Authority may use as a reference the Certification Specifications for Standard Changes and Standard Repairs (CS-STAN).~~

GM1 21.A.307(b)(5) - Equipment exempted from an airworthiness approval

In accordance with DASR 21.A.307(b)(5) the Authority may exempt equipment from an airworthiness approval in their rules governing the intended operations.

~~As guidelines, civil regulation Commission Regulation (EU) No 965/2012~~ **ORO.75 provides guidance on** ~~lists~~ the equipment exempted from an airworthiness approval.

GM1 21.A.307(b)(6) - Part or appliance that is part of a higher-level assembly

A DASR Form 1 is not required for a part or appliance when that part or appliance is an element of a higher-level assembly for which a DASR Form 1 is not required.

SUBPART M – REPAIRS

GM 21.A.432B(b) – Alternative procedures

See DASR AMC1 21.A.14(b) for the details of alternative procedures.

21.A.432C - Application for a repair design approval

- a) An application for a repair design approval shall be made in a form and manner established by the Authority.
- b) An application for a major repair design approval shall include, or be supplemented after the initial application ~~by~~, a certification programme containing:

...

21.A.433 - Requirements for approval of a repair design

- a) A repair design shall only be approved:
 1. when it has been demonstrated, following the certification programme referred to in DASR 21.A.432C(b), that the repair design complies with the type-certification basis incorporated by reference in, as applicable, either the ~~a type-certificate~~ type certificate, the supplemental ~~a type-certificate~~ type certificate or the APU **AUSMTSO** authorisation, as well as with any amendments established and notified by the Authority;
 2. when compliance with the type-certification basis that applies in accordance with (a)(1) has been declared and the justifications of compliance have been recorded in the compliance documents;
 3. when no feature or characteristic has been identified that may make the product unsafe for the uses for which certification is requested; ~~and~~

4. where the applicant has specified that it provided certification data on the basis of an arrangement with the owner of the type-certification data in accordance with DASR 21.A.432C(b)(7):
 - i. when the holder has indicated that it has no technical objection to the information submitted under (a)(2); and
 - ii. when the holder has agreed to collaborate with the repair design approval holder to ensure discharge of all obligations for continued airworthiness of the changed product through compliance with DASR 21.A.451;
 5. when it has been demonstrated that the structural integrity of the repair and affected structure is at least equivalent to the level of structural integrity established for the baseline structure of the product, or is subject to limitations in accordance with DASR 21.A.443 to assure safe use.
- b) The applicant shall submit to the Authority the declaration referred to in (a)(2) and, on request by the Authority, all necessary substantiation data.

AMC 21.A.433(a)(b) and 21.A.447-21.A.5 - Repair design and Record Keeping

...

21.A.435 - Classification and approval of repair designs

- a) A repair design shall be classified as either "major" or "minor" in accordance with the criteria set out in DASR 21.A.91 for a change to the a type-certificate type certificate.
- b) A repair design shall be classified and approved by:
 1. the Authority; or
 2. an approved design organisation within the scope of its privileges provided for in (1), (2) and (5) of DASR 21.A.263(c), as recorded in the terms of approval.

21.A.447 - Record keeping

For each repair, all relevant design information, drawings, test reports, instructions and limitations possibly issued in accordance with DASR 21.A.443, justification for classification and evidence of the repair design approval, shall:

- a) be held by the repair design approval holder at the disposal of the Authority; and
- b) be retained by the repair design approval holder in order to provide the information necessary to ensure the continued airworthiness of the repaired products, parts or appliances.

AMC 21.A.433(a) and 21.A.447 - Repair design and record keeping

- a) Relevant substantiation data associated with a new major repair design and record keeping should include:
 - i. the identification of the damage and the reporting source;
 - ii. the major repair design approval sheet identifying the applicable specifications and references of justifications;
 - iii. the repair drawing and/or instructions and scheme identifier;

iv. the correspondence with the holder of the military type certificate (MTC), military supplemental type certificate (MSTC), or auxiliary power unit ~~Australian military technical standard order (APU AUSMTSO)~~ authorisation, if its advice on the design has been sought;

v. the structural justification (static strength, fatigue, damage tolerance, flutter, etc.) or references to this data;

vi. the effect on the aircraft, engines and/or systems (performance, flight handling, etc., as appropriate);

vii. the effect on the maintenance programme;

viii. the effect on airworthiness limitations, the flight manual and the operating manual;

ix. any weight and moment changes; and

x. special test requirements.

b) Relevant minor repair documentation includes paragraphs (a)(i) and (a)(iii). Other points of paragraph (a) may be included where necessary. If the repair is outside the approved data, a justification for the classification is required.

c) Special consideration should be given to repairs that impose subsequent limitations on the part, product or appliance (e.g. engine turbine segments that may only be repaired a finite number of times, the number of repaired turbine blades per set, oversizing of fastener holes, etc.).

d) Special consideration should also be given to life-limited parts and critical parts, notably with the involvement of the MTC or MSTC holder, when deemed necessary under 21.A.433(a)(4).

e) Repairs to engine or APU critical parts would normally only be accepted with the involvement of the MTC holder.

21.A.449—Instructions for continuing airworthiness

a) The holder of the repair design approval shall furnish at least one complete set of those changes to the instructions for continuing airworthiness which result from the design of the repair, comprising descriptive data and accomplishment instructions prepared in accordance with the applicable requirements, to each operator of aircraft incorporating the repair. The repaired product, part or appliance may be released back into service before the changes to those instructions have been completed, but this shall be for a limited service period, and in agreement with the Authority. Those changes to the instructions shall be made available on request to any other person required to comply with any of the terms of those changes to the instructions. The availability of some manual or portion of the changes to the instructions for continuing airworthiness, dealing with overhaul or other forms of heavy maintenance, may be delayed until after the product has entered into service, but shall be available before any of the products reaches the relevant age or flight — hours/cycles.

b) If updates to those changes to the instructions for continuing airworthiness are issued by the holder of the repair design approval after the repair has been first approved, these updates shall be furnished to each operator and shall be made available on request to any other person required to comply with any of the terms of those changes to the instructions. A programme showing how updates to the changes to the instructions for continuing airworthiness are distributed shall be submitted to the Authority.

AMC 21.A.449—Instructions for Continuing Airworthiness (AUS)

Instructions for Continuing Airworthiness (ICA) shall be distributed in accordance with DASR AMC 21.A.57—Manuals (AUS).

The system for distributing ICA and their amendments to users shall ensure that:

- a) details of the authorised distribution of ICA to each user is recorded; and
- b) ICA are accessible to organisations and personnel.

GM 21.A.449—Instructions for Continuing Airworthiness (AUS)

Instructions for Continuing Airworthiness (ICA) details the methods, inspections, processes, and procedures necessary for the air operator to keep aircraft and / or engine, propeller, parts and appliances airworthy during its intended life.

The contents of ICA can be divided into two categories:

- a. an approved airworthiness limitations (AWL) section as defined by the applicable airworthiness codes during the certification process, which forms part of the type design / type certificate (DASR 21.A.31(a)(3) and DASR 21.A.41):
 - i. any limitations determined through the certification of the product, and instructions on how to determine that these limits have been exceeded.
 - ii. any inspection, servicing or maintenance actions determined to be necessary by the certification process.
- b. sections that do not contain approved data from the certification process and are not considered as part of type design/type certificate:
 - i. any inspection or troubleshooting actions determined to be necessary to establish the nature of faults and the necessary remedial actions.
 - ii. sufficient general information on the operation of the product to enable an understanding of the instructions in paragraphs (a)(i), (a)(ii), and (b)(i) above.

21.A.451 - Obligations and Australian Military Part Approval (MPA) marking

- a) Each holder of a major repair design approval shall:
 - 1. undertake the obligations:
 - i. laid down in DASR 21.A.3A, DASR 21.A.3B, DASR 21.A.4, DASR 21.A.5, DASR 21.A.7, DASR 21.A.439, DASR 21.A.441, and DASR 21.A.443, DASR 21.A.447 and DASR 21.A.449;
 - ii. implicit in the collaboration with the a type certificate type certificate or supplemental a type certificate type certificate and with the APU AUSMTSO authorisation holder, under DASR 21.A.433(b), as appropriate.
 - 2. specify the marking, including AUSMPA (Australian Military Part Approval) letters, in accordance with DASR 21.A.804(a).
- b) Except for a type certificate type certificate holders or APU AUSMTSO authorisation holders for which DASR 21.A.44 applies, the holder of a minor repair design approval shall:
 - 1. undertake the obligations laid down in DASR 21.A.4, DASR 21.A.4475 and DASR 21.A.4497;
 - and
 - 2. specify the marking, including AUSMPA letters, in accordance with DASR 21.A.804(a).

SUBPART O - AUSTRALIAN MILITARY TECHNICAL STANDARD ORDER AUTHORISATIONS

21.A.609 - Obligations of holders of AUSMTSO authorisations

The holder of an AUSMTSO authorisation under this Subpart shall:

- a) manufacture each article in accordance with DASR 21 Subpart G or Subpart F that ensures that each completed article conforms to its design data and is safe for installation;
- b) prepare and maintain, for each model of each article for which an AUSMTSO authorisation has been issued, a current file of complete technical data and records in accordance with DASR 21.A.613.5;
- c) prepare, maintain and update master copies of all manuals required by the applicable airworthiness specifications for the article;
- d) make available to users of the article and to the Authority on request those maintenance, overhaul and repair manuals necessary for the usage and maintenance of the article, and changes to those manuals;
- e) mark each article in accordance with DASR 21.A.807;
- f) comply with DASR 21.A.3A, DASR 21.A.3B and DASR 21.A.4;
- g) continue to meet the certification requirements of DASR 21.A.602B.

AMC1 21.A.609(c) and (d) - Obligations of holders of AUSMTSO authorisations

Although an AUSMTSO article itself typically does not require ICA (in the reference document CS-ETSO, there is no specification related to ICA, neither in Subpart A, nor in each specific ETSO), the applicable airworthiness standards may require the design approval holder (DAH) or the design approval applicant (DAA) who install an AUSMTSO article into their product to develop ICA that describe an AUSMTSO article's installation requirements, within the context of the product, to the extent necessary to ensure the product's continued airworthiness.

In addition, if the DAH or the DAA who install an AUSMTSO article into their product explicitly uses AUSMTSO provisions to demonstrate compliance with an installation requirement, they should review all the maintenance and inspection instructions for the particular AUSMTSO article when defining the ICA of the product.

It may be necessary for the DAH or the DAA to incorporate these instructions into the ICA of the product to ensure that the AUSMTSO article continues to satisfy the terms of its AUSMTSO authorisation after installation.

Any DAH or DAA who wishes to install an AUSMTSO article should comply with DASR 21.A.303.

For this, the applicant for an AUSMTSO authorisation may provide by the time of the application and before the authorisation is issued (in accordance with DASR 21.A.605) the following:

- instructions that cover periodic maintenance, calibration, and repair for the continued airworthiness of the article, including specific guidance on the limits of wear and damage that would warrant replacement;
- the recommended inspection intervals, which may be affected by storage and operating conditions (i.e. temperature, humidity, etc.).

21.A.613—Record keeping

Further to the record keeping requirements appropriate to, or associated with, the quality system, all relevant design information, drawings and test reports, including inspection records for the article tested, shall be held at the disposal of the Authority and shall be retained in order to provide the information necessary to ensure the continued airworthiness of the article and of the type-certificated product in which it is fitted.

AMC 21.A.613—Record keeping (AUS)

~~Records should be retained for at least two years after the removal from service of the last aircraft of the type certified.~~

SUBPART P - MILITARY PERMIT TO FLY

21.A.701 Scope

(a) Military permits to fly shall be issued in accordance with this Subpart to aircraft that do not meet, or have not been shown to meet, applicable airworthiness requirements but are capable of safe flight under defined conditions and for the following purposes:

...

~~16. (Reserved) flying an aircraft for troubleshooting purposes or to check the functioning of one or more systems, parts or appliances after maintenance.~~

17. operation of new or modified capability, prior to completion of certification, due to of a capability imperative;

18. operation of aircraft where a required maintenance activity has not been completed, due to a capability imperative.

...

GM 21.A.701 - Scope

An aircraft to be used for flight testing by any organisation which has its principle place of business in a state other than the state of registry, remains under the Authority of its state of registry. The Authority of the flight testing organisation or an appropriately approved design organisation can provide, on request, technical assistance to the state of registry for the issue of a military permit to fly (~~DASR Form 20b—Military Permit to Fly (Approved Organisation)~~), under the state of registry applicable regulations.

In the case of ground runs or taxi trials where there is a possible risk that the ground run or taxi trial could lead to take-off in case of mishap, mishandling etc. or where otherwise specified by the Authority, the flight testing organisation or an appropriately approved design organisation should request a permit to fly.

GM 21.A.701(a) - Military permit to fly when certificate of airworthiness or restricted certificate of airworthiness is not appropriate

...

(2) Demonstration of compliance with regulations or certification requirements:

- certification flight testing for ~~military type certification~~ type certification, military supplemental type certificates, changes to military type certificates or AUSMTSO authorisation.

...

(11) Flying the aircraft to a location where maintenance or airworthiness review are to be performed, or to a place of storage:

- Ferry flights in cases where maintenance is not performed in accordance with approved programmes, where an ~~Airworthiness Directive (AD)~~ AD has not been complied with where certain equipment outside the Master Minimum Equipment List (MMEL) is unserviceable or when the aircraft has sustained damage beyond the applicable limits.

(12) Flying an aircraft at a weight in excess of its maximum certificated take-off weight for flight beyond the normal range over water, or over land areas where adequate landing facilities or appropriate fuel is not available:

- Overseas ferry flights with additional fuel capacity.

(13) Reserved.

(14) Flying aircraft meeting the applicable airworthiness requirements before conformity to the environmental requirements has been found:

- Flying an aircraft which has been ~~shown~~ demonstrated to comply with all applicable airworthiness requirements but not with environmental requirements.

(15) For individual aircraft or types for which a certificate of airworthiness or restricted certificate of airworthiness is not appropriate:

- For aircraft which cannot practically meet all applicable airworthiness requirements, such as certain aircraft without MTC holder (generically termed 'orphan aircraft') or aircraft which have been under national systems of military permit to fly and have not been demonstrated to meet all applicable requirements. The option of a military permit to fly for such an aircraft should only be used if a certificate of airworthiness or restricted certificate of airworthiness cannot be issued due to conditions which are outside the direct control of the ~~aircraft owner~~ applicant, such as the absence of properly certified spare parts.

(16) ~~Reserved flying an aircraft for troubleshooting purposes or to check the functioning of one or more systems, parts or appliances after maintenance.~~

~~— After maintenance, when the diagnosis of the functioning of an aircraft system needs to be made in flight and the design approval holder has not issued instructions to perform this diagnosis within the approved aircraft limitations, the flight should be conducted under a permit to fly. Further guidance is available in subparagraph (b) of D GM M.A.301(i) of the AMC and GM to DASR M.~~

(17) Operation of new or modified capability, prior to completion of certification, due to capability imperative:

- For aircraft which have been modified to improve capability or introduce a new capability, where certification activities are unable to be completed prior to a need to operate the aircraft. This may be due to modification of a single aircraft for flight testing purposes, where it is not reasonably practicable to 'de-mod' that aircraft while certification is completed, or

or due to a need to incorporate a modification across all or part of the fleet for capability reasons in advance of certification being achieved. Note that in order for defensible characterisation of the risks associated with airworthiness non-compliances, a Certification Program Plan must have prior agreement with DASA, and current knowledge of the state of certification efforts is required prior to MPTF application; and Note that operation under an MPTF prior to certification should be limited to the minimum practicable duration, since extended operation for convenience under an MPTF may not be defensible. Lack of resourcing is not normally considered a credible and defensible reason to continue operation under an MPTF, and full certification (underpinned by MCRIs as required) should be pursued as soon as possible.

(18) Continued operation of aircraft where required maintenance has not been completed, due to a capability imperative:

- For aircraft where there is a capability imperative to continue operating beyond a required maintenance activity without completion of that maintenance. This includes operation beyond Airworthiness Limitations (AwLs) or directed activities in an Airworthiness Directive (AD) without other DASA approval, and operations outside of ICA (other than AwLs) where it is not reasonably practicable to proceed through other means (for example through seeking amendment of the ICA from the MTC holder, or obtaining an approval to proceed under DASR M or DASR 145).

NOTE: Note: 1. The above listing is of cases when a military permit to fly MAY be issued, in accordance with national regulations; it does not mean that in the described cases a military permit to fly SHOULD be issued. If other legal means are available to allow the intended flight(s) they can also be used.

2. A military permit to fly for normal operations may be issued, before the design change approval, provided that the modified system is not operated, and its installation does not affect safe operations. For these cases a safety assessment should be performed.

AMC 21.A.701(a)(17) - Issue of an MPTF prior to completion of certification (AUS)

The purpose of an MPTF issued in accordance with 21.A.701(a)(17) is to allow flexibility in the completion of certification activities, and flexibility provisions to allow for operations at a higher level of risk during the completion of certification when the need to fly to support capability exists and certification cannot be achieved first. 21.A.701(a)(17) does not provide an exception to the need to conduct certification.

Before the issue of, or extension to, an MPTF under DASR 21.A.701(a)(17) the applicant shall demonstrate that:

- a. Certification is achievable, with a suitable timeline and allocation of resources to the project.
- b. A Certification Program Plan (CPP) has been accepted by the Authority, prior to applying for an MPTF, in order to understand the risks from the resultant non-compliances.
- c. The substantiation of the MPTF has been informed by the certification efforts that have already taken place, and accounts for compliance demonstration already completed.

These requirements do not impact MPTFs obtained for the purposes of activities conducted under 21.A.701(a)(1) or 21.A.701(a)(2).

GM 21.A.703 - Applicant for a military permit to fly

The applicant for a military permit to fly may be a person other than the registered owner of the aircraft. As the holder of this permit will be responsible for ensuring that all the conditions and limitations associated with the military permit to fly are continuously satisfied, the applicant for the permit should be a person or organisation suitable for assuming these responsibilities. In particular, the organisations designing, modifying or maintaining the aircraft should normally be the holder of the associated permits to fly.

AMC 21.A.709(b) - Submission of documentation supporting the establishment of flight conditions

Together with the application, the documentation required by DASR 21.A.709(b) must be submitted with DASR Form 18b - Flight Conditions for a Military Permit to Fly - Approval Form, (see DASR Forms Document), completed with all relevant information. If the complete set of data is not available at the time of application, the missing elements can be provided later. In such cases, the approval form should be provided only when all data are available, to allow the applicant to make the statement required in Block 9 of DASR Form 18b.

AMC1 21.A.709(b) - Application for the approval of flight conditions

SUBMISSION OF DOCUMENTATION SUPPORTING THE ESTABLISHMENT OF FLIGHT CONDITIONS

The applicant should submit, together with the application, the documentation required by DASR 21.A.709(b) with the approval form DASR Form 18B, completed with all the relevant information. The same approval form (DASR Form 18B) should be used when the application is submitted by a DOA holder that does not have the privilege to approve flight conditions or when it has such a privilege, but the respective flight conditions are outside the approved scope of work. If the complete set of data is not available at the time of application, the missing elements can be provided later. In such cases, the approval form should be provided only when all the data is available, to allow the applicant to make the statement required in block 9 of the Form.

Note 1: For Flight Tests with an airborne armament store or air launched guided weapon system:

- The applicant should provide evidence that the airborne armament store or air launched guided weapon Design Organisation has provided the necessary evidence with respect to any carriage, firing, launch/release or jettison limitations.

21.A.711 - Issue of a military permit to fly

...

d) Reserved

...

SUBPART Q - IDENTIFICATION OF PRODUCTS, PARTS AND

21.A.801 - Identification of products

- a) The identification of products shall include the following information:

1. the manufacturer's name;
 2. the product designation;
 3. the manufacturer's serial number; and
 4. Reserved
 5. any other information the Authority finds appropriate.
- b) Any person or organisation that manufactures an aircraft or engine under DASR 21 Subpart G or Subpart F shall identify that aircraft or engine by means of a fireproof plate that has the information specified in paragraph (a) marked on it by etching, stamping, engraving, or other approved method of fireproof marking. The identification plate shall be secured in such a manner that it is accessible and legible, and will not likely be defaced or removed during normal service, or lost or destroyed in an accident.
- c) Any organisation that manufactures a propeller, propeller blade, or propeller hub under DASR 21 Subpart G or Subpart F shall identify it by means of a plate, stamping, engraving, etching or other approved method of fireproof identification that is placed on it on a non-critical surface, contains the information specified in paragraph (a) and will not likely be defaced or removed during normal service or lost or destroyed in an accident.
- d) (Reserved)

GM1 21.A.801(a)(4) – Identification of products

Military aircraft engines do not need to comply with environmental protection requirements (reference to GM1 21.B.85 (a)), but may be required by the Authority on a case by case basis under DASR 21.A.801 (a) (5). In this case the engines not complying with environmental protection requirements should be marked with “EXEMPT”.

21.A.804 - Identification of parts and appliances

- a) Each part or appliance which is eligible for installation in a type-certified product shall be marked permanently and legibly with:
1. a name, trademark, or symbol identifying the manufacturer in a manner identified by the applicable design data; and
 2. the part number, as defined in the applicable design data; and
 3. the letters **AUSMPA (Australian Military Part Approval)** for parts or appliances produced in accordance with approved design data not belonging to the a type-certificate type certificate holder of the related product, except for **AUSMTSO** articles; and for parts and appliances covered under DASR 21.A.307 (b).
- b) By way of exception from paragraph (a), if the Authority agrees that a part or appliance is too small or that it is otherwise impractical to mark a part or appliance with any of the information required by paragraph (a), the authorised release document accompanying the part or appliance or its container shall include the information that could not be marked on the part or appliance.

GM1 21.A.804(a)(3) - Identification of parts and appliances

MILITARY PARTS APPROVAL (MPA) MARKING FOR REPAIR PARTS

The MPA marking only applies to the parts, specifically designed or modified for the repair, to be incorporated as part of the repair design. If the repair scheme does not require the addition of any new parts or the use of modified parts, there is no need to mark the repaired part with the letters 'MPA'.

In this context, the definition of a modified part includes an approved part that has been modified as a result of the repair process (eg. a blend repair beyond structural repair manual limits).

AMC1 21.A.804(b) - Identification of parts and appliances

THE AUTHORITY AGREEMENT FOR THE DESIGN APPROVAL HOLDER TO DEROGATE USE AN EXCEPTION FROM DASR 21.A.804(a)

A design approval holder may apply DASR 21.A.804(a) or make use of the exception defined in DASR 21.A.804(b) by clarifying, in the relevant procedures, the conditions (e.g. the minimum dimensions of a (flat) area on a part suitable for marking) in which the marking on the part may be completely or partially omitted. This can also be supported by examples of parts or cases when certain parts do not have to be marked.

In such cases, the relevant design data (e.g. drawings) should specify the contents and location of the information that could not be marked on the part (i.e. the information to be provided in the authorised release document or on the container).

GM1 21.A.805 - Identification of critical parts

PARTS TO BE MARKED

For the purposes of DASR 21.A.805, a part that requires individual traceability for the management of its airworthiness, as identified by the design approval holder, shall be permanently marked with a part number and a serial number.

The need for the design approval holder to identify and mark parts may be related to specific requirements for critical parts included in airworthiness codes and standards. For instance, according to point (c) of EASA CS-E 110 Drawings and Marking of Parts — Assembly of Parts: 'Certain parts (including Engine Critical Parts; see CS-E 515) as may be required by the Authority must be marked and the constructor must maintain records related to this marking such that it is possible to establish the relevant manufacturing history of the parts.' Another example is in point AC 29.602 of FAA AC 29-2C, as referenced in Book 2 of CS-29: '(7) – Critical parts are identified as required, and relevant records relating to the identification are maintained such that it is possible to establish the manufacturing history of the individual parts or batches of parts.'

Another typical case is for any part subject to an individually specified life limit or inspection requirement when it is also possible for that part to be removed from one serial number of the associated product during maintenance and installed on another serial number of the same product. In this case, the traceability of the part, which is necessary for airworthiness management purposes, is not assured through the serial number of the product alone, and it is necessary to maintain records for the part through its serial number.

NPA FOR DCP 0068 Response Sheet

Incorporation of EMAR 21 Edition 3.0 Amendments into DASR 21

Please forward this sheet as an email attachment to dasa.iarp@defence.gov.au by 28 Aug 26. A word version of this response sheet can be found via obj no: [BO3960659](#) or alternatively contact [DASA](#).

Please indicate your acceptance or otherwise of this proposal by ticking the appropriate box below. Additional comments, suggested amendments or alternative action are welcome and may be provided on this response sheet or by separate correspondence.

- [] The proposal is **acceptable without change**.
- [] The proposal is **acceptable but would be improved if the following changes were made**:
- [] The proposal is **not acceptable but would be acceptable if the following changes were made**:

LSN	NPA Reference: (i.e Regulation number, NPA paragraph etc)	Comment or suggested change	Explanation
1			
2			
3			
4			
5			

RESOURCE IMPLICATIONS

Please provide specific comment on any significant resource implications that this proposal may have for your organisation, for both its implementation and ongoing compliance. Your comments should address both financial and human resource considerations.

Resource implications – Proposal implementation	
Resource implications – Proposal sustainment	

RESPONDENT DETAILS

Your name:	
Submission date:	
Your organisation:	
Email address:	
Postal address:	
Phone:	
Whose views are represented in your response? i.e. Is your response the authoritative response from your organisation?	Responding on behalf of : Individual [] Regulated Military entity [] Regulated Commercial entity [] Wing HQ [] Group HQ [] ADF Regulatory, Technical or Logistics policy agency [] Other commercial entity [], Other [] Please describe:
Do you consent to your name being published as an NPA respondent within the NPA Summary of Responses:	YES [] NO []