RECORD OF CHANGE – DASR RELEASE 25 JUL 24

This document records all changes to the Defence Aviation Safety Regulation (DASR) introduced in the 25 Jul 24 release. An overview of noteworthy changes is available in the Notification of Change.

1. An index of all changes, grouped by DASR part, is provided in Table 2 below. Each entry is hyperlinked to an Amendment Record that documents the rationale for the change, previous text and revised text.

2. Each change is classified as Major, Minor or Editorial according to its impact. Table 1 below provides classification definitions and identifies the colour coding used in Table 2.

3. The DASR Change Proposal (DCP) reference number associated with each change is provided for traceability. A single DCP may introduce several changes having similar effect and may affect multiple DASR parts. Any Notices of Proposed Amendment and associated Comment Response Documents issued by DASA are available on the DASA web site and are identified by the same DCP reference number.

4. Any revised text within the Initial and Continuing Airworthiness regulations that is unique to DASR, i.e. different to the base European Military Airworthiness Requirements, is highlighted green.

5. This document is intended to be accessed in electronic format using bookmarks and hyperlinks for navigation; the page numbers applied to Amendment Records do not reflect page numbers within this compiled Record of Change.

Table 1. Change classifications and colour coding

Major	Introduces significant regulation change with a corresponding change to compliance requirements.
Minor	Improves the regulation but does not change the intent or impose new regulation.
Editorial	Applies changes such as corrections or updates to terminology.

BP42194259

Table 2. Index of changes

LSN	Short Title (DCP Reference)	Amendment Record	Change Classification	DASR Clause
	General			
1	Amend references to Environmental Commanders (DCP 2023-033)		Major	Various
2	Removal of term 'Suitability for Flight' (DCP 2024-009)		Editorial	Various
3	Update definition for Low Flying to improve readability (DCP 2023-038)		Editorial	DASP Manual Glossary of Terms
	DASR 21 – Aircraft Design, Production and Certification			
4	DASR 21 update to EMAR 21 Ed 2.0 Remaining Changes (DCP 2024-012)		Minor	Various
5	Correct typographical error in GM to DASR 21.A.14(c) (DCP 2024-014)		Editorial	GM 21.A.14(c)
	DASR 66 – Military Aircraft Maintenance Licensing			
6	Amendment to various DASR 66 GM green text (DCP 2024-005)		Minor	GM 66.A.15 GM1 66.A.20(a)3(ii) GM2 66 A.20(a)1

	DASR 145 – Requirements for Maintenance Organisations			
7	Reduction of minimum age for certifying staff (DCP 2023-035)		Major	145.A.35(m)
8	Amendment to various DASR 145 & M green text (DCP 2024-004)		Minor	AMC 145.A.10 AMC M.A.303 GM M.A.303
	DASR ACD – Air Cargo Delivery			
9	Updated DASR ACD.50.A to align with contemporary QMS language (DCP 2024-007)		Editorial	ACD.50.A
	DASR ANSP – Air Navigation Service Providers			
10	Review and update of entire DASR ANSP (DCP 2023-017)		Major	ANSP in toto
	DASR ARO – Authority Requirements for Air Operations			
11	Removal of DASR ARO.40 Aircraft Crash Protection (CP) (DCP 2020-028)		Major	ARO.40
12	Updated ARO.100 to replace the undefined acronym 'SFP' and outdated terminology (DCP 2024-008)		Editorial	GMARO.100(c)(d)(ii)
13	Replace reference to DASAMAN with DASP Man Vol 3 (DCP 2024-011)		Editorial	GM ARO.60.A.2
	DASR M– Continuing Airworthiness Management			
14	Improvements to CAMO direct consumption provisions (DCP 2019-037)		Major	M.A.304(b) GM M.A.304(b)

	DASR SPA – Specific Purpose Approvals			
15	AMC SPA.50(a) - Paragraph formatting corrections (DCP 2024-013)		Editorial	AMC SPA.50(a)

Australian Government
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Defence Aviation Safety Authority

Defence Aviation Safety Authority

DASR AMENDMENT RECORD
DCP 2023 - 033

DASR CLAUSE: Various

RATIONALE FOR CHANGE

This change removes references to Environmental Commanders (COMAUSFLT/COMD AVNCOMD/ACAUST) where those references represented a continuation of the legacy Operational Airworthiness Authority responsibilities within the pre-DASR MILAVREG and OAREG. Removal of these references has improved the internal consistency of the regulations by either re-directing those elements to the Military Air Operator Accountable Manager, OIP Sponsor or DASA as appropriate.

CURRENT REGULATION TEXT

See Below Enclosure 1 to DCP 2023-033 - DASR AMENDMENT RECORD - Amend references to Environmental Commanders (BP35434764)

REVISED REGULATION TEXT

See Below Enclosure 1 to DCP 2023-033 - DASR AMENDMENT RECORD - Amend references to Environmental Commanders (BP35434764)

BP35434764

DASR AMENDMENT RECORD
DCP 2023-033
Amend references to Environmental Commanders

Rationale for change: This change removes references to Environmental Commanders (COMAUSFLT/COMD AVNCOMD/ACAUST) where those references represented a continuation of the legacy Operational Airworthiness Authority responsibilities within the pre-DASR MILAVREG and OAREG. Removal of these references has improved the internal consistency of the regulations by either re-directing those elements to the Military Air Operator Accountable Manager, OIP Sponsor or DASA as appropriate.

Key:

Current and revised DASR text changes are made in-line, with changes highlighted.

Yellow highlight - ~~Deleted~~ text, characters or spaces (eg / spaces deleted either side of forward slash)

Green highlight - New or revised text

Volume 2- Defence Aviation Safety Regulation

AIRCREW.10 - DEFENCE AIRCREW QUALIFICATIONS AND TRAINING

AMC AIRCREW.10.A(4) - Airborne Emergency Training (AUS)

5. **Practice engine failures – Single–engine aircraft.** MAOs must not conduct the deliberate airborne shutdown or stopping of an engine in single-engine aircraft during emergency training. ~~may not occur unless specifically authorised by COMAUSFLT / COMD AVNCOMD / ACAUST~~.

MED.05 – AVIATION MEDICINE (AVMED) TRAINING (AUS)

GM MED.05(e) – Supplemental Aviation Medicine (SAVMED) training (AUS)

b. **Single Service Aviation Medicine Advisor (SSAMA)** (As described in the Defence Health Manual). The SSAMA is responsible for providing AVMED advice to the relevant Service; and to ensure AVMED training meets COMAUSFLT, COMD AVNCOMD, or ACAUST requirements (as applicable to the relevant Service).

AMC MED.10.A – Flexibility Provisions (AUS)

Medical Certificate Management

7. **Certificate Types.** AVMOs should issue ~~M~~medical certificates ~~should be issued on appropriate forms~~ IAW the Defence Health Manual (DHM). ~~using medical standards proposed by the SSAMA, endorsed by the Surgeon General ADF and approved by COMAUSFLT / COMD AVNCOMD / ACAUST~~ . Certificates may follow …

Ongoing Currency Management Compliance: Service Specific

11. ~~COMAUSFLT / COMD AVNCOMD / ACAUST~~ The relevant MAO, ANSP, ABMO or Sponsor, in consultation with COMAUSFLT/COMD AVNCOMD/ACAUST and IAM, may decide harmonisation with the civil system is less important than the Service requirements and adopt a different method to allow flexibility in completing aircrew medical examinations. A renewed certificate...

FSTD.05 - FLIGHT SIMULATION TRAINING DEVICE MANAGEMENT

(a) ~~COMAUSFLT / COMD AVNCOMD / ACAUST~~ The MAO-AM must approve a Flight Simulation Training Device Installation Operating Permit prior to use of the Flight Simulation Training Device in support of flight crew training, qualification or currency.

GM FSTD.05.A – Flight Simulation Training Device Management (AUS)

2. **Non-FSTD application.** The regulation is focused on training that directly impacts the control of the aircraft in flight. Specifically, the FSTD used to train personnel who interact with aircraft flight controls or power plant controls to manoeuvre the aircraft in flight. ~~COMAUSFLT/COMD AVNCOMD/ACAUST~~ The MAO-AM may determine if FSTD regulation should apply to Mission Simulators or Weapon Tactical Trainers.

AO.GEN.05 - MANAGEMENT OF OIP

(d) OIP issued under this regulation must ensure that:

3. A list of ~~COMAUSFLT / COMD AVNCOMD / ACAUST~~ OIP Sponsor approved sources of Flight Information Documents (FID) is maintained.

ARO.50 - STATEMENT OF OPERATING INTENT AND USAGE

AMC ARO.50.A – Statement of Operating Intent and Usage (AUS)

Statement of Operating Intent and Usage Approval

1. …

   b. COMAUSFLT/COMD AVNCOMD/ACAUST will then approve the SOIU as being an accurate reflection of the roles and operational environments that the aircraft will be used in.

SOIU Updates

2. Proposed changes to the role, operating environment and usage defined in the SOIU should be endorsed by ~~the Authority (~~DASA~~)~~ to ensure they are compatible with the certified design prior to COMAUSFLT/COMD AVNCOMD/ACAUST approval.

ORO.10 - FLYING MANAGEMENT SYSTEM

GM ORO.10.A – Flying Management Systems (AUS)

Organisational Implementation

7. **Wing (E) Level implementation**. Flying operations management at Wing level may satisfy the majority of the regulatory requirements for an FMS. Although the SOIU may be managed at a higher level, the Wing Level organisation should be the custodian of the aircraft roles and environment. ~~The Wing may provide advice to COMAUSFLT / COMD AVNCOMD / ACAUST on any necessary changes to the SOIU, or identify new roles.~~ With a number of operating units utilising the same aircraft type, the Wing may also be best placed to define and standardise currency and competency criteria, manage OIP and training devices, and define policy and processes for RM and aviation safety.

ORO.15 - APPOINTMENT OF KEY STAFF

GM ORO.15.A – Appointment of Key Staff (AUS)

4. Personnel who are appointed with operational airworthiness management responsibilities in support of flying operations play an essential role in the overall management of the FMS. Key Staff includes:

c. **Flying Instructor.** A flying instructor is a pilot who has been trained and certified as competent to give flying instruction. The MAO may create sSub-categories or specialised Flying Instructor roles ~~may be created~~ ~~or endorsed~~ ~~COMAUSFLT, COMD AVNCOMD, or ACAUST~~ as part of the applicable FMS, eg ~~QHI~~ OFI.

h. **Single Service Aviation Medical Advisor (SSAMA).** ~~A COMAUSFLT, COMD AVNCOMD, or ACAUST appointment~~ An appointment made by the single Service Director General Health. The SSAMA is a Senior Aviation Medical Officer, as defined in the Defence Health Manual, who provides authoritative aviation medical advice and recommendations to the MAO-AM, and the Def AA; ~~who represents a single Service, is recognised by the Surgeon General ADF as being recognised by the Surgeon General ADF as being qualified to provide authoritative aviation medical advice~~ and is responsible for the development and implementation of aviation medicine policies.

NDR.05 - OPERATION OF NON DEFENCE REGISTERED AIRCRAFT BY DEFENCE ORGANISATIONS

AMC NDR.05.B – Approval to Operate an NDRA (AUS)

Ramp Inspections

12. The inspection regime should allow the approval authority to access applicable resources relevant to inspecting the leased aircraft shortly prior to flight regarding readily apparent technical issues and the overall operational readiness of the aircraft. Control of the inspection process should be delegated to aviation safety personnel to ensure appropriate risk management and resource management. Personnel who conduct ramp inspections should have relevant experience and deemed competent to conduct them. Inspections teams should comprise at least one operational representative, one maintenance representative and other relevant personnel as required; the MAO-AM or Sponsor should identify such

personnel. ~~may be identified by the Authority, or COMAUSFLT / COMD AVNCOMD / ACAUST~~

Sports Aviation Controls

15. General controls for assessing the sports aviation activity risk include:

d. A periodic safety audit has been conducted. An appropriate audit includes any CASA approved audit process or a ~~COMAUSFLT / COMD AVNCOMD / ACAUST~~ DASA, MAO-AM or Sponsor-recognised audit process.

NDR.15 - FOREIGN MILITARY OPERATIONS IN AUSTRALIA

GM NDR.15.B – Suspension of Foreign Military Operations in Australia (AUS)

2. The ~~authority~~ Sponsor suspending flight operations should advise COMAUSFLT/COMD AVNCOMD/ACAUST and ~~the Authority (through~~ DASA~~)~~ as soon as practicable.

SPA.20 - LOW FLYING

AMC SPA.20.A – Low Flying Areas, Routes And Charts, and Conduct (AUS)

Low flying areas

1. ~~COMAUSFLT / COMD AVNCOMD / ACAUST~~ The MAO-AM should nominate suitable appointments at each Flying Base for the management of low flying issues. These appointments should promulgate approved low flying areas (LFA) for their respective bases in the appropriate SI. Areas selected for promulgation as LFA should be:

a. surveyed to identify and locate all hazardous obstructions

b. where possible, clear of promulgated instrument approaches

c. as clear as possible of hazardous obstructions

d. as clear as possible from aerodrome Obstacle Limitation Surfaces (OLS).

UAS.20 - CERTIFIED CATEGORY UAS

(a) UAS shall only be eligible for operation under Certified category if they:

7. are controlled by a RP who is a qualified military pilot, or qualified in accordance with requirements mandated by ~~either Commander Australian Fleet (COMAUSFLT), Commander Army Aviation Command (COMD AVNCOMD), or Air Commander Australia (ACAUST)~~ the MAO-AM.

UAS.30 - SPECIFIC CATEGORY UAS

AMC UAS.30.B - Authority Requirements for Issue of a UASOP (AUS)

24. For the Authority to issue a UASOP that includes flight over people:

g. the risk to MEP inherent in such UAS operations must have been well articulated to, and retained by, the relevant risk management authority. ~~COMAUSFLT, COMD AVNCOMD, ACAUST , or Head of Defence Group, (as appropriate), and residual risk, (including any uncertainty in residual risk) must have been retained~~

Australian Government
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Defence Aviation Safety Authority

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DASR AMENDMENT RECORD
DCP 2024 – 009

DASR CLAUSE: VARIOUS

RATIONALE FOR CHANGE

The legacy (and Australian-unique) term 'Suitability for Flight' was removed from all DASPMAN (including AMC and GM) and replaced with the term ‘Aviation Safety’. The usage of the term ‘Suitability for Flight’ creates unnecessary confusion with the definition of ‘Aviation Safety’. Additionally, the term ‘Aviation Safety’ stems from the release of ICAO Annex 19 and is a globally accepted benchmark.

CURRENT REGULATION TEXT

Various

REVISED REGULATION TEXT

DASA directly replaced ‘Suitability for Flight’ with ‘Aviation Safety’ in all cases except for those detailed in Enclosure 1 to DASR Amendment Record 2024-009 (BP41043662). The table below is a direct extract from BP41043662.

LOCATION/REFERENCE	EXISTING	CHANGE
GM ARO.100 1.	**Purpose. (Context)** An independent Organisational Approval of organisations that conduct Defence air operations provides assurance that aviation safety will be maintained. **(Hazard)** Compromised management of aviation quality and safety management systems adversely affects the safe delivery of capability. **(Defence)** This regulation requires the MAO to implement controls to ensure ~~the Suitability for Flight~~, including that an airworthy Aircraft will be maintained and operated to approved standards and limitations, by competent and authorised individuals, who are acting as a member of an approved organisation.	**Purpose. (Context)** An independent Organisational Approval of organisations that conduct Defence air operations provides assurance that aviation safety will be maintained. **(Hazard)** Compromised management of aviation quality and safety management systems adversely affects the safe delivery of capability. **(Defence)** This regulation requires the MAO to implement controls to ensure Aviation Safety, including that an airworthy Aircraft will be maintained and operated to approved standards and limitations, by competent and authorised individuals, who are acting as a member of an approved organisation.
GM ARO.100(b) b.	Civil registered aircraft operated by the MAO on an on-going basis should be included on the MAOC OpSpec. The Military Air Operator's FMS, OIP, training and qualification, facilities, SMS, continuing airworthiness management, and operational limitations must be adequate to ensure ~~Suitability For Flight of~~ civil registered aircraft. The safety controls and risk management processes should provide an equivalent level of safety to Defence and civil registered aircraft operated by the MAO.	Civil registered aircraft operated by the MAO on an on-going basis should be included on the MAOC OpSpec. The Military Air Operator's FMS, OIP, training and qualification, facilities, SMS, continuing airworthiness management, and operational limitations must be adequate to ensure Aviation Safety for civil registered aircraft. The safety controls and risk management processes should provide an equivalent level of safety to Defence and civil registered aircraft operated by the MAO.
GM ORO.30	Purpose. (Context) Defence Flight operations require careful consideration in both planning and execution to ensure safety. (Hazard) Depending on the operations' complexity, Crew involved in their planning and execution may not adequately consider, monitor, and mitigate relevant ~~Aviation Safety and Mission factors, leading to potentially compromised Suitability For Flight.~~	Purpose. (Context) Defence Flight operations require careful consideration in both planning and execution to ensure safety. (Hazard) Depending on the operations' complexity, Crew involved in their planning and execution may not adequately consider, monitor, and mitigate relevant risks and Mission factors, leading to potentially compromised Aviation Safety~~.~~
AMC ORO.30(a)3 a. xiv. (a)	**Conducting ~~a Suitability For Flight~~ assessment.**	**Conducting an Aviation Safety assessment.**

GM1 ORO.30(a)3 d. ii.	~~a Suitability For Flight~~ assessment is made by a qualified, competent and appointed FLTAUTHO	an Aviation Safety assessment is made by a qualified, competent and appointed FLTAUTHO
GM SPA.10 1.	**Purpose**. **(Context)** On occasion, to maintain key capabilities at high levels of operational readiness and to undertake non-discretionary activities in support of Australia’s national interest, commanders may be required to operate aircraft outside of approved configuration, role, environment (CRE), limitations or conditions. **(Hazard)** Operating aircraft outside of approved CRE, limitations or conditions may affect Suitability For Flight. **(Defence)** This regulation requires the MAO to establish a process to manage risk ~~of Suitability For Flight~~ for aircraft operated under a Command Clearance	**Purpose**. **(Context)** On occasion, to maintain key capabilities at high levels of operational readiness and to undertake non-discretionary activities in support of Australia’s national interest, commanders may be required to operate aircraft outside of approved configuration, role, environment (CRE), limitations or conditions. **(Hazard)** Operating aircraft outside of approved CRE, limitations or conditions may affect Suitability For Flight. **(Defence)** This regulation requires the MAO to establish a process to manage risks to Aviation Safety for aircraft operated under a Command Clearance
AMC SPA.10.A 1. b.	Provide a rigorous and disciplined review of all relevant aspects that affords the Commander effective decision making advice where the management of risk is eliminated, or otherwise minimised SFARP, so that the aviation activity is conducted safely, including how the activity might compromise ~~each element of suitability for flight.~~	Provide a rigorous and disciplined review of all relevant aspects that affords the Commander effective decision making advice where the management of risk is eliminated, or otherwise minimised SFARP, so that the aviation activity is conducted safely, including how the activity might compromise Aviation Safety.
SPA.30 a.	The MAO must establish a system that ensures aircraft conducting flying displays do not compromise ~~the suitability for flight~~.	The MAO must establish a system that ensures aircraft conducting flying displays do not compromise Aviation Safety.
AMC NDR.05.B 1.	The Sponsor approving the acquisition or operation of a NDRA is responsible for the associated safe aviation outcomes. ~~Once satisfied, t~~he Sponsor can issue an Approval to Operate (ATO) once satisfied ~~suitability for flight~~ will not be compromised. Where the Sponsor is not a Defence AA appointed authority, advice should be sought from DASA	The Sponsor approving the acquisition or operation of a NDRA is responsible for the associated safe aviation outcomes. The Sponsor can issue an Approval to Operate (ATO) once satisfied that Aviation Safety will not be compromised. Where the Sponsor is not a Defence AA appointed authority, advice should be sought from DASA
AMC NDR.05.B 3. a.	~~Suitability for flight determination.~~	Aviation Safety assessment.

AMC NDR.05.B	~~**Suitability for Flight of**~~ **NDRA**	**Avaition Safety for NDRA**
AMC NDR.05.B 6.	~~A NDRA is deemed suitable for flight~~ ~~when~~ it is operated:	Aviation Safety considerations for NDRA include that it is operated:
AMC NDR.05.B 10.	~~Purpose.~~ The purpose of a Ramp Inspection of NDRA is to provide the Sponsor a higher degree of confidence that the operator, flight crew and aircraft intended for use by or on behalf of Defence is suitable for flight by ensuring that the aircraft and crew do not have significant defects or obvious aviation safety issues.	The purpose of a Ramp Inspection of NDRA is to provide the Sponsor a higher degree of confidence that the operator, flight crew and aircraft intended for use by or on behalf of Defence is suitable for flight operations by ensuring that the aircraft and crew do not have significant defects or obvious aviation safety issues.
AMC ACD.60(b) a. ii.	~~a Suitability For Flight~~ assessment, confirming that the procedures detailed at AMC ACD.60(b)a.i have been completed, prior to acceptance of the ACD load by the Aircrew.	an Aviation Safety assessment, confirming that the procedures detailed at AMC ACD.60(b)a.i have been completed, prior to acceptance of the ACD load by the Aircrew.
SPO.00 TITLE	**SPO.00 ~~SUITABILITY FOR FLIGHT~~ ASSESMENT**	**SPO.00 AVIATION SAFETY ASSESMENT**
GM SPO.00	Joint personnel recovery (JPR) can compromise ~~suitability for flight~~ should the ability to recover personnel transported aboard the aircraft who are in need of JPR be ineffective. ~~Just as airworthiness commences with pre-flight preparations, such as flight planning, so does suitability for flight extend to the post flight phase~~	Joint personnel recovery (JPR) can compromise Aviation Safety should the ability to recover personnel transported aboard the aircraft who are in need of JPR be ineffective.
VOLUME 3 CH5.3 ANNEX A PARA5	MAO is a regulatory term that is applicable to an organisation approved by the DASA to conduct Defence aircraft flight operations. To become a MAO the commander of the organisation nominated by their Service must apply to DASA by submitting an Operations Compliance Statement (OCS). DASA assesses information in the OCS to assure that it forms the basis of judgement ~~to the Suitability for Flight of an airworthy aircraft that will be maintained~~ and operated to approved standards and	MAO is a regulatory term that is applicable to an organisation approved by the DASA to conduct Defence aircraft flight operations. To become a MAO the commander of the organisation nominated by their Service must apply to DASA by submitting an Operations Compliance Statement (OCS). DASA assesses information in the OCS to assure that it forms the basis of judgement for the suitability of flight operations of an airworthy aircraft, maintained and operated to approved standards

	limitations, by competent and authorised individuals, who are acting as a member of an approved organisation	and limitations, by competent and authorised individuals, who are acting as a member of an approved organisation
GLOSSARY - Suitability For Flight	Definition of Suitability For Flight	[Remove in total]
GLOSSARY - Surveyed Route Or Area	A route or area is considered surveyed when it is flown in VMC by day and all hazards and obstacle data that may compromise ~~suitability for flight has~~ been identified and recorded.	A route or area is considered surveyed when it is flown in VMC by day and all hazards and obstacle data that may compromise Aviation Safety have been identified and recorded.

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DASR AMENDMENT RECORD
DCP 2023 - 038

DASR CLAUSE: DASPMAN Glossary

RATIONALE FOR CHANGE

DASA updated the DASPMAN Glossary Of Terms definition for Low Flying to improve readability.

CURRENT REGULATION TEXT

Low Flying *

By day, night or in IMC, flight below the authorised minimum height above and within a defined lateral distance of an obstacle. Low flying does not include flight associated with: a published instrument arrival, approach and departure procedure; or take-off and landing.

REVISED REGULATION TEXT

Low Flying *

As defined in Flight Information Handbook Australia (FIHA) and consistent with the relevant OpSpec.

Australian Government
Department of Defence
Defence Aviation Safety Authority

Defence Aviation Safety Authority

DASR AMENDMENT RECORD
DCP 2024 - 012

DASR CLAUSE: DASR 21 - Aircraft Design, Production and Certification

RATIONALE FOR CHANGE

In March 2021 the European Defence Agency released Edition 2.0 of EMAR 21, which incorporated updates originating from several EASA Part-21 releases. Due to the scope of changes introduced in Edition 2.0, DASA has taken a phased approach to updating DASR 21 for alignment. This is the fifth DCP as part of this alignment task. This DCP incorporates a number of minor and editorial changes to all DASR 21 subparts and covers the remaining EMAR 21 Ed 2.0 changes, excluding changes relating to Operational Suitability Data, which will be addressed as a separate DCP.

CURRENT REGULATION TEXT

See Below Enclosure 1 to DCP 2024 - 012 - Amendment Record - DCP 2024-012: Amendments to DASR 21 to align with EMAR 21 Ed 2.0 Remaining Changes (BP34432188)

REVISED REGULATION TEXT

See Below Enclosure 1 to DCP 2024 - 012 - Amendment Record - DCP 2024-012: Amendments to DASR 21 to align with EMAR 21 Ed 2.0 Remaining Changes (BP34432188)

Amendment Record - DCP 2024-012: Amendments to DASR 21 to align with EMAR 21 Ed 2.0 Remaining Changes

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

a. deleted text is marked with ~~strike through~~;

b. text highlighted in green is Australian unique text; and

c. new or amended text is highlighted in grey;

d. new EMAR Ed 2.0 (AMC/GM Ed 2.1) based text that will NOT be incorporated is ~~highlighted grey with strikethrough~~

DASR 21 SUBPART A — GENERAL PROVISIONS

21.A.1 – Scope

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

AMC 21.A.1 - Scope (AUS)

Any design, Instruction for Continuing Airworthiness and other product approved under TAREG continues to be applicable and authoritative under DASR for its equivalent purpose, and hence does not require re-approval under DASR by default.

21.A.2 - Undertaking by another organisation than the applicant for, or holder of, a certificate

The actions and obligations required to be undertaken by the holder of, or applicant for, a certificate for a product, part or appliance under this Section may be undertaken on its behalf by any other person or organisation, provided the holder of, or applicant for, that certificate can show that it has made an agreement with the other person or organisation such as to ensure that the holder's obligations are and will be properly discharged.

AMC 21.A.2 - Undertaking by another organisation than the applicant for, or holder of, a certificate

In order to undertake the actions and obligations of the holder of, or applicant for, the certificate, the person or organisation should have an agreement in place with an approved Design Organisation who has access to the data related to the ~~T~~type ~~D~~design ~~data~~.

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

…

(b) Reporting ~~Occurrences~~ to the Authority.

…

(c) Investigation of Reported Occurrences.

1. When an occurrence reported under paragraph (b), or under DASR 21.A.129(f)(2) or DASR 21.A.165(f)(2) results from a deficiency in the design, or a manufacturing deficiency, the holder of the type-certificate, restricted type-certificate, supplemental type-certificate, AUSMTSO authorisation, major repair design approval or any other relevant approval deemed to have been issued under this DASR, or the manufacturer (Production Organisation) as appropriate, shall investigate the reason for the deficiency and report to the Authority the results of its investigation and any action it is taking or proposes to take to correct that deficiency.

…

AMC2 to 21.A.3A(a) Collection, investigation and analysis of data related to DLRO~~ETOPS~~ significant occurrences

(1) Holders of a type-certificate, restricted type-certificate, supplemental type-certificate or any other relevant approval deemed to have been issued under DASR 21 and which includes Defence Long Range Operation (DLRO)~~extended range operation with two-engined aeroplane (ETOPS)~~ capability should implement a specific tracking, reporting and resolution system for DLRO~~ETOPS~~ significant occurrences, suitable to ensure the initial and continued fleet compliance with the applicable DLRO~~ETOPS~~ reliability objectives. This system should be part of the system for collection, investigation and analysis of data required by DASR 21.A.3A(a).

Appropriate coordination should exist between engine TC holder, propeller TC holder and APU MTSO authorisation holder with the aircraft TC holder to ensure compliance with the DLRO~~ETOPS~~ reliability objectives.

(2) ~~For tracking, reporting and resolution of ETOPS significant occurrences refer to the latest edition of EASA AMC 20-6 (part of AMC-20 document), together with military specific considerations that can be found in the EMAD 20 document.~~ Reserved.

AMC~~2~~3 21.A.3A(a) - System for collection, investigation and analysis of data (AUS)

Foreign CAA/MAAs may issue Airworthiness Directives (ADs), or equivalent mandatory continuing airworthiness information. These are not automatically applicable under DASR and~~, issued by airworthiness authorities other than DASA~~ should be treated in accordance with DASR 21.A.3A. Such ~~ADs~~ documents should be assessed for applicability to the ADF type design by the holder of the airworthiness authorisation ~~instrument~~ listed in DASR 21.A.3A(a). ~~ADs~~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 ~~instrument~~ listed in DASR 21.A.3A(a) should monitor relevant ~~ADs~~information issued by any ~~airworthiness~~aviation authority whose prior certification was recognised by DASA in issuing that authorisation~~instrument~~.

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

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

There are instances where a failure, malfunction or defect, or analysis of failures, malfunctions or defects represents some level of shortfall to the type design but may not result in a reportable occurrence in accordance with DASR 21.A.3A(b) based on an assessment of the available information at that time. In these situations, the holder ought to make a judgement as to whether the shortfall constitutes a risk or not.

Where the shortfall is judged to be within the level of safety inherent to the certification baseline, the holder should continue monitoring and assessing relevant information for risks to the type design.

Where a risk is judged to exist, the risk or hazard must be eliminated So Far As is Reasonably Practicable (SFARP), or if it is not practicable to do so, minimised SFARP in accordance with the requirements of the Work Health and Safety Act 2011, the Work Health and Safety Regulations 2011 and DASR SMS.A.25(b)(2.2).

In meeting the DASR SMS requirements the holder of the type-certificate, restricted type-certificate, supplemental type-certificate, AUSMTSO authorisation, major repair design approval or any other relevant approval deemed to have been issued under this DASR, should formalise arrangements with

operators of the product to ensure timely and effective characterisation and communication of risks when deficiencies are being managed. 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

For occurrence reporting, 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).
In particular:

a) The products and part and appliances design rules prescribe that occurrences defined as a failure, malfunction, defect or other occurrence which has resulted in or may result in an unsafe condition must be reported to the Authority;

b) According to the product and part and appliances production rules occurrences defined as a deviation which could lead to an unsafe condition must be reported to the Authority.

GM1 21.A.3A(b) - Occurrence reporting (AUS)

Relevant design organisations are to independently report on the occurrences to the Authority, with a focus on impact to the on-going validity of the certified design.

Typically, relevant design organisations will be made aware of occurrences by DASR 145 and Continuing Airworthiness Management Organisations (CAMO) fulfilling their reporting requirements.

However, in the course of conduct of design activities, analysis or relevant Military Type-certificate holder obligations, identified occurrences are to be reported to the Authority. These instances may not have a corresponding DASR 145 or CAMO Occurrence Report.

A list of occurrences to be reported are detailed in AMC GR.40 - Occurrence Reporting. This is not a comprehensive list and an additional requirement may need to be considered dependent on the scope of the organisations operations.

The following Sections are the most relevant to DASR 21~~J~~:

SECTION I: AIRCRAFT FLIGHT OPERATIONS

SECTION II: AIRCRAFT TECHNICAL

SECTION V: IMMEDIATE NOTIFICATION OF ACCIDENTS AND SERIOUS INCIDENTS

In particular:

The products and part and appliances design rules prescribe that occurrences defined as a failure, malfunction, defect or other occurrence which has resulted in or may result in an unsafe condition must be reported to the Authority;

According to the product and part and appliances production rules occurrences defined as a deviation which could lead to an unsafe condition must be reported to the Authority.

AMC 21.A.3A(b)(2) - Reporting to the Authority

Within the overall limit of 72 hours the degree of urgency for submission of a report should be determined by the level of hazard judged to have resulted from the occurrence.

Where an occurrence is judged by the person identifying the possible unsafe condition to have resulted in an immediate and particularly significant hazard the Authority expects to be advised immediately and by the fastest possible means ~~(telephone, fax, email, telex, etc.)~~ of whatever details are available at that time. This initial report should be followed up by a full written report within 72 hours. A typical example would be an uncontained engine failure resulting in damage to aircraft primary structure.

Where the occurrence is judged to have resulted in a less immediate and less significant hazard, report submission may be delayed up to the maximum of three days in order to provide more details.

AMC1 21.A.3A(b)(2) - Reporting to the Authority (AUS)

Occurrence Reports may be transmitted by any method, however the preferred method is using the DASR Form 44 – Occurrence Report.

Urgent unsafe conditions should be reported by the fastest possible means ~~verbally~~, ie via telephone, in the first instance. All reporting should be followed up by a written report, ~~as time allows~~ within 72 hours.

The occurrence reporting process, content and format should be defined in the relevant organisation exposition or handbook ~~DASR 21J – Design Organisation Exposition~~.

Each report should contain at least the following information:

a) organisation details,

b) information necessary to identify the subject aircraft and/or products, parts and appliances affected, including software version~~,~~ (if applicable),

c) details of the occurrence,

~~c)~~d) implications to on-going validity of the type design (recommended), as to whether an unsafe condition exists, and

~~d)~~e) any other relevant information.

21.A.3B - Airworthiness Directives

(a) An Airworthiness Directive means a document issued or adopted by the Authority which mandates actions to be performed on an aircraft to restore an acceptable level of safety, when evidence shows that the safety level of this aircraft may otherwise be compromised.

(b) The Authority shall issue an airworthiness directive when:

1. ~~A~~an unsafe condition has been determined by the Authority to exist in an aircraft, as a result of a deficiency in the aircraft, or an engine, propeller, part or appliance installed on this aircraft; and

2. ~~T~~that condition is likely to exist or develop in other aircraft, including engine, propeller, part or appliance installed on those aircraft that may be affected by this unsafe condition.

(c) When an Airworthiness Directive has to be issued by the Authority to correct the unsafe condition referred to in paragraph (b), or to require the performance of an inspection, the holder of the type-certificate, restricted type-certificate, supplemental type-certificate, major repair design approval, AUSMTSO authorisation or any other relevant approval deemed to have been issued under this DASR, shall:

1. ~~P~~propose the appropriate corrective action and/or required inspections and submit details of these proposals to the Authority for approval;

2. ~~F~~following the approval by the Authority of the corrective action and/or required inspections referred to under subparagraph (c)1, make available to all known operators or owners of the product, part or appliance and, on request, to any person required to comply with the airworthiness directive, appropriate descriptive data and accomplishment instructions.

(d) An Airworthiness Directive shall contain at least the following information:

1. ~~A~~an identification of the unsafe condition;

2. ~~A~~an identification of the affected aircraft; operating and maintenance associated documentation;

3. ~~T~~the action(s) required;

4. ~~T~~the compliance time for the required action(s);

5. ~~T~~the date of entry into force.

GM 21.A.3B(a) - Airworthiness Directives (AUS)

The Authority will issue all Airworthiness Directives. In some circumstances the Authority's issuing function may be conducted by a Delegate of the Safety Authority (DoSA) within the scope of their delegation.

...

GM 21.A.3B(b) - 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 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 skill to apply the procedures correctly, and
- the aircraft is assumed to be maintained in accordance with the prescribed instructions for continuing airworthiness (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.

See DASR AMC 21.A.3B(b) for definition of 'unsafe condition' used in DASR 21.A.3B(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 (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.

…

AMC1 21.A.3B(c)1 - Airworthiness Directives (AUS)

Corrective actions and inspections that are proposed by the holder are to eliminate all risks associated with the unsafe condition So Far As is Reasonably Practicable (SFARP), or if it is not reasonably practicable to do so, minimise the risk(s) SFARP. To fulfil this requirement, the holder should ensure that the safety risk management requirements outlined in DASR SMS.A.25(b)(2)(2.2) are applied for all safety related risks.

Foreign Airworthiness Directives

The holder may submit an AD, or equivalent, in support of the proposed corrective action where the Airworthiness Directive (AD) addresses the unsafe condition referred to in DASR 21.A.3B(b) and:

(a) has been issued by an airworthiness authority whose certifications are recognised by DASA, and

(b) has been assessed as applicable to the ADF type design in accordance with DASR AMC2 21.A.3A(a)

AMC2 21.A.3B(c)(1) - Airworthiness Directives for aircraft structures and propulsion systems (AUS)

For unsafe conditions related to structures and propulsion systems the proposed corrective actions and inspections should take into account the following specific considerations in addition to those of DASR AMC1 21.A.3B(c)(1).

AIRCRAFT STRUCTURE

The proposed corrective actions and inspections should be based on conservative engineering analysis and judgement. The proposal submitted to the Authority by the holder should include:

Relevant assumptions and details of the analysis performed.

Justification that the proposed corrective actions and inspections eliminate or otherwise minimise the risk(s) SFARP.

Most airworthiness design standards for structures are based on deterministic criteria, and it follows that proposed corrective actions and inspections will often be based on similar methods. Therefore, the guidance on compliance time under DASR 21.A.3B(d)(4) will usually not be suitable for aircraft

structures unless probabilistic methods are used in development of the proposed corrective actions and inspections. Where probabilistic methods are not used, compliance times should be established using conservative analysis and judgement.

PROPULSION SYSTEMS

The proposed corrective actions and inspections should be based on:

(a) FAA AC 39–8 - Continued Airworthiness Assessment Methodologies (CAAM), or

(b) conservative engineering analysis and judgement.

The proposal submitted to the Authority by the holder should include:

(a) Relevant assumptions and input data (including fleet data and statistical model parameters).

(b) Risk profile over the full duration of the fleet management strategy.

(c) Justification that the proposed corrective actions and inspections eliminate or otherwise minimise the risk(s) SFARP

The application of FAA AC 39–8 for determining compliance time of corrective actions and inspections will typically require detailed design data and complex statistical and probabilistic analyses. The Authority expects that the propulsion system OEM will normally be involved in this process.

GM 21.A.3B(d)(4) - Compliance time charts for military aircraft

…

The civil regulations EASA Part 21 (21.A.3B) allow a time period that is directly related to the level risk~~,~~ i.e. higher the risk the shorter the time period. These regulations have hard limits for the maximum instantaneous risk, the maximum risk for an individual aircraft and maximum cumulative risk for the fleet. The basis of these regulations considers typical civil operation, of 10 major safety campaigns during an aircraft life, a hull life of 60,000 hours and that 75% of the risk is attributed to the design. Using the above assumptions they calculate an acceptable time period for restoration of risk levels to certification levels.

…

AMC 21.A.4~~(b)~~ Transferring of information on eligibility and approval status from the design organisations to production organisations

Where there is a need to provide (normally outside the design organisation) a visible statement of approved design data or airworthiness or environmental protection data associated with the approved design data, the following minimum information should be provided. The need for a visible statement may be in relation to Company holding a military production organisation approval (MPOA) in relation to DASR 21.A.163(c).

The procedures related to the use of forms or other electronic means to provide this information should be agreed with the Authority.

Information to be provided:

Company Name: the name of the responsible design organisation (MTC, MSTC, approval of repair or minor change design, AUSMTSO authorisation holder) issuing the information.

Date: the date at which the information is released.

Eligibility: indicate the specific products or articles, in case of AUSMTSO authorisation, for which data have been approved.

Identification: the part number of the part or appliance. Preference should be given to the use of the Illustrated Parts Catalogue (IPC) designation. Alternatively, the reference to the instruction for continuing airworthiness could be stated. Marking requirements of DASR 21 Section A Subpart Q should be taken into account.

Description: the name or description of the part or document should be given. In the case of a part or appliance preference should be given to use of IPC designation. The description is to include reference to any applicable AUSMTSO authorisation or AUSMPA marking, or previous national approvals still valid.

Purpose of data: the reason for the provision of the information should be stated by the design approval holder.

Examples:

a) Provision of approved design data to a production organisation to permit manufacture (AMC1 to DASR 21.A.133(b) and (c))

b) Information regarding eligibility for installation (replacement parts, repair, modification, etc.)

c) Direct Delivery Authorisation (AMC1 to DASR 21.A.133(b) and (c))

If the data is in support of a change or repair, then reference to the aircraft level approval should be given (make reference to the approved MSTC, change or repair).

Limitations/Remarks: state any information, either directly or by reference to supporting documentation that identifies any particular data or limitations (including specific importing requirements) needed by a production organisation to complete the DASR Form 1.

Approval: provide reference information related to the approval of the data (Authority document or MDOA privilege).

Authorised signature: name and hand-written normal or electronic signature of a person who has written authority from the design organisation, as indicated in the procedures agreed with the Authority.

…

DASR 21 SUBPART B —MTC & MRTC

…

AMC 21.A.14(b) - Alternative procedures

3.2.2 – Identification of changes

The procedure should indicate how the following are identified:

- major changes;
- those minor changes where additional work is necessary to demonstrate compliance with the airworthiness requirements;
- other minor changes ~~requiring~~that require no further demonstration~~g~~ of compliance.

…

21.A.15 - Application

(b) …

6. 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 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

…

AMC 21.A.15(b)(6) - Level of Involvement

…

3. Principles and generic criteria for the LoI determination

The Authority determines its LoI based on the applicant's proposal in view of the risk (the combination of the likelihood of an unidentified non-compliance and its potential impact). This is performed after proper familiarisation with the certification project in three steps:

- Step 1: identification of the likelihood of an unidentified non-compliance,
- Step 2: identification of the risk class, and
- Step 3: determination of the Authority's LoI.

This AMC contains criteria, common to all technology discipline(s), for the determination of:

- any novel or unusual features of the certification project, including operational, organisational and knowledge management aspects;
- the complexity of the design and/or compliance demonstration;
- the performance and experience of the design organisation of the applicant in the domain concerned;
- the criticality of the design or technology and the related safety and environmental risks, including those identified on similar designs; ~~and~~
- ~~the performance and experience of the design organisation of the applicant in the domain concerned.;~~ and
- the data and activities to be retained by the Authority.

21.A.21 - Issue of a type-certificate

(a) In order to be issued a product type-certificate or, when the aircraft does not meet the essential requirements of Annex A to DASP Manual Volume 1 Chapter 4 an aircraft restricted type-certificate, the applicant shall:

1. demonstrate its capability in accordance DASR 21.A.14;

2. comply with DASR 21.A.20

3. demonstrate that the engine and propeller, if installed in the aircraft:

a) have a type-certificate issued in accordance with this DASR; or
b) have been demonstrated to be in compliance with the aircraft type-certification basis and the environmental protection requirements established by the Authority as necessary to ensure the safe flight of the aircraft

…

GM 21.A.35 - Flight Tests

Detailed material on flight testing is included in the applicable ~~certification criteria~~ airworthiness codes and ~~GM~~ associated guidance material.

GM 21.A.35(b)(2) ~~–~~ Objective and Content of Function and Reliability Testing ~~Flight Tests~~

1. Objective

The objective of this testing is to expose the aircraft to the variety of uses, including training, that are likely to occur when in routine service to provide an assurance that it performs its intended functions to the standard required for certification and ~~will~~should continue to do so in service.

2. Content of function and reliability testing

The testing ~~is to~~should cover both routine operations and some simulation of abnormal conditions. The details of the programme ~~are to~~should be agreed with the Authority prior to commencement of testing.

It may be possible to combine this testing with any required to demonstrate compliance with the applicable type-certification ~~criteria~~basis. This will be agreed on a case-by-case basis with the Authority.

Where possible, testing conditions ~~are to~~should be defined with the co-operation of an ~~operator~~ operating organisation.

A substantial proportion of the flying ~~is to~~should be on a single aircraft. The flying ~~is to~~should be carried out to a continuous schedule on an aircraft that is very close to the final type design, operated as though it were in service and ~~is to~~should include a range of representative ambient operating conditions and airfields.

…

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

The type-certificate and restricted type-certificate shall include the type design, the operating limitations, the type-certificate data sheet for airworthiness, the applicable 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 data sheet shall include the record of CO2 emissions compliance and the engine 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.M42 – Integration

The aircraft MTC holder shall be responsible for the integration of Products, Weapons and other Systems onto the aircraft, except for approvals under Subpart E.

GM 21.A.M42 – Integration

~~The principles for the military type-certification (taking in account DASR 21.A.17A) are predicated on the hierarchy of the Military Type Certificate and subordinate certification:~~

~~a. The use of the MTC is limited to Products, namely aircraft, engine or propeller.~~

b. ~~The certification of Parts is to be undertaken in accordance with Subpart K.~~

The following principles of military type-certification should be applied when determining the responsibilities for integration.

(a) The certification of products, including their parts and appliances, is based on the demonstration of compliance (refer to DASR 21.A.20 and 21.A.303) with the applicable type-certification basis (DASR 21.A.17A) and the specified environmental protection requirements (DASR 21.A.18).

1. The responsibility for the integration of products installed on an aircraft follows the hierarchy as specified in DASR 21.A.21(a)(3);
2. The responsibility for the certification and integration of Parts and Appliances (refer also to DASR 21.A.303(a)), which are to be approved under the procedures of Subparts B or D, lies in principle with the type certificate holder of the respective product;
3. The responsibility for the certification and integration of a part of a product covered by a supplemental type-certificate remains with the holder of the supplemental type-certificate.

(b) The approval of parts and appliances within the scope of a Australian Military Technical Standard Order Authorisation (AUSMTSOA) according to the procedures of Subpart O (refer to DASR 21.A.303(b)) is based on the demonstration of compliance with the specified technical performance and airworthiness requirements by the respective manufacturer / holder of the AUSMTSO authorisation. The responsibility for integration of these items on the aircraft lies with the aircraft type certificate holder by demonstrating that the aircraft, with any generic article authorised to the same technical and airworthiness standards is and remains compliant with the applicable type-certification basis and the specified environmental protection requirements.

...

DASR 21 SUBPART D — CHANGES TO MTC & MRTC

…

21.A.90A - Scope

This Subpart establishes the procedure for the approval of changes to type-certificates, and establishes the rights and obligations of the applicants for, and holders of, those approvals. In this Subpart, references to type-certificates include type certificate and restricted type certificate.

GM 21.A.90A - Scope

The term 'changes to the type certificate' is consistently used in DASR 21 Section A Subpart D and E, as well as in the related AMC and GM. This term does not refer to changing the document that reflects the ~~Military~~ Type Certificate (~~M~~TC) but to the elements of the ~~M~~TC as defined in DASR 21.A.41. It means that the processes for the approval of changes, as described in the said two Subparts, do not only apply to changes to the type design, but may also apply to changes to:

- the operating limitations;
- the type certificate data sheet (TCDS) for airworthiness and, where applicable, emissions;
- the applicable type-certification basis and environmental protection requirements with which the applicant has to demonstrate compliance;
- any other conditions or limitations prescribed for the product by the Authority; and
- where applicable, the TCDS for noise

21.A.90B - Reserved

(Reserved)

…

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

…

3.4 Complementary guidance for classification of changes

A change to the MTC is judged to have an 'appreciable effect on the mass, balance, structural strength, reliability, operational characteristics, noise, fuel venting, exhaust emission or other characteristics affecting the airworthiness, or environmental protection of the product~~or its environmental characteristics~~' and, therefore, should be classified as major, in particular but not only, when one or more of the following conditions are met:

…

AMC 21.A.93(b)(3)(iii) - Level of Involvement (AUS)

~~The proposed assessment shall take into account at least the following elements:~~

1. ~~novel or unusual features of the certification project, including operational, organisational and knowledge management aspects;~~
2. ~~complexity of the design and/or demonstration of compliance;~~
3. ~~criticality of the design or technology and the related safety and environmental risks, including those identified on similar designs; and~~
4. ~~performance and experience of the design organisation of the applicant in the domain concerned.~~

~~Based on this assessment, the application shall include a proposal for the Authority's involvement in the verification of the compliance demonstration activities and data.~~

For acceptable means of compliance regarding proposal and determination of LoI see AMC 21.A.15(b)(6).

GM 21.A.101 - Establishing the certification basis of changed aeronautical products

...

1.2.6 This GM primarily provides guidance for the designation of applicable airworthiness requirements for the type-certification basis for the changed product. This GM is not intended to be used to determine the applicable environmental protection requirements (aircraft noise, fuel venting, and engine exhaust emissions and aeroplane CO2 emissions requirements) for changed products, as they are designated by the Authority through DASR 21.A.18.
1.2.7 This GM is not mandatory. This GM describes an acceptable means, but not the only means, to comply with DASR 21.A.101. However, an applicant who uses the means described in this GM must follow it entirely.
1.3. Reserved.

SUBPART F - PRODUCTION WITHOUT MILITARY PRODUCTION ORGANISATION APPROVAL

...

GM2 to 21.A.121(b) - Applicability – Applicable design data

Applicable design data is defined as all necessary drawings, specifications and other technical information provided by the applicant for, or holder of a design organisation approval, MTC, MSTC, approval of repair or minor change design, or AUSMTSO authorisation (or equivalent when DASR 21 Section A Subpart F is used for production of products, parts or appliances, the design of which has been approved other than according to DASR 21), and released in a controlled manner to the manufacturer producing under DASR 21 Section A Subpart F. This will be sufficient for the development of production data to enable manufacture in conformity with the design data.

Prior to issue of the MTC, MSTC, approval of repair or minor change design or AUSMTSO authorisation, or equivalent, design data is defined as 'not approved', but parts and appliances may be released with a DASR Form 1—Authorised Release Certificate, as a certificate of conformity.

After issue of the MTC, MSTC, approval of repair or minor change or AUSMTSO authorisation, or equivalent, this design data is defined as 'approved' and items manufactured in conformity are eligible for release on a DASR Form 1 for airworthiness purposes.

For the purpose of Subpart F of DASR 21, the term 'applicable design data' includes the information related to the applicable engine exhaust emissions and aeroplane CO2 emissions production cut-off requirements.

...

AMC1 21.A.122 - Eligibility – Link between design and production

An 'arrangement' is considered suitable if it is documented and satisfies the Authority that co-ordination is satisfactory.

To achieve satisfactory co-ordination the documented arrangements should at least define the following aspects irrespective of whether the design organisation and the person producing or intending to produce under DASR 21 Section A Subpart F are separate legal entities or not:

a) The responsibilities of a design organisation which assure correct and timely transfer of up-to-date applicable design data~~,~~ (e.g., drawings, material specifications, dimensional data, processes, surface treatments, shipping conditions, quality requirements, etc.);

b) The responsibilities and procedures of the manufacturer for receiving, managing and using the applicable design data provided by the design organisation;

c) The responsibilities and procedures of the manufacturer for developing, where applicable, its own manufacturing data in compliance with the applicable design data package;

d) The responsibilities of the manufacturer to assist the design organisation in dealing with continuing airworthiness matters and for required actions, (e.g., traceability of parts in case of direct delivery to users, retrofitting of modifications, traceability of processes' outputs and approved deviations for individual parts as applicable, technical information and assistance, etc.);

...

AMC2 21.A.122 - Eligibility – Link between design and production

In accordance with DASR AMC1 to 21.A.122 the person producing or intending to produce under DASR 21 Section A Subpart F should demonstrate to the Authority that it has entered into an

arrangement with the design organisation. The arrangement should be documented irrespective of whether the two organisations are separate legal entities or not.

The documented arrangement should facilitate the person producing or intending to produce under DASR 21 Section A Subpart F to demonstrate compliance with the requirement of DASR 21.A.122 by means of written documents agreed.

In the case where the design organisation and the person producing or intending to produce under DASR 21 Section A Subpart F are part of the same legal entity these interfaces may be demonstrated by company procedures accepted by the Authority.

In all other cases to define such a design/production interface the following sample format is offered:

Arrangement Sample Form:

<table>
<tr><td colspan="2">Arrangement
In accordance with DASR 21.A.122</td></tr>
<tr><td>The undersigned agree on the following commitments:</td><td>relevant interface procedures</td></tr>
<tr><td>The design organisation [NAME] takes responsibility to
~~?~~ - assure correct and timely transfer of up-to-date applicable design data, eg drawings, material specifications, dimensional data, processes, surface treatments, shipping conditions, quality requirements, etc, to the person producing under DASR 21 Section A Subpart F [NAME]
~~?~~ - provide visible statement(s) of approved design data</td><td></td></tr>
<tr><td>The person producing under DASR 21 Section A Subpart F [NAME] takes responsibility to
~~?~~ - assist the design organisation [Name] in dealing with continuing airworthiness matter and for required actions
~~?~~ - assist the design organisation [Name] in case of products prior to type-certification in demonstrating compliance with airworthiness requirements
~~?~~ - develop, where applicable, its own manufacturing data in compliance with the airworthiness data package</td><td></td></tr>
<tr><td>The design organisation [Name] and the person producing under DASR 21 Section A Subpart F [Name] take joint responsibility to
~~?~~ - deal adequately with production deviations and non conforming parts in accordance with the applicable procedures of the design organisation and the manufacturer producing under DASR 21 Section A Subpart F.
~~?~~ - achieve adequate configuration control of manufactured parts, to enable the manufacturer producing under DASR 21 Section A Subpart F to make the final determination and identification for conformity.</td><td></td></tr>
<tr><td colspan="2">The scope of production covered by this arrangement is detailed in ... [DOCUMENT REFERENCE/ ATTACHED LIST]

[When the design organisation is not the same legal entity as the manufacturer producing under DASR 21 Section A Subpart F]

Transfer of approved design data
The MTC/MSTC/AUSMTSO authorisation holder [NAME] acknowledges that the approved design data provided, controlled and modified in accordance with the arrangement are recognised as approved by the Authority and therefore parts and appliance manufactured in accordance with these data and found in a condition for safe operation may be released certifying that the item was manufactured in conformity to approved design data and is in a condition for safe operation.</td></tr>
<tr><td colspan="2">[When the design organisation is not the same legal entity as the manufacturer producing under DASR 21 Section A Subpart F]</td></tr>
</table>

for the [NAME of the design organisation/MDOA holder] date signature xx.xx.xxxx ([NAME in block letters])	for the [NAME of the person producing under DASR 21 Section A Subpart F] date signature xx.xx.xxxx ([NAME in block letters])

Instructions for completion:

Title: The title of the relevant document should clearly indicate that it serves the purpose of a design/production interface arrangement in accordance with DASR 21.A.122.

Commitment: The document should include the basic commitments between the design organisation and the manufacturer producing under DASR 21 Section A Subpart F as addressed in DASR AMC 21.A.4 and DASR AMC1 to 21.A.122.

Relevant Procedures: Identify an entry point into the documentary system of the organisations with respect to the implementation of the arrangement (for example a contract, quality plan, handbooks, common applicable procedures, working plans etc.).

...

21.A.124 - Application

...

(b) Such application shall contain:

1. Evidence which demonstrate, where applicable, that:

i. ~~T~~the issuance of a production organisation approval under DASR 21 Section A Subpart G—Military Production Organisation Approval Production, would be inappropriate; or

ii. ~~T~~the certification or approval of a product, part or appliance under this Subpart is needed pending the issuance of a production organisation approval under DASR 21 Section A Subpart G.

2. An outline of the information required by DASR 21.A.125A(b).

GM 21.A.124(a) – Application – Application form

DASR Form 60—Application for agreement of production under DASR 21 Subpart F, is to be completed by the applicant.

An application may be accepted from:

a) ~~A~~an individual applying on their own behalf, or

b) ~~I~~in the case of an organisation, an individual with the authority to make agreements on behalf of the organisation.

The completed form is to be forwarded to the Authority.

...

21.A.125A - Issue of a letter of agreement

The applicant shall be entitled to have a letter of agreement issued by the Authority agreeing to the showing of conformity of individual products, parts and appliances under this Subpart, after:

(a) ~~H~~having established a production inspection system that ensures that each product, part or appliance conforms to the applicable design data and is in condition for safe operation.

(b) ~~Providing~~ having provided a manual that contains:

1. ~~A~~a description of the production inspection system required under paragraph a;

2. ~~A~~a description of the means for making the determinations of the production inspection system; and

3. ~~A~~a description of the tests of DASR 21.A.127 and DASR 21.A.128, and the names of persons authorised for the purpose of DASR 21.A.130(a).

(c) ~~D~~demonstrating that it is able to provide assistance in accordance with DASR 21.A.3A, and DASR 21.A.129(d).

GM 21.A.125A - Letter of agreement - Meaning of individual

'Individual' means that each part number or type of item~~,~~ (i.e., product, part or appliance~~,~~) to be produced is to be specifically referenced, either directly or through a referenced capability list, in the letter of agreement from the Authority. The letter may also specify any limitation in the production rate.

GM1 21.A.125A(b) - Letter of agreement - Contents of the Manual

...

k) Description of the Inspection System (including test~~)~~, see DASR GM2 to DASR 21.A.125A(b), and DASR 21.A.127 and DASR 21.A.128), and the procedures to meet DASR 21.A.126 and associated GM;

...

21.A.125B - Findings

(a) When objective evidence is found showing non-compliance of the holder of a letter of agreement with the applicable requirements of this DASR, the finding shall be classified as follows:

1. A level one finding is any non-compliance with this DASR which could lead to uncontrolled non-compliances with applicable design data and which could affect the safety of the aircraft.

2. A level two finding is any non-compliance with this DASR which is not classified as level one.

(b) A level three finding is any item where it has been identified, by objective evidence, to contain potential problems that could lead to a non-compliance under paragraph (a).

...

21.A.125C - Duration and continued validity

(a) The letter of agreement shall be issued for a limited duration not exceeding one year, or as agreed by the Authority. It shall remain valid unless:

1. ~~T~~the holder of the letter of agreement fails to demonstrate compliance with the applicable requirements of this Subpart; or

2. ~~T~~there is evidence that the manufacturer cannot maintain satisfactory control of the manufacture of products, parts, or appliances under the agreement; or

3. ~~T~~the manufacturer no longer meets the requirements of DASR 21.A.122; or

4. ~~T~~the letter of agreement has been surrendered, revoked, or has expired.

...

21.A.126 - Production inspection system

(a) The production inspection system required under DASR 21.A.125A(a) shall provide a means for determining that:

1. ~~I~~incoming materials, and bought or subcontracted parts, used in the finished product are as specified in the applicable design data;

2. ~~I~~incoming materials, and bought or subcontracted parts, are properly identified;

3. ~~P~~processes, manufacturing techniques and methods of assembly affecting the quality and safety of the finished product are accomplished in accordance with specifications accepted by the Authority;

4. ~~D~~design changes, including material substitutions, have been approved under DASR Subpart D or DASR Subpart E and controlled before being incorporated in the finished product.

(b) The production inspection system required by DASR 21.A.125A(a), shall also be such as to ensure that:

1. ~~P~~parts in process are inspected for conformity with the applicable design data at points in production where accurate determinations can be made;

2. ~~M~~materials subject to damage and deterioration are suitably stored and adequately protected;

3. ~~C~~current design drawings are readily available to manufacturing and inspection personnel, and used when necessary;

4. ~~R~~rejected materials and parts are segregated and identified in a manner that precludes installation in the finished product;

5. ~~M~~materials and parts that are withheld because of departures from design data or specifications, and that are to be considered for installation in the finished product, are subjected to an approved engineering and manufacturing review procedure. Those materials and parts determined by this procedure to be serviceable shall be properly identified and re-inspected if rework or repair is necessary. Materials and parts rejected by this procedure shall be marked and disposed of to ensure that they are not incorporated in the final product;

6. ~~R~~records produced under the production inspection system are maintained, identified with the completed product or part where practicable, and retained by the manufacturer in order to provide the information necessary to ensure the continued airworthiness of the product.

GM 21.A.126 - Production Inspection System

DASR GM ~~under paragraphs~~ 21.A.126(a) and 21.A.126(b), have been developed for persons producing under DASR 21 Section A Subpart F on the long term basis as defined in DASR 21.A.124(b)(1)(i).

...

GM 21.A.126(a)(1) - Production Inspection System – Conformity of supplied parts, appliances and material

…

d) For suppliers not holding a MPOA the inspection system of the person producing under DASR 21 Section A Subpart F ~~is to~~ should establish a system for control of incoming

materials and bought or subcontracted items which provides for inspections and tests of such items by the person producing under DASR 21 Section A Subpart F at the supplier's facility, if the item cannot or will not be completely inspected upon receipt.

GM 21.A.126(a)(2) - Production Inspection System - Identification of incoming materials and parts

All parts and materials coming from external parties ~~are to~~ should be identified and inspected to ascertain that they have not been damaged during transport or unpacking, that the incoming parts and materials have the appropriate and correct accompanying documentation and that the configuration and condition of the parts or materials is as laid down in that documentation.

Only on completion of these checks and of any incoming further verifications laid down in the procurement specification, may the part or material be accepted for warehousing and used in production.

This acceptance is to be certified by an inspection statement.

A suitable recording system is to allow reconstruction at any time of the history of every material or part.

The areas where the incoming checks are carried out and the materials or parts are stored pending completion of the checks are to be physically segregated from other departments.

...

GM2 to 21.A.126(a)(3) - Production Inspection System - Means of checking of the production processes

...

b) Availability of personnel with suitable qualification, experience, and training for each required production, inspection, and test task. Special attention is to be paid to tasks requiring specialised knowledge and skill, e.g. NDT/NDI, welding…;

...

GM 21.A.126(a)(4) - Production Inspection System – Applicable design/production data procedures

a) When a person producing under DASR 21 Section A Subpart F is developing its own manufacturing data from the design data package delivered by a Design holder, procedures are to demonstrate the correct transcription of the original design data.

b) Procedures are to define the manner in which applicable design data is used to issue and update the production/inspection data, which determines the conformity of products, parts, appliances and materials. The procedure is to also define the traceability of such data to each individual product, part, appliance or material for the purpose of stating the condition for safe operation and for issuing a Statement of Conformity.

c) During execution, all works are to be accompanied by documentation giving either directly or by means of appropriate references, the description of the works as well as the identification of the personnel in charge of inspection and execution tasks for each of the different work phases.

GM 21.A.126(b)(1) - Production Inspection System - Inspection of parts in process

...

During the manufacturing process, each article is to be inspected in accordance with a plan which identifies the nature of all inspections required and the production stages at which they occur. The plan is to also identify any particular skills or qualification required of person(s) carrying out the

inspections, (e.g., NDT personnel). A copy of the plan is to be included in, or referenced by, the manual required by DASR 21.A.125A(b).

...

GM 21.A.126(b)(2) - Production Inspection System – Suitable storage and protection

...

d) Lighting is to be such as to allow safe and effective access and handling, but is to also cater for items which are sensitive to light~~,~~ e.g., rubber items.

e) Care is to be taken to segregate and shield items which can emit fumes~~,~~ (e.g., wet batteries), substances or radiation~~,~~ (e.g., magnetic items), which are potentially damaging to other stored items.

...

GM 21.A.126(b)(3) - Production Inspection System – Use of derived data instead of original design data

Where derived data, e.g., worksheets, process sheets, fabrication/inspection instructions, etc., is used instead of original design drawings, documents identification and control procedures are to be used to ensure that the documentation in use is always accurate and current.

GM 21.A.126(b)(4) - Production Inspection System – Segregation of rejected material

All materials and parts which have been identified at any stage in the manufacturing process as not conforming to the specific working and inspection instructions ~~are to~~ must be suitably identified by clearly marking or labelling, to indicate their non-conforming status.

All such non-conforming material or parts ~~are to~~ should be removed from the production area and held in a restricted access segregated area until an appropriate disposition is determined in accordance with DASR 21.A.126(b)(5).

GM 21.A.126(b)(5) - Production Inspection System – Engineering and manufacturing review procedure

a) The procedure is to permit to record the deviation, to present it to the Design holder under the provisions of DASR 21.A.122, and to record the results of the review and actions taken consequently as regards the part/product.

b) Any unintentional deviation from the manufacturing/inspection data ~~is to~~ should be recorded and handled in accordance with DASR 21 Section A Subpart D—Changes to Military Type-certificates and Restricted Type-certificates, or DASR 21 Section A Subpart E—Military Supplemental Type-certificates, as changes to the approved design.

GM 21.A.126(b)(6) - Production Inspection System – Recording and record keeping

a) Records within a production environment satisfy two purposes. Firstly, they are to, during the production process, ensure that products, parts, or appliances are in conformity with the controlling data throughout the manufacturing cycle. Secondly, certain records of milestone events are needed to subsequently provide objective evidence that all prescribed stages of the production process have been satisfactorily completed and that compliance with the applicable design data has been achieved.

Therefore, the person producing under DASR 21 Section A Subpart F—Production without Military Production Organisation Approval~~, is to~~ should implement a system for the compilation and retention of records during all stages of manufacture, covering short-term and long-term records appropriate to the nature of the product and its production processes.

The management of such information is to be subject to appropriate documented procedures in the Manual required by DASR 21.A.125A(b).

All forms of recording media are acceptable (paper, film, magnetic ...) provided they can meet the required duration for archiving under the conditions provided.

b) The related procedures are to:

i. Identify records to be kept.

ii. Describe the organisation of and responsibility for the archiving system (location, compilation, format) and conditions for access to the information, (e.g., by product, subject).

...

21.A.127 - Tests: Aircraft

(a) Each manufacturer~~,~~ of an aircraft manufactured under this Subpart~~,~~ shall establish an approved production ground and flight test procedure and check-off forms, and in accordance with those forms, test each aircraft produced, as a means of establishing relevant aspects of compliance with DASR 21.A.125A(a).

...

GM 21.A.127(a) - Approved production ground and flight tests

The production ground and flight tests for new aircraft will be specified by the aircraft design organisation ~~in conjunction with the applicable flight test authority~~.

...

GM2 21.A.128 - Acceptable functional test – Variable pitch propellers

The functional tests required for a new propeller will be specified by the propeller design organisation and ~~is to~~ should normally include a number of complete cycles of control throughout the propeller pitch and rotational speed ranges. In addition, for feathering and/or reversing propellers, several cycles of feathering operation and reversing operation from the lowest normal pitch to the maximum reverse pitch, will normally be required.

GM3 21.A.128 - Acceptable functional test - Engines and Propellers

After functional test, each engine or propeller ~~is to~~ should be inspected to determine that the engine or propeller is in condition for safe operation. Such inspection will be specified by the design organisation and is to normally include internal inspection and examination. The degree of internal inspections will normally be determined on the basis of the positive results of previous inspections conducted on the first production engines, and on the basis of service experience.

21.A.129 - Obligations of the manufacturer

Each manufacturer of a product, part or appliance being manufactured under this Subpart shall:

(a) ~~M~~make each product, part or appliance available for inspection by the Authority;

(b) ~~M~~maintain at the place of manufacture the technical data and drawings necessary to determine whether the product conforms to the applicable design data;

(c) ~~M~~maintain the production inspection system that ensures that each product conforms to the applicable design data and is in condition for safe operation;

(d) ~~P~~provide assistance to the holder of the type-certificate, restricted type-certificate or design approval in dealing with any continuing airworthiness actions that are related to the products, parts or appliances that have been produced;

(e) ~~E~~establish and maintain an internal occurrence reporting system in the interest of safety, to enable the collection and assessment of occurrence reports in order to identify adverse trends or to address deficiencies, and to extract reportable occurrences. This system shall include

evaluation of relevant information relating to occurrences and the promulgation of related information;

(f)

1. ~~R~~report to the holder of the type-certificate, restricted type-certificate or design approval, all cases where products, parts or appliances have been released by the manufacturer and subsequently identified to have deviations from the applicable design data, and investigate with the holder of the type-certificate, restricted type-certificate or design approval to identify those deviations which could lead to an unsafe condition;

2. ~~R~~report to the Authority the deviations which could lead to an unsafe condition identified according to subparagraph (f)1. Such reports shall be made in a form and manner established by the Authority under DASR 21.A.3A(b)(2) ~~or accepted by the Authority~~;

3. ~~W~~where the manufacturer acts as supplier to another production organisation, report also to that other organisation all cases where it has released products, parts or appliances to that organisation and subsequently identified them to have possible deviations from the applicable design data.

...

AMC3 21.A.129(c) - Obligations of the manufacturer – Condition for safe operation

...

n) The registration has been marked on the exterior of the aircraft as required by Defence policy ~~by national legislation. Where required by national legislation fix a fireproof owners nameplate~~.

o) Where applicable, there should be a certificate for noise and, for the aircraft radio station.

p) ~~Where applicable, t~~The installed compass and or compass systems have been adjusted and compensated and a deviation card displayed in the aircraft.

q) Software criticality list.

r) A record of rigging and control surface movement measurements.

s) Details of installations which will be removed before starting ~~commercial air transport~~ regular operations~~,~~ (e.g. ferry kits for fuel, radio or navigation).

t) List of all applicable Service Bulletins and airworthiness directives that have been implemented.

AMC 21.A.129(f)(2) - Reporting to the Authority - Form and manner (AUS)

~~Form AE 061—Report on Aircraft and Aeronautical Product or~~ DASR Form 44~~—Technical~~ Occurrence Report, should be completed as established by the Authority.

~~Form AE 061 and~~ DASR Form 44 may be accepted from:

An individual reporting on their own behalf, or

In the case of an organisation, an individual with the authority to report on behalf of the organisation.

Urgent unsafe conditions should be reported verbally, ie via telephone, in the first instance, while all reporting should be followed up by the completed form, as time allows.

~~The completed form is to be forwarded to the Authority, carbon copied (Cc) the applicable DIA desk officer or other working level point of contact~~. NOTE: Depending on organisational arrangements, concurrent reporting to the applicable CAMO may also be necessary.

21.A.130 - Statement of Conformity

(a) Each manufacturer of a product, part or appliance manufactured under this Subpart shall raise a Statement of Conformity, a DASR Form 52 - Military Aircraft Statement of Conformity, for complete aircraft, or a DASR Form 1 - Authorised Release Certificate, for other products, parts or appliances. This statement shall be signed by an authorised person who holds a responsible position in the manufacturing organisation.

(b) A statement of conformity shall include all of the below:

1. ~~F~~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. ~~F~~for each aircraft, a statement that the aircraft has been ground and flight checked in accordance with DASR 21.A.127(a);

3. ~~F~~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. ~~A~~additionally, in the case of ~~engines,~~ environmental requirements:

   (i) a statement that the completed engine is in compliance with the applicable engine exhaust emission requirements ~~(where applicable)~~ 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

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.

(d) The Authority shall validate by counter-signature the Statement of Conformity if it finds after inspection that the product, part or appliance conforms to the applicable design data and is in condition for safe operation.

AMC1 21.A.130(b) - Statement of Conformity for Complete Aircraft

1. ~~Purpose and scope~~ PURPOSE AND SCOPE

The description for this AMC ~~is contained in DASR Form 52 – Military Aircraft Statement of Conformity, and~~ refers only to the use of the aircraft Statement of Conformity issued under DASR 21 Section A Subpart F. Statement of Conformity under DASR 21 Section A Subpart F for products other than complete aircraft, and for parts and appliances is described in DASR AMC2 to 21.A.130(b).

Use of the aircraft Statement of Conformity issued by an approved production organisation is described in DASR Section A Subpart G 21.A.163(b) and the completion instructions are to be found together with DASR Form 52.

The purpose of the aircraft Statement of Conformity (DASR Form 52) issued under DASR 21 Section A Subpart F is to present to the Authority a complete aircraft. The Authority only validates the

Statement of Conformity if it finds, as described in DASR 21.A.130 and its associated GM, that the aircraft conforms with the type design and is in condition for safe operation.

2. GENERAL

The Statement of Conformity must comply with the format provided with DASR Form 52 including block numbers and the location of each Block. The size of each Block may however be varied to suit the individual application, but not to the extent that would make the Statement of Conformity unrecognisable. If in doubt consult the Authority.

The Statement of Conformity must either be pre-printed or computer generated but in either case the printing of lines and characters must be clear and legible. Pre-printed wording is permitted in accordance with the attached model but no other certification statements are permitted.
Statements of Conformity must be issued in one or more of the official language(s) of the issuing Authority with translations in English shown below, if required. Completion may be either machine/computer printed or hand-written using block letters to permit easy reading.
A copy of the Statement of Conformity and all referenced attachments are to be retained by the manufacturer. A copy of the validated Statement of Conformity is to be retained by the competent authority.

3. COMPLETION OF THE AIRCRAFT STATEMENT OF CONFORMITY BY THE ORIGINATOR

There must be an entry in all Blocks to make the document a valid Statement.

A Statement of Conformity must not be issued for validation by the competent authority, unless the design of the aircraft and its installed products are approved.

The information required in Blocks 9, 10, 11, 12, 13 and 14 may be by reference to separate identified documents held on file by the manufacturer, unless the competent authority agrees otherwise.

This Statement of Conformity is not intended to provide for the complete equipment fit required by the applicable operational rules. However, some of these individual items may be included in Block 10 or in the approved type design. Operators are therefore reminded of their responsibility to ensure compliance with the applicable operational rules for their own particular operation.

Block 1 Enter name of the State of manufacture.

Block 2 The Authority under which authority the Statement of Conformity is issued.

Block 3 A unique serial number should be pre-printed in this Block for Statement control and traceability purposes. Except that in the case of a computer generated document the number need not be pre-printed where the computer is programmed to produce and print a unique number.

Block 4 The full name and location address of the manufacturer issuing the statement. This Block may be pre-printed. Logos, etc., are permitted if the logo can be contained within the Block.

Block 5 The aircraft type in full as defined in the type-certificate and its associated data sheet.

Block 6 The type-certificate reference numbers and issue for the subject aircraft.

Block 7 If the aircraft is registered then this mark will be the registration mark. If the aircraft is not registered then this will be such a mark that is accepted by the Authority of the Member State and, if applicable, by the Authority of a third country.

Block 8 The identification number assigned by the manufacturer for control and traceability and product support. This is sometimes referred to as a Manufacturers Serial No or Constructors No.

Block 9 The engine and propeller type(s) in full as defined in the relevant type-certificate and its associated data sheet. Their manufacturer identification No and associated location should also be shown.

Block 10 Approved design changes to the Aircraft Definition.

Block 11 A listing of all applicable airworthiness directives (or equivalent) and a declaration of compliance, together with a description of the method of compliance on the subject individual aircraft including products and installed parts, appliances and equipment. Any future compliance requirement time should be shown.

Block 12 Approved unintentional deviation to the approved type design sometimes referred to as concessions, divergences, or non-conformances.

Block 13 Only agreed exemptions, waivers or exceptions may be included here.

Block 14 Remarks: Any statement, information, particular data or limitation which may affect the airworthiness of the aircraft. If there is no such information or data, state: 'NONE'. If the Authority has endorsed a CO2 emissions production cut-off exemption, make the following record: 'Aeroplane exempted from the applicability of paragraph 2.1.1 [x] as referenced in the 1st Edition of Annex 16, Volume III, Part II, Chapter 2 (July 2017).'

Block 15 Enter 'Certificate of Airworthiness' or 'Restricted Certificate of Airworthiness' for the Certificate of Airworthiness requested.

Block 16 Additional requirements such as those notified by an importing country should be noted in this Block.

Block 17 Validity of the Statement of Conformity is dependent on full completion of all Blocks on the form. A copy of the flight test report together with any recorded defects and rectification details should be kept on file by the manufacturer. The report should be signed as satisfactory by the appropriate certifying staff and a flight crew member, e.g., test pilot or flight test engineer. The flight tests performed are those required by DASR 21.A.127 and DASR GM 21.A.127, to ensure that the aircraft conforms to the applicable design data and is in condition for safe operation.

The listing of items provided (or made available) to satisfy the safe operation aspects of this statement should be kept on file by the manufacturer.

Block 18 The Statement of Conformity may be signed by the person authorised to do so by the manufacturer in accordance with DASR 21.A.130(a). A rubber stamp signature should not be used.

Block 19 The name of the person signing the certificate should be typed or printed in a legible form.

Block 20 The date the Statement of Conformity is signed must be given.

Block 21 For production under DASR 21 Subpart F, state 'NOT APPLICABLE'

Additionally, for production under DASR 21 Section A Subpart F, ~~this Block~~ the Statement of Conformity should include validation by the Authority. For this purpose, the validation statement below should be included in the Block 21 itself, and not referred in a separate document. The statement can be pre-printed, computer generated or stamped, and should be followed by the signature of the representative of the Authority validating the certificate, the name and the position/identification of such representative of the Authority, and the date of such validation by the Authority.

VALIDATION STATEMENT:

'After due inspection the < Defence Aviation Authority > is satisfied that this document constitutes an accurate and valid Statement of Conformity in accordance with DASR 21 Section A Subpart F'.

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)

~~The DASR 21 AMC associated with DASR Form 1 can be found in the DASR Forms document.~~

A. INTRODUCTION

This AMC relates specifically to the use of the DASR Form 1 for manufacturing purposes under DASR 21 Subpart F. It can be used as a supplement to the completion instructions provided with DASR Form 1.

1. PURPOSE AND USE

The DASR Form 1 is prepared and signed by the manufacturer. For production under DASR 21 Subpart F it is presented for validation by the Authority.

Under Subpart F the certificate may only be issued by the Authority.

A mixture of items released under Subpart G and under Subpart F of DASR 21 is not permitted on the same certificate.

2. GENERAL FORMAT

Refer to the specimen of DASR Form 1.

3. COPIES

Refer to the instructions for the use of DASR Form 1.

The DASR 21 Subpart F originator must retain a copy of the certificate in a form that allows verification of original data.

4. ERROR(S) ON THE CERTIFICATE

If an end user finds an error(s) on a certificate, they must identify it/them in writing to the originator. The originator may prepare and sign a new certificate for validation by the Authority if they can verify and correct the error(s).

The new certificate must have a new tracking number, signature and date.

The request for a new certificate may be honoured without re-verification of the item(s) condition. The new certificate is not a statement of current condition and should refer to the previous certificate in Block 12 by the following statement: ‘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.’ Both certificates should be retained according to the retention period associated with the first.

5. COMPLETION OF THE CERTIFICATE BY THE ORIGINATOR

Refer to the instructions for the use of DASR Form 1 for completion of the certificate. Specific instructions that differ from these instructions are provided below.

Block 1 – Approving Authority/Country

State the name and country of the Authority under whose jurisdiction this certificate is issued.

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 AIRCRAFT'.

b) 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.

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 the following statement must be entered in Block 12:

["NEW" OR "SPARE"] ENGINE EXEMPTED FROM NOx EMISSIONS PRODUCTION CUT-OFF REQUIREMENT'.

Block 13b – Authorised Signature

This space shall be completed with the signature of the Authority representative validating the Block 12 manufacturer Statement of Conformity, under DASR 21.A.130(d). To aid recognition, a unique number identifying the representative may be added.

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.

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

Military aviation is not within the scope of the environmental requirements of the Chicago Convention. However, in case that compliance to these requirements is required by national law or the Authority, the following guidance should be used to determine compliance with DASR 21.A.130(b)(4).

1. Definitions of engine type certification date and production date:

Volume II of Annex 16 to the Chicago Convention contains two different references to applicability dates:

a) ‘Date of manufacture for the first individual production model’ which refers to the engine type certification date; and

b) ‘Date of manufacture for the individual engine’ which refers to the production date of a specific engine serial number (date of DASR Form 1).

The second reference is used in the application of the 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.130(b)(4) includes the production requirements and refers to paragraphs (b) and (d) of Volume II, Part III, Chapter 2, paragraph 2.3 of Annex 16 to the Chicago Convention.

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/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/R could be used to determine compliance to DASR 21.A.130(b)(4)(ii).

...

DASR 21 SUBPART G - MILITARY PRODUCTION ORGANISATION APPROVAL

21.A.131 – Scope

This Subpart establishes:

(a) The procedure for the issuance of a military production organisation approval (MPOA)~~,~~ for a production organisation showing conformity of products, parts and appliances with the applicable design data;

(b) The rules governing rights and obligations ~~and privileges~~ of the applicant for, and holders of, such approvals.

GM 21.A.131 - Scope - Applicable design data

Applicable design data is defined as all necessary drawings, specifications and other technical information provided by the applicant for, or holder of a design organisation approval, MTC, MSTC, approval of repair or minor change design, or AUSMTSO authorisation ~~(or equivalent when DASR 21 Section A Subpart G is used for production of products, parts or appliances, the design of which has been approved other than according to DASR 21)~~ and released in a controlled manner to a production organisation approval holder. This is to be sufficient for the development of production data to enable repeatable manufacture to take place in conformity with the design data.

Prior to issue of the MTC, MSTC, approval of repair or minor change design or AUSMTSO authorisation, or equivalent, design data is defined as 'not approved' but parts and appliances may be released with a DASR Form 1—Authorised Release Certificate, as a certificate of conformity.

After issue of the MTC, MSTC, approval of repair or minor change or AUSMTSO authorisation, or equivalent, this design data is defined as 'approved' and items manufactured in conformity are eligible for release on a DASR Form 1 for airworthiness purposes.

For the purpose of Subpart G of DASR 21, the term 'applicable design data' includes the information related to the applicable engine exhaust emissions and aeroplane CO2 emissions production cut-off requirements.

21.A.133 – Eligibility

Any organisation shall be eligible as an applicant for an approval under this Subpart. The applicant shall:

(a) ~~J~~justify that, for a defined scope of work, an approval under this Subpart is appropriate for the purpose of showing conformity with a specific design; and

(b) ~~H~~hold or have applied for an approval of that specific design; or

(c) ~~H~~have ensured, through an appropriate arrangement with the applicant for, or holder of, an approval of that specific design, satisfactory coordination between production and design.

~~**GM 21.A.133 - Issue of Military Production Organisation Approval**~~

~~a) Where a production organisation has an extant EASA Part 21 production organisation approval, and when the military production activity is within the scope of the EASA term of approval, the organisation may be accepted by the Authority to satisfy the DASR 21 requirements for that scope of work with any further investigation limited only to the delta between the two approvals. The Authority is to be kept informed by the production organisation of significant changes to the organisation and of any EASA findings that may impact the military production activity.~~

~~b) Where a production organisation has an extant EASA Part 21 production organisation approval, and when the scope of the EASA term of approval does not entirely cover the military production activity, those parts of the organisation's EASA Part 21 exposition that are equally applicable to satisfy the DASR 21 may be accepted by the Authority as equivalent in respect of the DASR 21 requirements. It is permissible that only those parts of the organisation that are specific to the military activity or requirements are addressed in the DASR 21 exposition. Those requirements covered by read-across of the sections of the EASA exposition document are to be identified and the EASA document clause reference quoted.~~

GM 21.A.133(a) - Eligibility – Approval appropriate for showing conformity

...

d) …

vi. processes (heat treatment, surface finishing, shot peening, etc~~,~~.).

AMC1 21.A.133(b) and 21.A.133(c) - Eligibility – Link between design and production organisations

...

a) The responsibilities of a design organisation which assure correct and timely transfer of up-to-date airworthiness data~~,~~ (e.g., drawings, material specifications, dimensional data, processes, surface treatments, shipping conditions, quality requirements, etc.);

...

c) The responsibilities of a MPOA holder/applicant to assist the design organisation in dealing with continuing airworthiness matters and for required actions~~,~~ (e.g., traceability of parts in case of direct delivery to users, retrofitting of modifications, traceability of processes' outputs and approved deviations for individual parts as applicable, technical information and assistance, etc.);

...

AMC2 21.A.133(b) and 21.A.133(c) - Eligibility – Link between design and production organisations

...

Arrangement Sample Form:

Arrangement In accordance with DASR 21.A.133(b) and DASR 21.A.133(c)	
The undersigned agree on the following commitments:	relevant interface procedures
The design organisation [NAME] takes responsibility to ~~2.~~ - assure correct and timely transfer of up-to-date applicable design data~~,~~ (e.g., drawings, material specifications, dimensional data, processes, surface treatments, shipping conditions, quality requirements, etc~~,~~.) to the production organisation approval holder [NAME] ~~2.~~ - provide visible statement(s) of approved design data	
The production organisation approval holder [NAME] takes responsibility to	

~~?~~ - assist the design organisation [Name] in dealing with continuing airworthiness matter and for required actions ~~?~~ - assist the design organisation [Name] in case of products prior to type-certification in demonstrating compliance with airworthiness requirements ~~?~~ - develop, where applicable, its own manufacturing data in compliance with the airworthiness data package	
The design organisation [Name] and the MPOA holder [Name] take joint responsibility to ~~?~~ - deal adequately with production deviations and non conforming parts in accordance with the applicable procedures of the design organisation and the production organisation approval holder ~~?~~ - achieve adequate configuration control of manufactured parts, to enable the MPOA holder to make the final determination and identification for conformity.	
The scope of production covered by this arrangement is detailed in ... [DOCUMENT REFERENCE/ ATTACHED LIST]	
[When the design organisation is not the same legal entity as the production organisation approval holder] Transfer of approved design data The MTC/MSTC/AUSMTSO authorisation holder [NAME] acknowledges that the approved design data provided, controlled and modified in accordance with the arrangement are recognised as approved by the Authority and therefore parts and appliance manufactured in accordance with these data and found in a condition for safe operation may be released certifying that the item was manufactured in conformity to approved design data and is in a condition for safe operation.	
[When the design organisation is not the same legal entity as the production organisation approval holder] Direct Delivery Authorisation This acknowledgment includes also [OR does not include] the general agreement for direct delivery to end users in order to guarantee continued airworthiness control of the released parts and appliances.	
for the [NAME of the design organisation/MDOA holder] date signature xx.xx.xxxx ([NAME in block letters])	for the [NAME of the MPOA holder] date signature xx.xx.xxxx ([NAME in block letters])

~~**Instructions for completion:**~~

~~**Title:** The title of the relevant document should clearly indicate that it serves the purpose of a design/production interface arrangement in accordance with DASR 21.A.133(b) and DASR 21.A.133(c).~~

~~**Commitment:** The document should include the basic commitments between the design organisation and the MPOA holder as addressed in DASR AMC 21.A.4 and AMC1 to 21.A.133(b) and DASR 21.A.133(c).~~

~~**Relevant Procedures:** Identify an entry point into the documentary system of the organisations with respect to the implementation of the arrangement (for example a contract, quality plan, handbooks, common applicable procedures, working plans.).~~

~~**Scope of arrangement:** The scope of arrangement should state by means of a list or reference to relevant documents those products, parts or appliances that are covered by the arrangement.~~

~~**Transfer of applicable design data:** Identify the relevant procedures for the transfer of the applicable design data required by DASR 21.A.131 and DASR GM 21.A.131 from the design organisation to the MPOA holder. The means by which the design organisation advises the MPOA holder whether such data is approved or not approved is also to be identified (see DASR 21.A.4 and DASR AMC 21.A.4).~~

~~**Direct Delivery Authorisation:** Where the design organisation and the MPOA holder are separate legal entities the arrangement should clearly identify whether authorisation for direct delivery to end users is permitted or not.~~

~~Where any intermediate production/design organisations are involved in the chain between the original design organisation and the MPOA holder evidence should be available that this intermediate organisation has received authority from the design organisation to grant Direct Delivery Authorisation.~~

~~**Signature:** AMC1 to 21.A.133(b) and 21.A.133(c) requests the identification of the responsible persons/offices who control the commitments laid down in the arrangement. Therefore the basic document should be signed mutually by the authorised representatives of the design organisation and the MPOA holder in this regard.~~

…

GM 21.A.134 - Application – Application form and manner

DASR Form 50—Application for DASR 21 Production Organisation Approval ~~(see AMC 21.B.220(c))~~, ~~is to~~ should be obtained from the Authority, and completed by the Accountable Manager of the organisation.

The completed form, an outline of the production organisation exposition, and details of the proposed terms of approval are to be forwarded to the Authority.

~~Organizations recognized by competent civil aviation authorities or certified as per AS/EN 9100 or the equivalent AQAP, may re-use part or all of the same process evidences in the demonstration of compliance with DASR 21 Section A Subpart G, as agreed by the Authority.~~

…

GM 21.A.135 - Issue of Military Production Organisation Approval

a) Where a production organisation has an extant ~~EASA~~ Part 21 Production Organisation Approval (POA) issued by a recognised ~~NAA/NMAA~~ CAA/MAA, and when the military production activity is within the scope of the ~~EASA~~ ~~NAA/NMAA~~ CAA/MAA term of approval, the organisation may be accepted by the Authority to satisfy the DASR 21 requirements for that scope of work with any further investigation limited only to the delta between the two approvals. The Authority is to be kept informed by the production organisation of significant changes to the organisation and of any ~~EASA~~ ~~NAA/NMAA~~ CAA/MAA findings that may impact the military production activity.

b) Where a production organisation has an extant Part 21 POA issued by a recognised ~~NAA/NMAA~~ CAA/MAA, and when the scope of the ~~NAA/NMAA~~ CAA/MAA term of approval does not entirely cover the military production activity, those parts of the organisation's ~~NAA/NMAA~~ CAA/MAA Part 21 exposition that are equally applicable to satisfy the DASR 21 may be accepted by the Authority as equivalent in respect of the DASR 21 requirements. It is permissible that only those parts of the organisation that are specific to the military activity or

requirements are addressed in the DASR 21 exposition. Those requirements covered by read-across of the sections of the ~~NAA/NMAA~~ CAA/MAA exposition document are to be identified and the ~~NAA/NMAA~~ CAA/MAA document clause reference quoted.

c) The civil airworthiness release certificates signed under the civil POA authority can be recognised and accepted. Authorised signatures may be accepted by the ~~NMAA~~ MAA for the common civil-military parts manufactured and delivered to a military organisation. Appropriate procedures are to be established to demonstrate that validation of the military applicability of civil parts installed is performed. Suitable consideration must be given to the impact on continued airworthiness especially with regard to the implementation of applicable civil and military Airworthiness Directives.

21.A.139 - Quality System

...

(b) The quality system shall contain:

1. As applicable within the scope of approval, control procedures for:

i. ~~D~~document issue, approval, or change;

ii. ~~V~~vendor and subcontractor assessment audit and control;

iii. ~~V~~verification that incoming products, parts, materials, and equipment, including items supplied new or used by buyers of products, are as specified in the applicable design data;

iv. ~~I~~identification and traceability;

v. ~~M~~manufacturing processes;

vi. ~~I~~inspection and testing, including production flight tests;

vii. ~~C~~calibration of tools, jigs, and test equipment;

viii. ~~N~~non-conforming item control;

ix. ~~A~~airworthiness coordination with the applicant for, or holder of, the design approval;

x. ~~R~~records completion and retention;

xi. ~~P~~personnel competence and qualification;

xii. ~~I~~issue of airworthiness release documents;

xiii. ~~H~~handling, storage and packing;

xiv. ~~I~~internal quality audits and resulting corrective actions;

xv. ~~W~~work within the terms of approval performed at any location other than the approved facilities;

xvi. ~~W~~work carried out after completion of production but prior to delivery, to maintain the aircraft in a condition for safe operation;

xvii. ~~I~~issue of military permit to fly and approval of associated flight conditions.

The control procedures shall include specific provisions for any critical parts.

...

GM2 21.A.139(a) - Quality System – Conformity of supplied parts or appliances

The MPOA holder is responsible for determining and applying acceptance standards for physical condition, configuration status and conformity of supplied products, parts or appliances, whether to be used in production or delivered to customers as spare parts. This responsibility also includes GFE (Government Furnished Equipment) items.

...

GM 21.A.139(b)(1) - Quality System – Elements of the quality system

a) The control procedures covering the elements of DASR 21.A.139(b)(1) are to document the standards to which the production organisation intends to work.

b) An organisation having a Quality system designed to meet a recognised Standard such as AS/EN 9100 (relevant to the scope of approval being requested) ~~is to~~ should expand it to include at least the following additional topics, as appropriate, in order to demonstrate compliance with the requirements of DASR 21 Section A Subpart G:

i. Mandatory Occurrence Reporting and continued airworthiness as required by DASR 21.A.165(e);

ii. Control of work occasionally performed (outside the MPOA facility by MPOA personnel);

iii. Co-ordination with the applicant for, or holder of, an approved design as required by DASR 21.A.133(b), DASR 21.A.133(c) and DASR 21.A.165(g);

iv. Issue of certifications within the scope of approval for the privileges of DASR 21.A.163;

v. Incorporation of airworthiness data in production and inspection data as required in DASR 21.A.133(b), DASR 21.A.133(c) and DASR 21.A.145(b);

vi. When applicable, ground test and/or production flight test of products in accordance with procedures defined by the applicant for, or holder of, the design approval;

vii. Procedures for traceability including a definition of clear criteria of which items need such traceability. Traceability is defined as a means of establishing the origin of an article by reference to historical records for the purpose of providing evidence of conformity;

viii. Personnel training and qualification procedures especially for certifying staff as required in DASR 21.A.145(d).

c) An organisation having a quality system designed to meet a recognised aerospace quality standard will still need to ensure compliance with all the requirements of DASR Section A Subpart G. In all cases, the Authority will still need to be satisfied that compliance with DASR 21 Section A Subpart G is established.

AMC1 21.A.139(b)(1)(ii) - Vendor and sub-contractor assessment, audit and control – Military Production Organisation Approval (MPOA) holder using documented arrangements with other parties for assessment and surveillance of a supplier.

…

AMC2 21.A.139(b)(1)(ii) - Vendor and sub-contractor assessment, audit and control - Military Production Organisation Approval (MPOA) holder using other party supplier certification

1. General

…

The purpose of using an OP cannot be to replace the assessment, audit and control of the POA holder. It is to allow an element~~,~~ (i.e. the assessment of the quality system~~,~~) to be delegated to another organisation under controlled conditions.

...

3. …

(c) …

(3) …

Where the POA holder uses an OP accredited and working in accordance with an aviation standard~~,~~ (e.g. AS/EN 9104 series of requirements~~,~~) that describes requirements for the OP certification, the items (ii), (iv) and (v) above should be deemed to be complied with.

...

GM2 21.A.139(b)(2) - Quality System – Adequacy of procedures and monitoring function

Adequacy of procedures means that the quality system, through the use of the procedures as set forth, is capable of meeting the conformity objectives identified in DASR 21.A.139(a).

The quality assurance function to ensure the above ~~is to~~ should perform planned continuing and systematic evaluations or audits of factors that affect the conformity (and, where required, safe operation) of the products, parts or appliances to the applicable design. This evaluation is to include all elements of the quality system in order to demonstrate compliance with DASR 21 Section A Subpart G.

21.A.143 - Production Organisation Exposition

(a) The organisation shall submit to the Authority a Production Organisation Exposition (POE) providing the following information:

1. ~~A~~a statement signed by the accountable manager confirming that the production organisation exposition and any associated manuals which define the approved organisation's compliance with this Subpart will be complied with at all times;

2. ~~T~~the title(s) and names of managers accepted by the Authority in accordance with DASR 21.A.145(c)(2);

3. ~~T~~the duties and responsibilities of the manager(s) as required by DASR 21.A.145(c)(2) including matters on which they may deal directly with the Authority on behalf of the organisation;

4. ~~A~~an organisational chart showing associated chains of responsibility of the managers as required by DASR 21.A.145(c)(1) and DASR 21.A.145(c)(2);

5. ~~A~~a list of certifying staff as referred to in DASR 21.A.145(d);

6. ~~A~~a general description of human resources;

7. ~~A~~a general description of the facilities located at each address specified in the production organisation's certificate of approval;

8. ~~A~~a general description of the production organisation's scope of work relevant to the terms of approval;

9. ~~T~~the procedure for the notification of organisational changes to the Authority;

10. ~~T~~the amendment procedure for the production organisation exposition;

11. ~~A~~a description of the quality system and the procedures as required by DASR 21.A.139(b)(1);

12. ~~A~~a list of those outside parties referred to in DASR 21.A.139(a); and

~~13. If flight tests are to be conducted, a flight test operations manual defining the organisation's policies and procedures in relation to flight tests.~~

13. if flight tests are to be conducted, a flight test operations manual defining the organisation's policies and procedures in relation to flight test. The flight test operations manual shall include:

(i) a description of the organisation's processes for flight test, including the flight test organisation involvement into the permit to fly issuance process;

(ii) crewing policy, including composition, competency, currency and flight time limitations, where applicable;

(iii) procedures for the carriage of persons other than crew members and for flight test training, when applicable;

(iv) a policy for risk and safety management and associated methodologies;

(v) procedures to identify the instruments and equipment to be carried;

(vi) a list of documents that need to be produced for flight test.

(b) The production organisation exposition shall be amended as necessary to remain an up-to-date description of the organisation, and copies of any amendments shall be supplied to the Authority.

(c) The organisation shall establish and maintain a Safety Management System (SMS), in accordance with DASR.SMS

AMC to 21.A.143(a)(13) ~~and 21.A.243(a)(1), 21.A.14(b), 21.A.112B(b) and 21.A.432B(b)~~ Flight Test Operations Manual (FTOM) (AUS)

~~The flight test operations manual shall include:~~

~~a) a description of the organisation's processes for flight test, including the flight test organisation involvement into the Military Permit to Fly issuance process, see DASR 21 Subpart P – Military Permit to Fly;~~

~~b) crewing policy, including composition, competency, currency and flight time limitations;~~

~~c) procedures for the carriage of persons other than crew members and for flight test training, when applicable;~~

~~d) a policy for risk and safety management and associated methodologies;~~

~~e) procedures to identify the instruments and equipment to be carried; and~~

~~f) a list of documents that need to be produced for flight test.~~

Reserved. ~~1. General~~

~~a. Scope: The FTOM covers flight test operations.~~

The FTOM complexity should be proportionate to the aircraft and the organisation complexity.

b. Format

The FTOM may:

- be included in the Design Organisation Approval (DOA) /Production Organisation Approval (POA) /Alternative Procedure to DOA (ADOA) documents, or

- be a separate manual.

The FTOM may make reference to other documents to cover the contents listed below, e.g. for record-keeping.

c. Use by contractors or sub-contractors:

When flight tests are performed by contractors or sub-contractors, they should comply with the FTOM of the primary organisations, unless they have established an FTOM in compliance with DASR 21, the use of which has been agreed between the two organisations.

2. The FTOM should contain the following elements:

a. Exposition (not applicable in the case of ADOA):

If the FTOM is presented as a separate document, it should include a chart indicating the structure of the organisation and, more specifically, the functional links of the people in charge of flight test activities. It should also mention the coordination between all departments affecting flight test, e.g. Design Office, Production and Maintenance, in particular coordination for the establishment and update of a Flight Test Programme.

b. Risk and safety management:

The FTOM should describe the organisation's policy in relation to risk and safety assessment, mitigation and associated methodologies.

c. Crew members:

According to the flight test category, the FTOM should describe the organisation's policy on the composition of the crew (including the need to use a Lead Flight Test Engineer (LFTE)) and the competence and currency of its flight test crew members, including procedures for appointing crew members for each specific flight.

All crew members should be listed in the FTOM.

A flight time limitation policy should be established.

d. Carriage of persons other than crew members:

According to the flight test category, the FTOM should describe the organisation's policy in relation to the presence and safety on-board, of people other than crew members (i.e. with no flying duties).

People other than crew members should not be allowed on board for Category 1 flight tests.

e. Instruments and equipment:

The FTOM should list, depending on the nature of the flight, the specific safety-related instruments and equipment that should be available on the aircraft or carried by people on board.

The FTOM should contain provisions to allow flights to take place in case of defective or missing instruments or equipment.

f. Documents:

The FTOM should list the documents to be produced for flight test, and include (or refer to) the procedures for their issue, update and follow-up to ensure the documents' configuration control:

(i) documents associated with a Flight Test Programme:

- Flight Order for a given flight, which should include:
  - a list of the tests to be performed and associated conditions;
  - safety considerations relevant to the flight;
  - category of the flight (e.g. Category 1);
  - composition of the crew;
  - names of persons other than crew members;
  - aircraft configuration items relevant to the test to be highlighted to the crew;
  - loading of the aircraft;
  - reference to approved flight conditions; and
  - restrictions relevant to the flight to be highlighted to the crew.
  - Flight crew report.

(ii) documentation and information to be carried on the aircraft during flight test;

(iii) record-keeping: the FTOM should describe the policy relative to record-keeping.

g. Permit to fly:

The FTOM should describe the involvement of the flight test organisation or flight test team (as appropriate) in the process for the approval of flight conditions and the issue of permits to fly in accordance with Subpart P.

h. Currency and training:

The FTOM should describe how training for flight test is organised.

Currency of the flight test crew may be ensured either through recent experience or refresher training.

~~The FTOM should specify the requirements for a refresher training in order to ensure that crew members are sufficiently current to perform the required flight test activity.~~

~~A system should be established to record the currency of the flight test crew's training.~~

The flight test operations manual should be owned by the organisation conducting flight test. If flight test is to be conducted by an organisation outside that of the MPOA / MDOA holder, eg a Military Air Operator (MAO), reference to that organisation's flight test operations manual (or equivalent) is acceptable.

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) ~~W~~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) ~~W~~with regard to all necessary airworthiness and environmental data:

1. ~~T~~the production organisation is in receipt of such data from the Authority, and from the holder of, or applicant for, the type-certificate, restricted type-certificate or design approval, including any exemption granted against the CO2 production cut-off requirements, to determine conformity with the applicable design data;

2. ~~T~~the production organisation has established a procedure to ensure that airworthiness and environmental data are correctly incorporated in its production data; and

3. ~~S~~such data are kept up to date and made available to all personnel who need access to such data to perform their duties.

(c) ~~W~~with regard to management and staff:

1. ~~A~~a manager has been nominated by the production organisation, and is accountable to the Authority. Their responsibilities within the organisation shall consist of ensuring that all production is performed to the required standards and that the production organisation is continuously in compliance with the data and procedures identified in the exposition referred to in DASR 21.A.143;

2. ~~A~~a person or group of persons have been nominated by the production organisation to ensure that the organisation is in compliance with the requirements of this DASR, and are identified, together with the extent of their authority. Such person(s) shall act under the direct authority of the accountable manager referred to in subparagraph 1. The person(s) nominated shall be able to show the appropriate knowledge, background and experience to discharge their responsibilities; and

3. ~~S~~staff at all levels have been given appropriate authority to be able to discharge their allocated responsibilities and that there is full and effective coordination within the production organisation in respect of airworthiness and environmental data matters.

(d) ~~W~~with regard to certifying staff, authorised by the production organisation to sign the documents issued under DASR 21.A.163 under the scope or terms of approval:

1. ~~T~~the knowledge, background (including other functions in the organisation), and experience of the certifying staff are appropriate to discharge their allocated responsibilities;

2. ~~T~~the production organisation maintains a record of all certifying staff which shall include details of the scope of their authorisation;

3. ~~C~~certifying staff are provided with evidence of the scope of their authorisation.

GM 21.A.145(a) - Approval Requirements

A facility is a working area where the working conditions and the environment are controlled as appropriate in respect of: cleanliness, temperature, humidity, ventilation, lighting, space/access, noise, air pollution.

Equipment and tools are to be such as to enable all specified tasks to be accomplished in a repeatable manner without detrimental effect. Calibration control of equipment and tools which affect critical dimensions and values are to demonstrate compliance with, and be traceable to, national or international standards.

Sufficient personnel means that the organisation has for each function according to the nature of the work and the production rate, a sufficient quantity of qualified personnel to accomplish all specified manufacturing tasks and to attest the conformity. Their number is to be such that airworthiness consideration may be applied in all areas without undue pressure.

An evaluation of the competence of personnel is performed as part of the quality system. This ~~is to~~ should include, where appropriate, verification that specific qualification standards have been implemented, for example NDT, welding, etc. Training is to be organised to establish and maintain the personal competence levels determined by the organisation to be necessary.

GM 21.A.145(b)(2) - Approval Requirements – Airworthiness, ~~noise, fuel venting and exhaust emissions (where applicable)/~~ and environmental protection, production/quality data procedures

a) When a MPOA holder/applicant is developing its own manufacturing data, such as computer based data, from the design data package delivered by a design organisation, procedures are required to demonstrate the right transcription of the original design data.

b) Procedures are required to define the manner in which airworthiness~~, and where applicable noise, fuel venting and exhaust emissions~~ and environmental data is used to issue and update the production/quality data, which determines the conformity of products, parts and appliances. The procedure is to also define the traceability of such data to each individual product, part or appliance for the purpose of certifying condition for safe operation and issuing a ~~DASR Form 52—~~Statement of Conformity or DASR Form 1—Authorised Release Certificate.

…

GM 21.A.145(c)(2) - Approval Requirements – Responsible managers

The person or persons nominated ~~is to~~ should represent the management structure of the organisation and be responsible for all functions as specified in DASR 21 Section A Subpart G. It therefore follows that, depending on the size of the DASR 21 Section A Subpart G organisation, the functions may be subdivided under individual managers (and in fact may be further subdivided) or combined in a variety of ways.

...

AMC 21.A.145(d)(1) - Approval Requirements – Certifying staff

...

c) Training ~~should~~ must be given to develop a satisfactory level of knowledge of organisation procedures, aviation legislation, and associated implementing rules, airworthiness ~~requirements~~ codes or standards, and associated GM, relevant to the particular role.

...

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 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.

(b) The Authority shall establish the conditions under which a production organisation approved under this Subpart may operate during such changes unless the Authority determines that the approval should be suspended.

...

GM 21.A.149 - Transferability

Transfer of approval would normally only 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 ~~the~~ appropriate ~~certificate from the to~~ 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 ~~(Production)~~ Requirements.

Alternatively, in the event of receivership (bankruptcy, insolvency or other 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 ~~under DASR 21.A.245 - Approval (Design) Requirements. EMAR 21.B.245~~.

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~~,~~ ~~requirements.~~ that the obligations and responsibilities of the former organisation ~~are to~~ should be transferred to the new organisation, otherwise transfer is not possible and application for a new approval will be required.

...

GM 21.A.151 - Terms of approval – Scope and categories

...

SCOPE OF WORK	PRODUCTS/CATEGORIES
A1 Large Aeroplanes A2 Small Aeroplanes A3 Large Helicopters A4 Small Helicopters A5 Gyroplanes A6 Sailplanes A7 Motor Gliders A8 Crewed Balloons A9 Airships A11 Very Light Aeroplanes A12 Other M1 ~~Aircraft for military transport of troops, reconnaissance, patrols, tankers, electronic warfare missions, etc.~~ Military Aeroplanes M2 ~~Combat fixed wing aircraft and advanced trainers~~ Military Helicopters ~~M3 Combat helicopter~~ U1 Fixed wing UAV ~~<150kg~~ U2 ~~Fixed wing UAV >150kg~~ ~~U4~~ Rotary wing UAV ~~<150kg~~ ~~U5 Rotary wing UAV >150kg~~	~~Insert~~ State types " " " " " " " " " " " " " " " " " " "
B1 Turbine Engines B2 Piston Engines B3 APU's B4 Propellers	" " " "
C1 Appliances: C2 Parts: C3 Weapons C4 Other military equipment	State appliance generic types eg Tyres, Altimeter, etc.) Examples include: Avionics, Com/Nav/Pulse Computer System, Aircraft/Engine/Avionics Instruments, Mechanical/Electrical/ Gyroscopic/Electronic Mechanical/Hydraulic/Pneumatic State part generic types eg Wing, Landing Gear Examples include: Structural, Metallic/non-metallic Mechanical/Hydraulic/Pneumatic Electrical Electronic Defensive Aids
D1 Maintenance D2 Issue of military permit to fly	~~Insert~~ State aircraft types State aircraft types

...

AMC 21.A.153 - Changes to the terms of approval – Application for a change to the terms of approval

DASR Form 51—Application for significant changes or variation of scope and terms of DASR 21 Production Organisation Approval~~, should~~ must be obtained from the Authority and be completed in accordance with the procedures of the Military Production Organisation Exposition (MPOE).

The information entered on the form is the minimum required by the Authority to assess the need for change of the production organisation approval.

The completed form and an outline of the changed ~~production organisation exposition~~ MPOE, and details of the proposed change to MPOA terms of approval should be forwarded to the Authority.

...

21.A.158 - Findings

(a) When objective evidence is found showing non-compliance of the holder of a production organisation approval with the applicable requirements of this DASR, the finding shall be classified as follows:

1. ~~A~~a level one finding is any non-compliance with this DASR which could lead to uncontrolled non-compliances with applicable design data and which could affect the safety of the aircraft;

2. ~~A~~a level two finding is any non-compliance with this DASR which is not classified as level one.

(b) A level three finding is any item where it has been identified, by objective evidence, to contain potential problems that could lead to a non-compliance under paragraph (a).

(c) After receipt of notification of findings issued by the Authority:

1. ~~I~~in case of a level one finding, the holder of the production organisation approval shall demonstrate corrective action to the satisfaction of the Authority within a period of no more than 21 working days after written confirmation of the finding;

2. ~~I~~in case of level two findings, the corrective action period granted by the Authority shall be appropriate to the nature of the finding but in any case initially shall not be more than three months. In certain circumstances and subject to the nature of the finding the Authority may extend the three months period subject to a satisfactory corrective action plan agreed by the Authority;

3. ~~A~~a level three finding shall not require immediate action by the holder of the production organisation approval. ~~If appropriate, the Authority will specify a compliance time.~~

(d) In case of level one or level two findings, the production organisation approval may be subject to a partial or full limitation, suspension or revocation of the production organisation approval. The holder of the production organisation approval shall provide confirmation of receipt of the notice of limitation, suspension or revocation of the production organisation approval in a timely manner.

...

GM2 21.A.158(a) – Examples of ~~L~~level ~~1~~ one findings

Examples of Level ~~1~~ one findings are non-compliances with any of the following DASR 21 paragraphs, that could affect the safety of the aircraft:

DASR 21.A.139, DASR 21.A.145, DASR 21.A.147, DASR 21.A.148, DASR 21.A.151, DASR 21.A.163 and DASR 21.A.165(b) to DASR 21.A.165(g).

It is to be anticipated that a non-compliance with these paragraphs is only considered a level one finding when objective evidence has been found that this finding is an uncontrolled non-compliance that could affect the safety of the aircraft.

In addition, the failure to arrange for investigations under DASR 21.A.157, in particular to obtain access to facilities, after denial of one written request are to be classified as a Level ~~1~~ one finding.

21.A.159 - Duration and continued validity

(a) A production organisation approval ~~can~~ shall be issued for an unlimited ~~period~~duration. It shall remain valid unless:

1. ~~T~~the production organisation fails to demonstrate compliance with the applicable requirements of this Subpart; or

2. ~~T~~the Authority is prevented by the holder or any of its partners or subcontractors to perform the investigations in accordance with DASR 21.A.157; or

3. ~~T~~there is evidence that the production organisation cannot maintain satisfactory control of the manufacture of products, parts or appliances under the approval; or

4. ~~T~~the production organisation no longer meets the requirements of DASR 21.A.133; or

5. ~~T~~the certificate has been surrendered or revoked under ~~EMAR 21.B.245~~; or

~~6. The production organisation has not carried out production activities in the scope of the term of the approval for a period specified by the Authority.~~

(b) Upon surrender or revocation, the certificate shall be returned to the Authority.

...

21.A.163 - Privileges

Pursuant to the terms of approval issued under DASR 21.A.135 ~~and if national regulations allow~~, the holder of a production organisation approval may:

(a) ~~P~~perform production activities under this DASR;

(b) ~~I~~in the case of complete aircraft and upon presentation of a Statement of Conformity (DASR Form 52 - Military Aircraft Statement of Conformity), under DASR 21.A.174, obtain an aircraft certificate of airworthiness ~~and a noise certificate, where applicable,~~ without further showing

(c) ~~I~~in the case of other products, parts or appliances issue authorised release certificates (DASR Form 1 Authorised Release Certificate) ~~under DASR 21.A.307~~ without further showing;

(d) ~~M~~maintain a new aircraft that it has produced and issue a certificate of release to service (DASR Form 53 - Military Certificate of Release to Service) in respect of that maintenance; or

(e) ~~U~~ under procedures agreed with its Authority for an aircraft it has produced and when the production organisation itself is controlling under its MPOA, the configuration of the aircraft and is attesting conformity with the design conditions approved for the flight, to issue a military permit to fly in accordance with DASR 21.A.711(c) including approval of the flight conditions in accordance with DASR 21.A.710(b).

GM 21.A.163 Privileges

DASR 21.A.163 lists the privileges an applicant for a production organisation approval may be granted by the authority within the terms of approval, depending on the result of the demonstration of compliance with the associated requirements of DASR 21 Subpart G. Some privileges may be subject to national legal restrictions. Therefore, only those privileges explicitly listed in the terms of approval apply.

AMC 21.A.163(c) - Computer generated signature and electronic exchange of the DASR Form 1

1. Submission to the Authority

Any Military Production Organisation Approval (MPOA) holder/applicant intending to implement an electronic signature procedure to issue DASR Form 1—Authorised Release Certificate, and/or to exchange electronically such data contained on the DASR Form 1 should document it and submit it to the ~~competent authority~~ Authority as part of the documents attached with its exposition.

2. Characteristics of the electronic system generating the DASR Form 1

~~2.1~~ The electronic system should:

~~a)~~ – guarantee secure access for each certifying staff;

~~b)~~ – ensure integrity and accuracy of the data certified by the signature of the Form and be able to show evidence of the authenticity of the DASR Form 1 (recording and record keeping) with suitable security, safeguards and backups;

~~c)~~ – be active only at the location where the part is being released with a DASR Form 1;

~~d)~~ – not permit to sign a blank form;

~~e)~~ – provide a high degree of assurance that the data has not been modified after signature (if modification is necessary after issuance, i.e., re-certification of a part, a new form with a new number and reference to the initial issuance should be made);

~~f)~~ – provide for a 'personal' electronic signature identifying the signatory. The signature should be generated only in the presence of the signatory.

~~2.2~~ An electronic signature means data in electronic form which are attached to or logically associated with other electronic data and which serve as a method of authentication and should meet the following criteria:

~~a)~~ – it is uniquely linked to the signatory;

~~b)~~ – it is capable of identifying the signatory;

~~c)~~ – it is created using means that the signatory can maintain under their sole control.

~~2.3~~ The electronic signature is defined as an electronically generated value based on a cryptographic algorithm and appended to data in a way to enable the verification of the data’s source and integrity.

2.4 MPOA holders/applicants are reminded that additional national and/or European requirements may need to be satisfied when operating electronic systems.

2.5 The electronic system should be based on a policy and management structure (confidentiality, integrity and availability), such as:

a) – administrators, signatories;

b) – scope of authorisation, rights;

c) – password and secure access, authentication, protections, confidentiality;

d) – track changes;

e) – minimum blocks to be completed, completeness of information;

f) – archives;

g) – etc.

2.6 The electronic system generating the DASR Form 1 may contain additional data such as:

a) – manufacturer code;

b) – customer identification code;

c) – workshop report;

d) – inspection results;

e) – etc

3. Characteristics of the DASR Form 1 generated from the electronic system

3.1 To facilitate understanding and acceptance of the DASR Form 1 released with an electronic signature, the following statement should be in Block 13b: 'Electronic Signature on File'.

3.2 In addition to this statement, it is accepted to print or display a signature in any form such as a representation of the hand-written signature of the person signing, ie scanned signature, or their name.

3.3 When printing the electronic form, it should meet the general format of DASR Form 1. A watermark-type 'PRINTED FROM ELECTRONIC FILE' should be printed on the document.

3.4 When the electronic file contains a hyperlink to data, required to determine the airworthiness of the item(s), the data associated to the hyperlink, when printed, should be in a legible format and be identified as a reference from the DASR Form 1.

3.5 Additional information not required by the DASR Form 1 completion instructions may be added to the printed copies of DASR Form 1 as long as the additional data do not prevent. a person from filling out, issuing, printing, or reading any portion of the DASR Form 1. This additional data should be provided only in block 12 unless it is necessary to include it in another block to clarify the content of that block.

4. Electronic exchange of the electronic DASR Form 1

~~4.1~~ The electronic exchange of the electronic DASR Form 1 should be accomplished on a voluntary basis. Both parties (issuer and receiver) should agree on electronic transfer of the DASR Form 1.

~~4.2~~ For that purpose, the exchange needs to include:

~~a)~~ – all data of the DASR Form 1, including data referenced from the DASR Form 1;

~~b)~~ – all data required for authentication of the DASR Form 1.

~~4.3~~ In addition, the exchange may include:

~~a)~~ – data necessary for the electronic format;

~~b)~~ – additional data not required by the DASR Form 1 completion instructions, such as manufacturer code, customer identification code.

~~4.4~~ The system used for the exchange of the electronic DASR Form 1 should provide:

~~a)~~ – a high level of digital security; the data should be protected, unaltered or uncorrupted;

~~b)~~ – traceability of data back to its source should be possible.

~~4.5~~ Trading partners wishing to exchange DASR Form 1 electronically should do so in accordance with these means of compliance stated in this document. It is recommended that they use an established, common, industry method such as Air Transport Association (ATA) Spec 2000 Chapter 16.

~~4.6~~ The applicant(s) is/are reminded that additional national requirements may need to be satisfied when operating the electronic exchange of the electronic DASR Form 1.

~~4.7~~ The receiver should be capable of regenerating the DASR Form 1 from the received data without alteration; if not the system should revert back to the paper system.

~~4.8~~ When the receiver needs to print the electronic form, see paragraph 3 above.

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

DASR Form 1 Block 8 ‘Part Number’

The part number as it appears on the item, is usually defined in the design data; however in the case of a kit of parts, media containing software or any other specific condition of supply may be defined in production data developed from design data. Information about the contents of the kit or media may be given in block 12 or in a separate document cross-referenced from block 12.

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 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 AUSMTSO articles, state the applicable AUSMTSO 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’.

AMC 21.A.163(d) - Privileges – Maintenance

…

MAINTENANCE OF AIRCRAFT

Examples of such maintenance activities are:

~~a)~~ - Preservation, periodic inspection visits, etc.~~;~~.

~~b)~~ - Embodiment of a Service Bulletin~~;~~.

~~c)~~ - Application of airworthiness directives~~;~~.

~~d)~~ – Repairs~~;~~.

~~e)~~ – Maintenance tasks resulting from special flights~~;~~.

~~f)~~ – Maintenance tasks to maintain airworthiness during flight training, demo flights and other non-revenue flights.

...

AMC 21.A.163(e) - Procedure for the issue of a military permit to fly including approval of the flight conditions

1. **Intent**

This acceptable means of compliance provides means to develop a procedure for the issue of a military permit to fly including approval of the flight conditions.

Each Military Production Organisation Approval (MPOA) applicant or holder should develop its own internal procedure following this AMC, in order to obtain the privilege of DASR 21.A.163(e) to issue permits to fly for an aircraft under procedures agreed with its Authority for production, when the production organisation itself is controlling under its MPOA the configuration of the aircraft and is attesting conformity with the design conditions approved for the flight.

2. **Procedure for the issue of a military permit to fly**

2.1 Content

The procedure should address the following points:

a) as relevant, in accordance with DASR 21.A.710(b), the approval of flight conditions;

b) conformity with approved conditions;

c) issue of the military permit to fly under the MPOA privilege ;

d) authorised signatories;

e) interface with the local Authority for the flight.

2.2 Approval of the flight conditions (when relevant)

The procedure should include the process to establish and justify the flight conditions, in accordance with DASR 21.A.708 and how compliance with DASR 21.A.710(c) is established, and include the DASR Form 18b—Flight Conditions for a Military Permit to Fly (Approval Form), as defined in DASR AMC 21.A.709(b) for the approval under the MPOA privilege. ~~If the flight test is to be conducted by an organisation outside of the MPOA holder approving the MPTF, flight conditions may only be approved after operational endorsement by competent staff of a Military Air Operator (MAO) as determined by the Delegate of the Safety Authority (DoSA) - Flight Test.~~

2.3 Conformity with approved conditions

The procedure should indicate how conformity with approved conditions is made, documented and attested by an authorised person.

2.4 Issue of the military permit to fly under the MPOA privilege

The procedure should describe the process to prepare the DASR Form 20b—Military Permit to Fly (Approved Organisation)~~,~~ and how compliance with DASR 21.A.711(c) and DASR 21.A.711(e) is established before signature of the military permit to fly.

2.5 Authorised signatories

The person(s) authorised to sign the military permit to fly under the privilege of DASR 21.A.163(e) ~~should~~ must be identified (name, signature and scope of authority) in the procedure, or in an appropriate document linked to the Production Organisation Exposition.

2.6 Interface with the local Authority for the flight

The procedure should include provisions describing the communication with the local Authority for compliance with the local requirements which are outside the scope of the conditions of DASR 21.A.708(b) (see DASR 21.A.711(e)).

...

21.A.165 - Obligations of the holder

The holder of a production organisation approval shall:

(a) ~~E~~ensure that the production organisation exposition furnished in accordance with DASR 21.A.143 and the documents to which it refers, are used as basic working documents within the organisation;

(b) ~~M~~maintain the production organisation in conformity with the data and procedures approved for the production organisation approval;

(c)

1. ~~D~~determine that each completed aircraft conforms to the type design and is in condition for safe operation prior to submitting Statements of Conformity to the Authority; or

2. ~~D~~determine that other products, parts or appliances are complete and conform to the approved design data and are in condition for safe operation before issuing DASR Form 1 - Authorised Release Certificate~~,~~ to certify conformity to approved design data and condition for safe operation;

3. ~~A~~additionally, in the case of environmental requirements determine that:

~~engines, a statement that~~ (i) the completed engine is in compliance with the applicable engine exhaust emissions requirements ~~(where applicable)~~ on the date of manufacture of the engine; ~~or~~ and

(ii) the completed aircraft is in compliance with the applicable CO2 emissions requirements on the date its first certificate of airworthiness is issued.

4. ~~D~~determine that other products, parts or appliances conform to the applicable data before issuing DASR Form 1, as a conformity certificate.

(d) ~~R~~record all details of work carried out;

(e) ~~E~~establish and maintain an internal occurrence reporting system in the interest of safety, to enable the collection and assessment of occurrence reports in order to identify adverse trends or to address deficiencies, and to extract reportable occurrences. This system shall include evaluation of relevant information relating to occurrences and the promulgation of related information;

(f)

1. ~~R~~report to the holder of the type-certificate or design approval, all cases where products, parts or appliances have been released by the production organisation and subsequently identified to have possible deviations from the applicable design data, and investigate with the holder of the type-certificate, or design approval in order to identify those deviations which could lead to an unsafe condition;

2. ~~R~~report to the Authority the deviations which could lead to an unsafe condition identified according to subparagraph (f)1. Such reports shall be made in a form and manner established by the Authority under DASR 21.A.3A(b)2~~, or accepted by the Authority~~;

3. ~~W~~where the holder of the production organisation approval is acting as a supplier to another production organisation, report also to that other organisation all cases where it has released products, parts or appliances to that organisation and subsequently identified them to have possible deviations from the applicable design data.

(g) ~~P~~provide assistance to the holder of the type-certificate or design approval in dealing with any continuing airworthiness actions that are related to the products, parts or appliances that have been produced;

(h) ~~E~~establish an archiving system incorporating requirements imposed on its partners, suppliers and subcontractors, ensuring conservation of the data used to justify conformity of the products, parts or appliances. Such data shall be held at the disposal of the Authority and be retained in order to provide the information necessary to ensure the continued airworthiness of the products, parts or appliances;

(i) ~~W~~where, under its terms of approval, the holder issues a certificate of release to service, determine that each completed aircraft has been subjected to necessary maintenance and is in condition for safe operation, prior to issuing the certificate;

(j) ~~W~~where applicable, under the privilege of DASR 21.A.163(e), determine the conditions under which a military permit to fly can be issued; and

(k) ~~W~~where applicable, under the privilege of DASR 21.A.163(e), establish compliance with DASR 21.A.711(c) and (e) before issuing a military permit to fly to an aircraft.

GM 21.A.165(a) - Obligations of the holder – Basic working document

Compliance with the MPOE is a prerequisite for obtaining and retaining a production organisation approval.

The organisation ~~is to~~ should make the MPOE available to its personnel where necessary for the performance of their duties. A distribution list is to therefore be established. Where the MPOE mainly refers to separate manuals or procedures, the distribution of the MPOE could be limited.

The organisation ~~is to~~ should ensure that personnel have access to and are familiar with that part of the content of the MPOE or the referenced documents, which covers their activities.

Monitoring of compliance with the MPOE is normally the responsibility of the quality assurance function.

GM1 21.A.165(c) - Obligations of the holder – Conformity of prototype models and test specimens

DASR 21.A.33 requires determination of conformity of prototype models and test specimens to the applicable design data. The DASR Form 1—Authorised Release Certificate~~,~~ may be used as a conformity certificate as part of the assistance a MPOA holder provides to a design approval holder/applicant.

GM2 21.A.165(c) - Obligations of holder – Conformity with type design

Individual configurations are often based on the needs of the customer and improvements or changes which may be introduced by the type-certificate holder. There are also likely to be unintentional divergences (concessions or non-conformances) during the manufacturing process. All these changes ~~are to~~ should have been approved by the design approval holder, or when necessary by the Authority.

GM3 21.A.165(c) - Obligations of the holder – Condition for safe operation

Before issue of the Statement of Conformity to the Authority of the State of registry, the holder of a production organisation approval ~~is to~~ should make an investigation so as to be satisfied in respect of each of the items listed below. The documented results of this investigation are to be kept on file by the MPOA holder. Certain of these items may be required to be provided (or made available) to the operator or owner of the aircraft (and in some cases the Authority of the State of registry):

a) Equipment or modifications which do not meet the requirements of the State of manufacture but have been accepted by the Authority of the importing country;

b) Identification of products, parts or appliances which:

i. ~~A~~are not new;

ii. ~~A~~are furnished by the buyer or future operator (including those identified in DASR 21.A.801 and DASR 21.A.805).

...

j) Details of the serviceability state of the aircraft in respect of: a) the fuel and oil contents, b) provision of operationally required emergency equipment such as life rafts, etc.;

...

n) The registration has been marked on the exterior of the aircraft as required by Defence policy. Where required by national legislation fix a fireproof owners nameplate;

...

s) Details of installations which will be removed before starting commercial air transport operations~~,~~ (e.g., ferry kits for fuel, radio or navigation);

...

GM 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 different references to applicability dates:

1. 'Date of manufacture for the first individual production model' which refers to the engine type certification date; and

2. '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 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.

AMC 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.

GM 21.A.165(d) and (h) - Obligations of the holder – Recording and archiving system

...

b) Describe the organisation of and responsibility for the archiving system (location, compilation, format) and conditions for access to the information~~,~~ (e.g., by product, subject);

...

AMC 21.A.165(f)(2) - Reporting to the Authority - Form and manner (AUS)

~~Form AE 061 – Report on Aircraft and Aeronautical Product or~~ DASR Form 44 ~~– Technical~~ Occurrence Report, should be completed as established by the Authority.

~~Form AE 061 and~~ DASR Form 44 may be accepted from:

An individual reporting on their own behalf, or

In the case of an organisation, an individual with the authority to report on behalf of the organisation.

Urgent unsafe conditions should be reported verbally, ie via telephone, in the first instance, while all reporting should be followed up by the completed form, as time allows.

~~The completed form is to be forwarded to the Authority, carbon copied (Cc) the applicable DIA desk officer or other working level point of contact.~~ NOTE: Depending on organisational arrangements, concurrent reporting to the applicable CAMO may also be necessary.

GM 21.A.165(d) and (h) - Obligations of the holder – Recording and archiving system

...

b) Describe the organisation of and responsibility for the archiving system (location, compilation, format) and conditions for access to the information, (e.g., by product, subject);

...

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

AMC to Subpart H (AUS)

The initial airworthiness review is due within 12 months of the issue date of the aircraft's initial Military Restricted Certificate of Airworthiness (MRCoA) or Military Certificate of Airworthiness (MCoA).

...

21.A.172 - Eligibility

Any organisation or operator under whose name an aircraft is registered or will be registered ~~in a participating State applying~~ under DASR ~~('State of registry')~~, or its representative, shall be eligible as an applicant for an airworthiness certificate for that aircraft under this Subpart.

~~**GM 21.A.172 - Eligibility (AUS)**~~

~~NOTE: In a participating Member State ('State of Registry')' means 'on the Defence register' for Australian Defence aircraft. To operate an aircraft on the Defence register requires issue of a Military Type Certificate or Military Restricted Type Certificate, as well as a Certificate of Airworthiness or Restricted Certificate of Airworthiness for that particular aircraft.~~

21.A.173 - Classification

Airworthiness certificates shall be classified as follows:

(a) ~~C~~certificates of airworthiness shall be issued to aircraft which conform to a type-certificate that has been issued in accordance with this DASR ~~(or if appropriate and if national regulations allow, based upon a Civil Type-certificate issued by a recognised Civil Authority)~~ (or if appropriate, based upon a Civil Type-certificate issued by a recognised Civil Authority);

(b) ~~R~~restricted certificates of airworthiness shall be issued to aircraft:

1. which conform to a restricted type-certificate that has been issued in accordance with this DASR; or

2. which have been shown to the Authority to comply with specific airworthiness specifications ensuring adequate safety.

~~**GM 21.A.173 - Classification (AUS)**~~

~~Defence registered aircraft types will each be issued with an Australian Military Type Certificate (MTC), from which Certificates of Airworthiness (COAs) can be issued. Non-Defence registered aircraft types are not subject to DASR; they are subject to the NAA/NMAA regulatory system of registration, e.g CASA. The provision for issuing a COA based on a civil Type Certificate issued by a recognised Civil Authority is therefore not applicable to DASR, since there will always be an Australian MTC from which to issue COAs for Defence aircraft.~~

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. ~~T~~the class of airworthiness certificate applied for;

2. ~~W~~with regard to new aircraft:

   i. ~~A~~a statement of conformity:

      - ~~I~~issued under DASR 21.A.163(b); or
      - ~~I~~issued under DASR 21.A.130 and validated by the Authority; or
      - ~~F~~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~~a weight and balance report with a loading schedule;

   iii. ~~T~~the flight manual and any other manuals required by the Authority of the State of registry

3. ~~W~~with regard to used aircraft:

   i. ~~O~~originating from a~~n EMAR compliant environment~~ State applying EASA / EMAR / DASR, a Military Airworthiness Review Certificate issued in accordance with EASA Part M / EMAR M / DASR M;

   ii. ~~Originating from another State~~ in any other case:

      - ~~A~~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~~a weight and balance report with a loading schedule;
      - ~~T~~the flight manual and any other manuals required by the Authority of the State of registry;
      - ~~H~~historical records to establish the production, modification, and maintenance standard of the aircraft, including all limitations associated with a restricted certificate of airworthiness;
      - ~~A~~a recommendation for the issuance of a certificate of airworthiness or restricted certificate of airworthiness and a Military Airworthiness Review Certificate following an airworthiness review in accordance with DASR M.

(c) Unless otherwise agreed, the statements referred to in subparagraphs (b)(2)(i) and (b)(3)(ii) shall be issued no more than 60 days before presentation of the aircraft to the ~~airworthiness~~ aviation Authority of the State of registry.

...

GM 21.A.175 - Language (AUS)

For the purpose of Defence aircraft, 'the State of registry' means Australia (AUS).

...

GM 21.A.177 - Amendment or modification (AUS)

For the purpose of Defence aircraft, 'the State of registry' means Australia (AUS).

21.A.179 - Transferability and re-issuance within States applying EMAR / DASR

(a) Where ~~national regulations allow~~ ownership ~~(either nationally or to another State/Nation)~~ of an aircraft ~~to be~~ has changed:

1. ~~I~~if it remains on the same register in the same State ~~of registry~~, the certificate of airworthiness, or the restricted certificate of airworthiness conforming to a restricted type-certificate only, shall be transferred together with the aircraft;

2. ~~I~~if the aircraft is registered on a different register in the same State or in another State applying EMAR / DASR, the certificate of airworthiness, or the restricted certificate of airworthiness conforming to a restricted type-certificate only, shall be issued:

   i. ~~U~~upon presentation of the former certificate of airworthiness and of a valid Military Airworthiness Review Certificate issued under EMAR M / DASR M; and

   ii. ~~W~~when satisfying ~~EMAR 21.A.175 /~~ DASR 21.A.175.

(b) Where ownership of an aircraft has changed, and the aircraft has a restricted certificate of airworthiness not conforming to a restricted type-certificate, the airworthiness certificates shall be transferred together with the aircraft provided the aircraft remains on the same register, or issued only with the formal agreement of the Authority of the State of registry to which it is transferred.

GM 21.A.179 – Transferability and re-issuance within States applying DASR (AUS)

The Authority allows for the change of ownership of a Defence registered aircraft in certain circumstances, and should be engaged as early as possible for specific advice.

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GM 21.A.180 - Inspections (AUS)

For the purpose of Defence aircraft, 'the State of registry' means Australia (AUS).

21.A.181 - Duration and continued validity

(a) An airworthiness certificate ~~may~~ shall be issued for an unlimited duration. It shall remain valid subject to:

1. ~~C~~compliance with the applicable type-design, airworthiness directives and instructions for continuing airworthiness; and

2. ~~T~~the aircraft remaining on the same register;

3. ~~T~~the type-certificate or restricted type-certificate under which it is issued not being previously invalidated under DASR 21.A.51; and

4. ~~T~~the certificate not being surrendered or revoked ~~under EMAR 21.B330~~ by the Authority.

(b) Upon surrender or revocation, the certificate shall be returned to the Authority of the State of registry.

GM 21.A.181(a)(4) - Duration and continued validity (AUS)

For the purpose of Defence aircraft, 'the State of registry' means Australia (AUS).

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SUBPART I - NOISE CERTIFICATES ~~(to be added later if required)~~

Reserved.

~~**21.A.201 Scope**~~

~~This Subpart establishes the procedure for issuing noise certificates.~~

~~**21.A.203 Eligibility**~~

~~Any person or organisation under whose name an aircraft is registered or will be registered in a State applying this DASR (State of registry), or its representative, shall be eligible as an applicant for a noise certificate for that aircraft under this Subpart.~~

~~**21.A.204 Application**~~

~~(a) Pursuant to DASR 21.A.203, an application for a noise certificate shall be made in a form and manner established by the Authority of the State of registry.~~

~~(b) Each application shall include:~~

~~1. 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 that the aircraft conforms to a design approved by the Authority of the State of registry; and~~

~~(ii) the noise information determined in accordance with the applicable noise requirements;~~

~~2. with regard to used aircraft:~~

~~(i) the noise information determined in accordance with the applicable noise requirements; and~~

~~(ii) historical records to establish the production, modification, and maintenance standard of the aircraft.~~

~~(c) Unless otherwise agreed, the evidence referred to in (b)(1) shall be issued no more than 60 days before presentation of the aircraft to the Authority of the State of registry.~~

~~**21.A.207 Amendment or modification**~~

~~A noise certificate may be amended or modified only by the Authority of the State of registry.~~

~~**21.A.209 Transferability and re-issuance within States applying this EMAR / DASR**~~

~~Where ownership of an aircraft has changed:~~

~~(a) if the aircraft remains on the same register, the noise certificate shall be transferred together with the aircraft; or~~

(b) if the aircraft moves to the register of another State applying this EMAR / DASR, the noise certificate shall be issued upon presentation of the former noise certificate.

21.A.210 Inspections

The holder of the noise certificate shall provide access to the aircraft for which that noise certificate has been issued upon request by the Authority of the State of registry for inspection.

21.A.211 Duration and continued validity

(a) A noise certificate shall be issued for an unlimited duration. It shall remain valid subject to:

1. compliance with the applicable type-design, environmental protection and continuing airworthiness requirements; and

2. the aircraft remaining on the same register; and

3. the type-certificate or restricted type-certificate under which it is issued not being previously invalidated under DASR 21.A.51;

4. the certificate not being surrendered or revoked under EMAR 21.B.430.

(b) Upon surrender or revocation, the certificate shall be returned to the Authority of the State of registry.

DASR 21 SUBPART J — MILITARY DESIGN ORGANISATION APPROVAL

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21.A.243 - Handbook (Design Organisation Exposition)

(a) The design organisation shall furnish a handbook to the Authority describing, directly or by cross-reference, the organisation, the relevant procedures and the products, or changes to products to be designed. If flight tests are to be conducted, a flight test operations manual defining the organisation's policies and procedures in relation to flight test shall be furnished. The flight test operations manual shall include:

~~1. If flight tests are to be conducted, the design organisation shall furnish a flight test operations manual defining the organisation's policies and procedures in relation to flight tests.~~

1. a description of the organisation's processes for flight test, including the flight test organisation involvement into the permit to fly issuance process. See DASR 21 Section A Subpart P – Military Permit to Fly;
2. crewing policy, including composition, competency, currency and flight time limitations, as required by the Authority;
3. procedures for the carriage of persons other than crew members and for flight test training, when applicable;
4. a policy for risk and safety management and associated methodologies;
5. procedures to identify the instruments and equipment to be carried;
6. a list of documents that need to be produced for flight test.

(b) Where any parts or appliances, or any changes to the products are designed by partner organisations or subcontractors, the handbook shall include a statement of how the design organisation is able to give, for all parts and appliances, the assurance of compliance required by DASR 21.A.239(b), and shall contain, directly or by cross-reference, descriptions and information on the design activities and organisation of those partners or subcontractors, as necessary to establish this statement.

(c) The handbook shall be amended as necessary to remain an up-to-date description of the organisation, and copies of amendments shall be supplied to the Authority.

(d) The design organisation shall furnish a statement of the qualifications and experience of the management staff and other persons responsible for making decisions affecting airworthiness and environmental protection (where applicable) in the organisation.

(e) The organisation shall establish and maintain a Safety Management System (SMS), in accordance with DASR.SMS.

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AMC to 21.A.143(a)(13) and 21.A.243(a)(1), ~~21.A.14(b), 21.A.112B(b) and 21.A.432B(b)~~ Flight Test Operations Manual (FTOM) (AUS)

~~The flight test operations manual shall include:~~

~~a) a description of the organisation's processes for flight test, including the flight test organisation involvement into the Military Permit to Fly issuance process, see DASR 21 Subpart P – Military Permit to Fly;~~

b) crewing policy, including composition, competency, currency and flight time limitations;

c) procedures for the carriage of persons other than crew members and for flight test training, when applicable;

d) a policy for risk and safety management and associated methodologies;

e) procedures to identify the instruments and equipment to be carried; and

f) a list of documents that need to be produced for flight test.

Reserved. 1. General

a. Scope: The FTOM covers flight test operations.

The FTOM complexity should be proportionate to the aircraft and the organisation complexity.

b. Format

The FTOM may:

- be included in the Design Organisation Approval (DOA) /Production Organisation Approval (POA) /Alternative Procedure to DOA (ADOA) documents, or

- be a separate manual.

The FTOM may make reference to other documents to cover the contents listed below, e.g. for record-keeping.

c. Use by contractors or sub-contractors:

When flight tests are performed by contractors or sub-contractors, they should comply with the FTOM of the primary organisations, unless they have established an FTOM in compliance with DASR 21, the use of which has been agreed between the two organisations.

2. The FTOM should contain the following elements:

a. Exposition (not applicable in the case of ADOA):

If the FTOM is presented as a separate document, it should include a chart indicating the structure of the organisation and, more specifically, the functional links of the people in charge of flight test activities. It should also mention the coordination between all departments affecting flight test, e.g. Design Office, Production and Maintenance, in particular coordination for the establishment and update of a Flight Test Programme.

b. Risk and safety management:

The FTOM should describe the organisation's policy in relation to risk and safety assessment, mitigation and associated methodologies.

c. Crew members:

According to the flight test category, the FTOM should describe the organisation's policy on the composition of the crew (including the need to use a Lead Flight Test

Engineer (LFTE)) and the competence and currency of its flight test crew members, including procedures for appointing crew members for each specific flight.

All crew members should be listed in the FTOM.

A flight time limitation policy should be established.

d. Carriage of persons other than crew members:

According to the flight test category, the FTOM should describe the organisation's policy in relation to the presence and safety on-board, of people other than crew members (i.e. with no flying duties).

People other than crew members should not be allowed on board for Category 1 flight tests.

e. Instruments and equipment:

The FTOM should list, depending on the nature of the flight, the specific safety-related instruments and equipment that should be available on the aircraft or carried by people on board.

The FTOM should contain provisions to allow flights to take place in case of defective or missing instruments or equipment.

f. Documents:

The FTOM should list the documents to be produced for flight test, and include (or refer to) the procedures for their issue, update and follow-up to ensure the documents' configuration control:

(i) documents associated with a Flight Test Programme:

- Flight Order for a given flight, which should include:
  - a list of the tests to be performed and associated conditions;
  - safety considerations relevant to the flight;
  - category of the flight (e.g. Category 1);
  - composition of the crew;
  - names of persons other than crew members;
  - aircraft configuration items relevant to the test to be highlighted to the crew;
  - loading of the aircraft;
  - reference to approved flight conditions; and
  - restrictions relevant to the flight to be highlighted to the crew.
  - Flight crew report.

(ii) documentation and information to be carried on the aircraft during flight test;

~~(iii) record-keeping: the FTOM should describe the policy relative to record-keeping.~~

~~g. Permit to fly:~~

~~The FTOM should describe the involvement of the flight test organisation or flight test team (as appropriate) in the process for the approval of flight conditions and the issue of permits to fly in accordance with Subpart P.~~

~~h. Currency and training:~~

~~The FTOM should describe how training for flight test is organised.~~

~~Currency of the flight test crew may be ensured either through recent experience or refresher training.~~

~~The FTOM should specify the requirements for a refresher training in order to ensure that crew members are sufficiently current to perform the required flight test activity.~~

~~A system should be established to record the currency of the flight test crew's training.~~

The flight test operations manual should be owned by the organisation conducting flight test. If flight test is to be conducted by an organisation outside that of the MPOA / MDOA holder, eg a Military Air Operator (MAO), reference to that organisation's flight test operations manual (or equivalent) is acceptable.

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21.A.263 – Privileges

(d) For a military product derived from a civil type certified product, the holder of a MDOA or holder of a MTC approved organisation shall be entitled, within its terms of approval and under the relevant procedures of the design assurance system:

1. To declare the applicability, through validation of no impact to the military certification basis and the intended use, of the following when it ~~is~~ has already been approved by a recognised civil aviation authority:

   (i)~~.~~ a modification; or

   (ii)~~.~~ an instruction for continuing airworthiness; or

   (iii)~~.~~ revisions to the flight manual; or

   (iv)~~.~~ revisions to the maintenance manual.

2. To approve the following, when it ~~is~~ has already been approved by a recognised civil aviation authority and when it has been declared to be applicable to the military product: AMC AMC1

   (i)~~.~~ a major modification; or

   (ii)~~.~~ revisions to the flight manual; or

   (iii)~~.~~ revisions to the approved sections of the maintenance manual.

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DASR 21 SUBPART K — PARTS AND APPLIANCES

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GM 21.A.301 – Scope

Parts and appliances can include Government Furnished Equipment ~~(GFE)~~.

21.A.303 - Compliance with applicable requirements

The showing of compliance of parts and appliances to be installed in a type-certificated product shall be made:

(a) ~~I~~in conjunction with the type-certification procedures of DASR 21 Subpart B, D or E for the product in which it is to be installed; or

(b) ~~W~~where applicable, under the AUSMTSO authorisation procedures of DASR 21 Subpart O; or

(c) ~~I~~in the case of standard parts, in accordance with officially recognised Standards.~~; or~~

~~(d) For specific equipment not subject to recognised airworthiness standards covered by the above and which has been demonstrated to the Authority not to adversely affect the airworthiness of the aircraft, in accordance with integration or installation requirements at aircraft level.~~

GM 21.A.303 - Showing of compliance of parts and appliances

DASR 21.A.303 requires the showing of compliance of parts and appliances to be installed in a type-certificated aircraft to be made in conjunction with the type-certification procedures of DASR 21. This is to identify all risks associated with such parts and appliances and define appropriate mitigation means (design, operational procedures) in order to ensure that all equipment on board of a type-certified product does not have a negative impact on its airworthiness. In the military context, the role of aircraft may change in urgent response to changes in operational scenarios, and flexibility is required regarding mission specific equipment. Typical examples are the integration of tactical radios and Medical Evacuation (MEDEVAC) equipment, containing parts and appliances sourced from non-aviation suppliers.

Parts and appliances with functions relevant for the safe operation of the aircraft are always to be considered as ‘installed’ and therefore part of the approved design of the aircraft. Other items, such as those carried by crew or passengers, are considered ‘loose items’ and not in the scope of DASR 21.A.303 and hence, usually not certified under the procedures of DASR 21. To use such items on board of certified aircraft, the safe integration into the aircraft environment has to be ensured, e.g. by verification that the aircraft design, as approved under the processes outlined in 21.A.303 (a) to (c), has sufficient safety margins to cope with any hazard originating from these items as well as appropriate storage for critical flight phases.

Examples for such equipment are personal electronic devices (PED) which can be understood as ‘any kind of electronic device, typically but not limited to consumer electronics, brought on board the aircraft by crew members, passengers, or as part of the cargo and that are not included in the approved aircraft configuration’. This includes all equipment that is able to consume electrical energy, rechargeable, non-rechargeable or connected to specific aircraft power sources.

Specific equipment like Patient Transport Units (PTU) for intensive care can be separated into a certified ‘provision’ being an approved configuration of the aircraft, and ‘loose items / PED’ under the responsibility of the operating organisation. The same principles could be similarly applied for military mission equipment.

Certified provisions act as the interface between non-certified equipment and the aircraft. They are designed to ensure the airworthiness, providing all safety relevant function, such as (crew/passenger/ patient) restraint, emergency oxygen supply, evacuation means, safe storage and power supply. The provision can also be used to mitigate the increased fire risk of batteries from consumer devices by providing appropriate detection and extinguishing capacity.

For non-certified equipment, including PED's, the safe integration into the aircraft environment can be determined based on compliance to adequate industry standards, acceptable to the authority, or dedicated technical assessments and tests conducted by an appropriate test facility.

~~**AMC 21.A.303(c) - Standard Parts**~~

~~The definition of 'Standard Parts' is included in the Glossary.~~

~~Equipment which must be approved in accordance with certification requirements is not considered a standard part.~~

GM 21.A.303(c) - Officially Recognised Standards

In this context "officially recognised Standards" means:

a) Those standards established or published by an official body whether having legal personality or not, which are widely recognised by the aerospace sector as constituting good practice.

~~b) The standard used by the manufacturer of the equipment as mentioned in paragraph 2 of DASR AMC 21.A.303(c).~~

~~**AMC 21.A.303(d) - Specific Equipment (AUS)**~~

~~The integration of specific equipment under this sub-clause should:~~

~~a. Occur within an appropriate design process in accordance with DASR 21 Subpart B, D or E where the demonstration 'not to adversely affect the airworthiness of the aircraft' is conducted via development and validation of compliance demonstration evidence against aircraft TCB elements affected by the integration, for example - crashworthiness, EMI / EMC, power draw requirements, mass and balance, and flammability.~~

~~b. Include the establishment of configuration management arrangements to ensure:~~

~~i. the MTC holder is aware of any modifications or repairs made to the specific equipment design where those changes may affect the airworthiness of the aircraft, and~~

~~ii. the physical items of the specific equipment are appropriately marked with sufficient information to enable the CAMO to clearly identify items that are approved for installation in the aircraft.~~

~~c. Define the document(s) that the CAMO or 145 maintenance organisation may accept as evidence that the equipment is eligible for installation in the aircraft and is serviceable when released from maintenance or production~~

~~**GM 21.A.303(d) - Specific Equipment (AUS)**~~

~~**Purpose**~~

~~The purpose of this sub-clause is to:~~

~~a. streamline the integration of certain equipment onto a type-certificated product; and~~

~~b. avoid unnecessarily strict requirements being applied to organisations designing, producing and maintaining such equipment.~~

~~**Criteria**~~

~~An item may be considered as specific equipment under this sub-clause if it is:~~

~~a. Installed in or attached to the aircraft for operation in flight; and~~

~~b. Not essential in order for the aircraft to comply with the applicable airworthiness standards; and~~

~~c. Not able to control equipment or systems that are essential in order for the aircraft to comply with the applicable airworthiness standards.~~

~~**Treatment of parts and appliances under DASR 21.A.303(d)**~~

~~During a change to the type-design an MDO may identify parts or appliances within the type-design that have been previously approved under DASR 21.A.303(a) but for which demonstration of compliance evidence under DASR 21.A.303(d) is suitable. In those cases, that part or appliance may be treated in accordance with DASR 21.A.303(d).~~

~~Where an MDO requires clarification in regards to the applicability of airworthiness standards to a part or appliance, the relevant MTC holder should be approached to provide clarification.~~

21.A.305 - Approval of parts and appliances

In all cases where the approval of a part or appliance is explicitly required by ~~Law~~ this DASR or Authority ~~procedures~~ measures, the part or appliance shall comply with the applicable technical standards AUSMTSO ~~or with the specifications recognised as equivalent by the Authority in the particular case~~ and airworthiness codes as referred to in Subpart O.

21.A.307 - Release 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:

(a) accompanied by an authorised release certificate (DASR Form 1), certifying that the item was manufactured in conformity to approved design data and is marked in accordance with DASR 21 Subpart Q; or

(b) a standard part; or

(c) ~~Specific equipment referred to in DASR 21.A.303(d).~~ (reserved)

(d) (reserved) ~~by way of derogation exception from (a), accompanied by a Certificate of Conformity or equivalent release documentation certifying that the item was manufactured in conformity to applicable design data such as the technical and performance standards identified in the approved type-design of the type-certified product, and~~

~~1. it is not a critical part, not required for type-certification or by applicable rules governing the intended operations; and~~

~~2. it has been demonstrated to the Authority that the item will not adversely affect the airworthiness of the aircraft; and~~

~~3. the Certificate of Conformity or equivalent release documentation, identifying the part and manufacturer, is acceptable to the Authority; and~~

~~4. the part is marked with a name, trademark, or symbol identifying the manufacturer and part designation in accordance with the applicable design data.~~

AMC 21.A.307 - Release of parts and appliances for installation (AUS)

Controls shall be established to ensure that aviation software is installed in the required configuration and verified to be installed correctly.

~~**AMC 21.A.307(d) Installation without DASR Form 1**~~

~~Parts and appliances that are required by applicable airworthiness codes used for the certification of airworthiness, certification of intended operations or declaration of performance equivalence thereto (e.g. EASA CS-25, EASA CS-ANCS), or where improper functioning would reduce the safety of the certified product, are to be released with an DASR Form 1. For other equipment (parts or appliances), the Authority may accept a statement of conformity or equivalent release documentation, if it has been appropriately shown for these items~~

~~(1) by test or compliance with appropriate industry consensus standards, that they are not a source of danger in themselves;~~

~~(2) as a result of investigations referred to in DASR 21.A.303, that they are properly identified for installation and that the items will not otherwise adversely affect the airworthiness of the product on which they are to be installed; and~~

~~(3) appropriate tests can be conducted upon installation to confirm they are safe to operate.~~

~~The assessments shall adequately address potential safety relevant failures and provide sufficient justification that they would only have negligible safety effect on aircraft operation'. The safety of third parties should be taken into account, where relevant.~~

SUBPART M – REPAIRS

...

GM 21.A.431A(a) - Scope

Manuals and other instructions for continuing airworthiness (such as the Manufacturers Structural Repair Manual, Maintenance Manuals and Engine Manuals provided by the holder of the type-certificate, supplemental type-certificate, design approval or Auxiliary Power Unit (APU) AUSMTSO authorisation as applicable) for operators, contain useful information for the development and approval of repairs.

When these data are explicitly identified as approved, they may be used by operators without further approval to cope with anticipated in-service problems arising from normal usage provided that they are used strictly for the purpose for which they have been developed.

Approved data is data which is approved either by the Authority, or by an appropriately approved design organisation.

Repairs approved under the framework of a recognised ~~N~~CAA/MAA may be implemented subject to the conditions in the relevant recognition certificate IAW DASR M.A.304(d) and without further approval under DASR 21 Subpart M.

~~When specific repair data is approved in another State in accordance with this EMAR or under an equivalent regulatory system, such data may be accepted under the conditions defined in the applicable arrangement (e.g. recognition agreement) between the Authority and the Authority of the other State.~~

~~In the absence of such arrangement, the repair data should follow the approval route as if it was designed for the certified product where it will be embodied.~~

GM 21.A.431A(e) - Repairs to Australian military technical standard order (AUSMTSO) articles other than an APU

A repair to an AUSMTSO article, other than an Auxiliary Power Unit (APU), can either be seen:

~~1.~~ a) Under DASR 21.A.611, in the context of an AUSMTSO authorisation, i.e., when an article as such is specifically approved under DASR 21 Section A Subpart O, with dedicated rules that give specific rights and obligations to the designer of the article, irrespective of any product type design or change to the type design. For a repair to such an article, irrespective of installation on any aircraft, DASR 21 Section A Subpart O, and DASR 21.A.611 in particular, should be followed; or

~~2.~~ b) When a DASR 145 / DASR M organisation is designing a new repair (based on data not published in the MTC holder or Original Equipment Manufacturer documentation) on an article installed on an aircraft, such a repair can be considered as a repair to the product in which the article is installed, not to the article taken in isolation. Therefore DASR 21 Section A Subpart M can be used for the approval of this repair, that will be identified as 'repair to product x affecting article y', but not 'repair to article y'.

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

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

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AMC 21.A.432B(~~d~~c) Alternative Demonstration

In some countries a government organisation is approved by the Authority to execute the Repair Approval Holder responsibilities. This government organisation may apply for a repair approval from its Authority, without being the original design organisation. In this case the government organisation should, in accordance with DASR 21.A.2, enter an agreement with a design organisation to ensure the undertaking of specific actions and obligations. Alternative procedures (refer to DASR 21.A.14(b)) for establishing a Design Assurance System to fulfil the obligations required under DASR 21.A.451 must be acceptable to the Authority.

AMC 21.A.432C(a) - Form and manner (AUS)

Notification of an intended major repair requiring Authority approval can be made using DASR Form 31 – Notification of Major Change/Major Repair. Submission of DASR Form 31 initiates dialogue that enables the Authority to guide the applicant through the major repair approval process. Application for approval of a major repair design should be made using DASR Form 31b.

Showings of compliance may leverage prior certification by a recognised ~~N~~CAA/MAA in accordance with AMC to DASR 21.A.20. The requirement for a detailed CP is determined in consultation with the Authority. In the case of major repairs, if long and complex compliance demonstration activities are deemed to not be required, the CP can be submitted in simplified form as part of the application.

~~**AMC 21.A.15(a), 21.A.93(a), 21.A.113(a), 21.A.432C(a) Form and manner**~~

~~The applicant should file an application using the forms or tools specified by the Authority. In doubt, the applicant should consult with the Authority to get informed about the relevant forms, tools, and procedure.~~

~~The application should be completed in accordance with the instructions given in the forms or tools or as received from the authority and sent to the addressee nominated by the Authority by fax, email, or regular mail.~~

AMC 21.A.432C(b)(1) – ~~Description~~ Certification programme for a repair design approval

Clarification of DASR 21.A.432C(b)(1): ~~T~~the description of the repair should consist of:

1. ~~–~~ the pre- and post-repair configuration;
2. ~~–~~ a drawing or outline of the repair;
3. ~~–~~ a list of the detailed features;
4. ~~–~~ a description of the type and extent of the inspection; and
5. ~~–~~ an outline of the damage.

~~**AMC 21.A.432C(b)(3) – Identification of reinvestigations**~~

Clarification of DASR 21.A.432C(b)(3): ~~T~~the identification of reinvestigations does not refer to the demonstration of compliance itself, but to the list of the affected airworthiness requirements ~~codes or standards~~ (e.g. EASA CSs), together with the means of compliance.

AMC 21.A.432C(b)(6) – Level of involvement (AUS)

~~The proposed assessment shall take into account at least the following elements:~~

~~1. novel or unusual features of the certification project, including operational, organisational and knowledge management aspects;~~

~~2. complexity of the design and/or demonstration of compliance;~~

~~3. criticality of the design or technology and the related safety and environmental risks, including those identified on similar designs; an~~

~~4. performance and experience of the design organisation of the applicant in the domain concerned.~~

~~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.~~

For acceptable means of compliance regarding proposal and determination of LoI see AMC 21.A.15(b)(6).

AMC 21.A.433(a)~~(b) and 21.A.447~~ - Repair design and ~~r~~Record keeping

~~1.~~ Relevant substantiation data associated with a new major repair design and record keeping should include:

~~a)~~ i. the identification of the damage and the reporting source;

~~b)~~ ii. the major repair design approval sheet identifying the applicable specifications and references of justifications;

~~c)~~ iii. the repair drawing and/or instructions and scheme identifier;

~~d)~~ 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;

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

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

~~g)~~ vii. the effect on the maintenance programme;

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

~~i)~~ ix. any weight and moment changes; and

~~j)~~ x. special test requirements.

~~2.~~ b) Relevant minor repair documentation includes paragraphs ~~1(a)~~ (a)(i) and ~~(c)~~(a)(iii). Other points of paragraph ~~1~~(a) may be included where necessary. If the repair is outside the approved data, a justification for the classification is required.

~~3.~~ 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.).

~~4.~~ 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).

~~5.~~ e) Repairs to engine or APU critical parts would normally only be accepted with the involvement of the MTC holder.

...

GM 21.A.435(a) - Classification of repairs

1. Clarification of the terms ~~major/minor~~ Major/Minor

In line with the definitions given in DASR 21.A.91, a new repair is classified as 'major' if the result on the approved type design has an appreciable effect on structural performance, weight, balance, systems, operational characteristics or other characteristics affecting the airworthiness of the product, part or appliance. In particular, a repair is classified as major if it needs extensive static, fatigue and damage tolerance strength justification and/or testing in its own right, or if it needs methods, techniques or practices that are unusual~~,~~ (i.e., unusual material selection, heat treatment, material processes, jigging diagrams, etc.).

...

2. Airworthiness concerns for ~~major/minor~~ Major/Minor classification

The following should be considered for the significance of their effect when classifying repairs. Should the effect be considered to be significant then the repair should be classified 'Major'. The repair may be classified as '~~minor~~Minor' where the effect is known to be without appreciable consequence.

~~(i)~~ a) Structural performance

Structural performance of the product includes static strength, fatigue, damage tolerance, flutter and stiffness characteristics. Repairs to any element of the structure should be assessed for their effect upon the structural performance.

~~(ii)~~ b) Weight and balance

The weight of the repair may have a greater effect upon smaller aircraft as opposed to larger aircraft. The effects to be considered are related to overall aircraft centre of gravity and aircraft load distribution. Control surfaces are particularly sensitive to the changes due to the effect upon the stiffness, mass distribution and surface profile which may have an ~~a~~effect upon flutter characteristics and controllability.

~~(iii)~~ c) Systems

Repairs to any elements of a system should be assessed for the effect intended on the operation of the complete system and for the effect on system redundancy. The consequence of a structural repair on an adjacent or remote system should also be considered as above, (for example: airframe repair in area of a static port).

~~(iv)~~ d) Operational characteristics

Changes may include:

~~–~~i. stall characteristics;

~~–~~ii. handling;

~~–~~iii. performance and drag;

~~–~~iv. vibration.

~~(v)~~ e) Other characteristics

~~–~~i. changes to load path and load sharing;

~~– Reserved~~

~~–~~ii. fire protection/resistance.

NOTE: Considerations for classifying repairs ~~'major/minor'~~'Major/Minor' should not be limited to those listed above.

3. Examples of ~~major~~'Major' repairs:

~~(i)~~ a) A repair that requires a permanent additional inspection to the approved maintenance programme, necessary to ensure the continued airworthiness of the product. Temporary repairs for which specific inspections are required prior to installation of a permanent repair do not necessarily need to be classified as '~~m~~Major'. Also, inspections and changes to inspection frequencies not required as part of the approval to ensure continued airworthiness do not cause classification as '~~m~~Major' of the associated repair.

~~(ii)~~ b) A repair to life limited or critical parts.

~~(iii)~~ c) A repair that introduces a change to the Aircraft Flight Manual.

GM 21.A.435(b) Repair design approval

(a) Repair Design Approval by ~~DASA~~ the Authority

~~(1) Products first type-certified by the Authority~~

~~DASA a~~Approval by the Authority is required in cases of major repair designs proposed by military design organisation approval (MDOA) holders that do not hold the necessary privilege as per DASR 21.A.263(c)(5) to approve certain major repair designs, as well as in cases of minor repair designs proposed by persons or organisations that do not hold a MDOA.

~~(2) Products first type-certified by an Authority of another state~~

~~Approval by the Authority is always required for major repairs on products first type-certified by an Authority of another state. For repairs approved by an Authority of another state, the conditions for acceptance may be defined in applicable arrangements between the Authority and the Authority of that state. In the absence of such an arrangement, the repair data should follow the approval route of DASR 21.~~

In response to applications (DASR Form 31B – Application for Approval of Major Repair Design), the Authority shall issue all 'major' repair design approvals to the relevant government MTC holder.

DASA may grant the applicant relief from some or all showings of compliance if the repair design has been previously approved by a recognised CAA / MAA and is suitable for the Defence CRE.

(b) Repair Design Approval by the MDOA Holder

(1) Approval by the MDOA holder

Approval of repairs through the use of procedures agreed with ~~DASA~~ the Authority implies that the MDOA holder issues the approval without ~~DASA's~~ the Authority's involvement. ~~DASA~~ The Authority will monitor the application of this procedure within the surveillance plan for the relevant organisation. When the organisation exercises this privilege, the repair release documentation should clearly show that the approval is issued on the basis of its privilege.

(2) Previously approved data for other applications

When it is intended to use previously approved data for other applications, it is expected that an appropriately approved design organisation has checked the applicability and effectiveness of this data. After damage identification, if a repair solution exists in the available approved data, and if the application of this solution to the identified damage remains justified by the previously approved repair design (structural justifications still valid, possible airworthiness limitations unchanged), the solution may be considered to be approved and may be used again.

(3) Temporary repairs

These are life-limited repairs to be removed and replaced by permanent repairs after a limited service period. These repairs should be classified under DASR 21.A.435, and the service period should be defined when the temporary repair is approved.

(4) Fatigue and damage tolerance

An approved design issued before the fatigue- and damage-tolerance evaluation has been completed should specify the limited service period.

...

GM 21.A.443 Limitations

Instructions and limitations associated with repairs should be specified and controlled by those procedures required by the applicable requirements (e.g. flight operations DASRs~~rules~~).

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AMC 21.A.433(a)~~(b) and 21.A.447~~ - Repair design and ~~r~~Record keeping

~~1.~~ Relevant substantiation data associated with a new major repair design and record keeping should include:

~~a)~~ i. the identification of the damage and the reporting source;

~~b)~~ ii. the major repair design approval sheet identifying the applicable specifications and references of justifications;

~~c)~~ iii. the repair drawing and/or instructions and scheme identifier;

~~d)~~ 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;

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

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

~~g)~~ vii. the effect on the maintenance programme;

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

~~i)~~ ix. any weight and moment changes; and

~~j)~~ x. special test requirements.

~~2.~~ b) Relevant minor repair documentation includes paragraphs ~~1(a)~~ (a)(i) and ~~(c)~~(a)(iii). Other points of paragraph ~~1~~(a) may be included where necessary. If the repair is outside the approved data, a justification for classification is required.

~~3.~~ 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.).

~~4.~~ 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).

~~5.~~ e) Repairs to engine or APU critical parts would normally only be accepted with the involvement of the MTC holder.

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SUBPART O - AUSTRALIAN MILITARY TECHNICAL STANDARD ORDER AUTHORISATIONS

21.A.601 – Scope

This Subpart establishes the procedure for issuing Australian Military Technical Standard Order (AUSMTSO) authorisations and the rules governing the rights and obligations ~~and privileges~~ of applicants for, or holders of, such authorisations.

GM 21.A.601 – Scope

For ~~the purpose~~ of this Subpart:

a) 'Article' means any part and appliance (including Government Furnished Equipment (GFE)) to be used on military aircraft;

b) 'technical standards and airworthiness specifications' referred to should consider published Technical Standard Orders~~, including~~ (e.g. CS-ETSO, TSO standards issued by the FAA) or equivalent, that are accepted by the 'Authority' establishing the minimum performance requirements for the specified articles~~;~~.

c) An article produced under an AUSMTSO authorisation is an approved article for the purpose of Subpart K.

...

21.A.602B - Demonstration of capability

Any applicant for an AUSMTSO authorisation shall demonstrate its capability as follows:

a) ~~F~~for production, by holding a production organisation approval, issued in accordance with DASR 21 Subpart G, or through compliance with DASR 21 Subpart F procedures; and

b) ~~F~~for design:

1. ~~F~~for an Auxiliary Power Unit, by holding a design organisation approval, issued by the Authority in accordance with DASR 21 Subpart J;

2. ~~F~~for all other articles, by using procedures setting out the specific design practices, resources and sequence of activities necessary to comply with this DASR.

AMC 21.A.602B(b)(2) - Procedures for AUSMTSO authorisations

1. Scope

1.1 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 AUSMTSO authorisation process

A procedure explaining how the application to the Authority certification process to obtain an AUSMTSO authorisation will be made, should be established.

3. Management of design changes

3.1 A procedure taking into account DASR 21.A.611, ~~should~~ must be established for the classification and approval of design changes on articles under AUSMTSO authorisation.

3.2 Repairs and production deviations from the approved design data.

Procedure for the classification and approval of repairs and unintentional deviations from the approved design data occurring in production (concessions or non-conformance's) should be established.

4. Obligations addressed in DASR 21.A.609

The applicant should establish the necessary procedures to show to the Authority how it will fulfil the obligations under DASR 21.A.609.

For issue of information and instructions, a procedure following the principles of DASR AMC 21.A.14(b), paragraph 4 should be established.

5. Control of design subcontractors

The applicant ~~should~~ must establish the necessary procedures to show to the Authority how it will control design subcontractors.

21.A.603 – Application

(a) An application for an AUSMTSO authorisation shall be made in a form and manner established by the Authority and shall include an outline of the information required by DASR 21.A.605.

(b) When a series of ~~MINOR~~ minor changes in accordance with DASR 21.A.611 is anticipated, the applicant shall set forth in its application the basic model number of the article and the associated part numbers with open brackets after it to denote that suffix change letters or numbers (or combinations of them) will be added from time to time.

AMC 21.A.603(a) - Application - Form and manner (AUS)

DASR Form 34—Application for Australian Technical Standard Order Authorisation, is to be obtained from the Authority, and completed by the Accountable Manager of the organisation.

The completed form, an outline of the design organisation exposition, and details of the proposed terms of approval are to be forwarded to the Authority.

21.A.604 - AUSMTSO Authorisation for an Auxiliary Power Unit

With regard to AUSMTSO authorisation for an Auxiliary Power Unit (APU):

(a) ~~DASR 21.A.15, DASR 21.A.16B, DASR 21.A.17A, DASR 21.A.20, DASR 21.A.21, DASR 21.A.31, DASR 21.A.33, and DASR 21.A.44 shall apply~~ by way of exception from DASR 21.A.603, ~~DASR 21.A.606(c),~~ DASR 21.A.610 and DASR 21.A.615, the following requirements shall apply: DASR 21.A.15, 21.A.16B, 21.A.17A, 21.A.20, 21.A.21, 21.A.31, 21.A.33, 21.A.44.~~, 21.B75 and 21.B.80. except that~~ However, an AUSMTSO authorisation shall be issued in accordance with DASR 21.A.606 instead of the type-certificate;

(b) ~~Subpart D or Subpart E of this DASR is applicable for the approval of design changes~~ by way of exception from DASR 21.A.611~~.~~, the requirements of DASR 21 Subpart D shall apply to the approval of design changes by the APU MTSO authorisation holder and design changes from other applicants classified as a minor change, and the requirements of DASR 21 Subpart E shall apply to the approval of design changes by other applicants classified as a major change. ~~When~~ Where the requirements of Subpart E apply ~~is used~~, a separate AUSMTSO authorisation shall be issued instead of a supplemental type-certificate~~.~~; and

(c) the requirements of DASR 21 Subpart M ~~is~~ applicable shall apply to the approval of repair designs.

21.A.605 - Data requirements

(a) The applicant shall submit to the Authority the following documents~~, to the Authority~~:

~~(a)~~1. a certification programme for the AUSMTSO authorisation, setting out the means to demonstrate compliance with DASR 21.A.606(b);

~~(b)~~2. ~~A~~a statement of compliance certifying that the applicant has met the requirements of this Subpart;

~~(c)~~3. ~~A~~a ~~DASR Form DDP —~~Declaration of Design and Performance (DDP), stating that the applicant has demonstrated that the article complies with the technical standards and airworthiness specifications in accordance with the certification programme;

~~(d)~~4. ~~One~~ a copy of the technical data required in the applicable technical standards and airworthiness specifications;

~~(e)~~5. Tthe exposition (or a reference to the exposition) referred to in DASR 21.A.143 for the purpose of obtaining an appropriate production organisation approval under DASR 21 Subpart G or the manual (or a reference to the manual) referred to in DASR 21.A.125A(b) for the purpose of manufacturing under DASR 21 Subpart F without production organisation approval;

~~(f)~~6. ~~F~~for an APU, the handbook ~~Design Organisation Exposition (DOE)~~, or a reference to the ~~DOE~~ handbook, referred to in DASR 21.A.243 for the purpose of obtaining an appropriate design organisation approval under DASR 21 Subpart J;

7. ~~F~~for all other articles, the procedures, or a reference to the procedures, referred to in DASR 21.A.602B(b)(2).

(b) The applicant shall report to the Authority any difficulty or event encountered during the approval process that may significantly impact the AUSMTSO authorisation.

GM 21.A.605 - Data requirements (AUS)

For the approval of a AUSMTSO authorisation other than for APU, the Authority shall determine its involvement at the level of the entire certification ~~project~~programme, taking into account any novel or unusual features, complexity of the design and/or demonstration of compliance, criticality of the design or technology, as well as the performance and experience of the applicant's design organisation.

AMC 21.A.~~608(a)~~605 - ~~Declaration of Design and Performance~~ Data Requirements (AUS)

Compliance demonstration evidence for AUSMTSO Authorisation applications may use prior certification by an ~~N~~CAA / ~~N~~MAA, whose certification is recognised by the Authority, in accordance with the principles of AMC to DASR 21.A.20 – Demonstration of compliance with the type-certification basis and environmental protection requirements (AUS).

AMC 21.A.605(a)(1) Certification programme

(a) For the purpose of the compliance demonstration in accordance with DASR 21.A.606(b), the applicant should:

(1) establish a certification programme;

(2) submit the certification programme to the Authority; and

(3) keep the certification programme updated during the authorisation process.

(b) The certification programme should contain the following information:

(1) a detailed description of the relevant Australian Technical Standard Order (AUSMTSO) article, including all of its configurations to be certified, and the identification of AUSMTSO and non-AUSMTSO functions, if any;

(2) the applicable technical standards and airworthiness specifications, in case of different minimum performance standard (MPS) available, the selected MPS, the other requirements and any optional aspects (applicable standards, applicable requirements, choice of classes (if applicable)) as well as the expected deviations;

(3) the operating characteristics and the expected limitations;

(4) the intended use of the article and the kind of operations for which the approval is requested;

(5) the proposed means of compliance, including the list of documents and deliverables for the Authority;

(6) an overview of the safety assessment for the functions supported by the article, including the main failure conditions, their classification, the associated assumptions, and architectural features supporting the safety aspects;

(7) the way in which the applicant will record the justifications of compliance; and

(8) a project schedule, including major milestones.

GM 21.A.605(b) Reporting from the compliance demonstration process and updates to the certification programme

The applicant should report to the Authority any unexpected difficulty or event encountered during the compliance demonstration which invalidates or appreciably affects the assumptions previously made, e.g.:

1. an increase in the severity of the consequences of a certain condition (e.g. a failure mode) of the article;

2. one or more significantly reduced margins on the 'pass–fail' criteria of the compliance demonstration;

3. an unusual interpretation of the results of the compliance demonstration;

4. a deviation from the agreed means as defined in the certification programme;

5. a change to the conditions that were used to establish the Authority's Level of Involvement (LoI) ~~set out in the AMC No 2 to EMAR 21.B.100(b)~~; and

6. any potential deviations discovered by the applicant.

The applicant should also evaluate whether the unexpected difficulty or event encountered will impact on the certification programme and, if necessary, they should amend the certification programme as per DASR 21.A.603.

21.A.606 - ~~Issue of~~ Requirements for the issuance of an AUSMTSO authorisation

~~The applicant shall be entitled to have an~~ In order to be issued a AUSMTSO authorisation, ~~issued by the Authority after~~ the applicant shall:

(a) ~~D~~demonstrate~~ing~~ its capability in accordance with DASR 21.A.602B;

(b) ~~D~~demonstrate~~ing~~ that the article complies with the technical conditions of the applicable technical standards and airworthiness specifications ~~that are acceptable to the Authority, and submitting the corresponding statement of compliance; and~~ or with deviations therefrom approved in accordance with DASR 21.A.610, if any

(c) ~~Expressly stating that it is prepared to~~ comply with ~~DASR 21.A.609.~~ the requirements of this Subpart; and

(d) declare that no feature or characteristic has been identified that may make the article unsafe for the uses for which certification is requested.

AMC 21.A.606(d) Declaration

The related declaration should confirm that compliance with the applicable technical standards and airworthiness specifications is successfully demonstrated and that all the assumptions, constraints, deviations, limitations, and open problem reports that are relevant for the approval of the installation are defined for both the AUSMTSO and the non-AUSMTSO functions.

Additionally, the applicant should demonstrate and declare that the non-AUSMTSO functions do not interfere with the AUSMTSO functions.

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21.A.608 - Declaration of Design and Performance (DDP)

(a) The ~~DASR Form DDP—Declaration of Design and Performance (~~DDP~~)~~ shall contain at least the following information:

1. ~~I~~information corresponding to DASR 21.A.31(a) and DASR 21.A.31(b), identifying the article and its design and testing standard.

2. ~~T~~the rated performance of the article, where appropriate, either directly or by reference to other supplementary documents.

3. ~~A~~a statement of compliance certifying that the article has met the applicable technical standards and airworthiness specifications.

4. ~~R~~reference to relevant test reports.

5. ~~R~~reference to the appropriate Maintenance, Overhaul and Repair Manuals.

6. ~~T~~the levels of compliance, where various levels of compliance are allowed by the applicable technical standards and airworthiness specifications.

7. Llist of deviations accepted in accordance with DASR 21.A.610.

(b) The DDP shall be endorsed with the date and signature of the holder of the AUSMTSO authorisation, or its authorised representative.

AMC 21.A.608~~(b)~~ - Declaration of Design and Performance

The DASR Form DDP—Declaration of Design and Performance~~,~~ should be completed by the applicant.

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

The holder of an AUSMTSO authorisation under this Subpart shall:

(a) ~~M~~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) ~~P~~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;

(c) ~~P~~prepare, maintain and update master copies of all manuals required by the applicable airworthiness specifications for the article;

(d) ~~M~~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) ~~M~~mark each article in accordance with DASR 21.A.807;

(f) ~~C~~comply with DASR 21.A.3A, DASR 21.A.3B and DASR 21.A.4;

(g) ~~C~~continue to meet the certification requirements of DASR 21.A.602B.

21.A.610 - Approval for deviation

(a) Each manufacturer who requests approval to deviate from any performance requirements of applicable technical standards and airworthiness specifications shall demonstrate that the standards from which a deviation is requested are compensated for by factors or design features providing an equivalent level of safety.

(b) The request for approval to deviate, together with all pertinent data, shall be submitted to the Authority.

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GM 21.A.611 - Design changes

A change to an AUSMTSO article is managed under either of the following two processes:

– under DASR 21A.611 in the context of an AUSMTSO authorisation, i.e., when an article as such is specifically approved under DASR 21 Section A Subpart O, with dedicated rules that give specific rights and obligations to the designer of the article, irrespective of any product type design or change to the type design. For a change to such an article, irrespective of installation on any aircraft, DASR 21 Section A Subpart O, and DASR 21.A.611 in particular, should be followed~~.~~; or

– when an organisation is designing a change (based on data not published in the MTC holder or Original Equipment Manufacturer (OEM) documentation) on an article installed on an aircraft, such a change can be considered as a change to the product in which the article is installed, not to the article taken in isolation. Therefore, DASR 21 Section A Subpart D can be used for the approval of this change that will be identified as 'change to product x affecting article y', but not 'change to article y'.

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.

...

21.A.615 - Inspection by the Authority

Upon a request of the Authority, each applicant for, or holder of an AUSMTSO authorisation for an article shall allow the Authority to:

(a) ~~W~~witness any tests;

(b) ~~I~~inspect the technical data files on that article.

21.A.619 - Duration and continued validity

(a) An AUSMTSO authorisation shall be issued for an unlimited duration. It shall remain valid unless:

1. ~~T~~the conditions required when AUSMTSO authorisation was granted are no longer being observed; or

2. ~~T~~the obligations of the holder specified in DASR 21.A.609 are no longer being discharged; or

3. ~~T~~the article has proved to give rise to unacceptable hazards in service; or

4. ~~T~~the authorisation has been surrendered or revoked under the applicable administrative procedures established by the Authority.

(b) Upon surrender or revocation, the certificate shall be returned to the Authority.

...

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:

~~Examples of where a military permit to fly may be required are:~~

1. ~~D~~development;
2. ~~Demonstration of~~ showing compliance with regulations or ~~certification requirements airworthiness codes~~ airworthiness requirements;
3. ~~D~~design organisations or production organisations crew training;
4. ~~P~~production flight testing of new production aircraft;
5. ~~F~~flying aircraft under production between production facilities;
6. ~~F~~flying the aircraft for customer acceptance;
7. ~~D~~delivering or exporting the aircraft;
8. ~~F~~flying the aircraft for Authority acceptance;
9. ~~M~~market survey, including customer's crew training;
10. ~~E~~exhibition and air show;
11. ~~F~~flying the aircraft to a location where maintenance or airworthiness review are to be performed, or to a place of storage;
12. ~~F~~flying an aircraft at a weight in excess of its maximum certificated takeoff weight for flight beyond the normal range over water, or over land areas where adequate landing facilities or appropriate fuel is not available;
13. (Reserved)
14. ~~F~~flying aircraft meeting the applicable airworthiness requirements before conformity to the environmental requirements (where applicable) has been found;
15. ~~F~~for individual aircraft or types for which a certificate of airworthiness or restricted certificate of airworthiness is not appropriate;
16. (Reserved)~~flying an aircraft for troubleshooting purposes or to check the functioning of one or more systems, parts or appliances after maintenance.;~~
17. ~~16.~~ ~~O~~operation of new or modified capability, prior to completion of certification, due to a capability imperative;
18. ~~17.~~ ~~O~~operation of aircraft where a required maintenance activity has not been completed, due to a capability imperative.

(b) This Subpart establishes the procedure for issuing military permits to fly and approving associated flight conditions and establishes the rights and obligations of the applicants for, and holders of, those permits and approvals for flight conditions.

GM 21.A.701 - Scope

An aircraft ~~registered 'outside the participating Military States (pMS), ie outside of those countries subject to DASA regulations or outside of militaries using EMAR based technical regulations, and~~ to be used for flight testing by an organisation which has its principle place of business in ~~the pMS~~ 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.

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

A certificate of airworthiness or restricted category certificate of airworthiness may not be appropriate for an individual aircraft or aircraft type when it is not practicable to comply with the normal continued airworthiness requirements and the aircraft is to a design standard that is demonstrated to be capable of safe flight under defined conditions. DASR 21.A.701 identifies cases where the issuance of a (~~R~~restricted) ~~C~~certificate of ~~A~~airworthiness may not be possible or appropriate and this ~~paragraph~~ GM provides further information and typical examples for clarification where appropriate:

NOTE: This list of examples is not exhaustive

~~a)~~ (1) Development:

~~i.~~ – testing of new aircraft or modifications;

~~ii.~~ – testing of new concepts of airframe, engine propeller and equipment;

~~iii.~~ – testing of new operating techniques.

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

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

~~c)~~ (3) Design organisations or production organisations crew training:

~~i.~~ – Flights for training of crew that will perform design or production flight testing before the design approval or Certificate of Airworthiness (C of A) can be issued.

~~d)~~ (4) Production flight testing of new production aircraft:

~~i.~~ – For establishing conformity with the approved design, typically this would be the same programme for a number of similar aircraft.

~~e)~~ (5) Flying aircraft under production between production facilities:

~~i.~~ – green aircraft ferry for follow on final production.

~~f)~~ (6) Flying the aircraft for customer acceptance:

~~i.~~ – Before the aircraft is sold and/or registered.

~~g)~~ (7) Delivering or exporting the aircraft:

~~i.~~ – Before the aircraft is registered in the State where the C of A will be issued.

~~h)~~ (8) Flying the aircraft for Authority acceptance:

~~i.~~ – In the case of inspection flight test by the Authority before the C of A is issued.

~~i)~~ (9) Market survey, including customer's crew training:

~~i.~~ – Flights for the purpose of conducting market survey, sales demonstrations and customer crew training with non-military type certificated aircraft or aircraft for which conformity has not yet been established or for non-registered a/c and before the C of A is issued.

~~j)~~ (10) Exhibition and air show:

~~i.~~ – Flying the aircraft to an exhibition or show and participating to the exhibition or show before the design approval is issued or before conformity with the approved design has been shown.

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

~~i.~~ – Ferry flights in cases where maintenance is not performed in accordance with approved programmes, where an Airworthiness Directive (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.

~~l)~~ (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:

~~i.~~ – Oversees ferry flights with additional fuel capacity.

~~m)~~ (13) Reserved.

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

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

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

~~i.~~ – 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, such as the absence of properly certified spare parts.

(16) Reserved.

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

~~i.~~ – 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 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 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.

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

~~i.~~ – 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: 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.

AMC 21.A.701(a) - Change of aircraft role and / or environment (AUS)

A military permit to fly may also be used to test a change to an aircraft's role and / or environment. For further information see DASR AMC FT.05.A (Flight Test for role and/or environment changes (AUS)~~Air Operations~~).

21.A.703 - Eligibility

(a) ~~At the discretion of the Authority, a~~Any ~~person or~~ organisation shall be eligible as an applicant for a military permit to fly ~~under the conditions laid down in this Subpart~~ except for a military permit to fly requested for the purpose of DASR 21.A.701(a)(15) where the applicant shall be the owner. ~~The applicant for a military permit to fly is also eligible for application for the approval of the flight conditions.~~

(b) ~~Reserved~~ Any person or organisation shall be eligible for application for the approval of the flight conditions.

~~(c) Reserved~~

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.

~~An appropriately approved design organisation can apply for the approval of the flight conditions when using its privilege in accordance with DASR 21.A.263(b)(1).~~

21.A.705 - Authority of the State

~~The military permit to fly under DASR 21 shall be issued by the approving Authority of the State of registry including cases where the aircraft will fly in another State. The military permit to fly contains all the conditions and restrictions to ensure safe flight but other airspace and operational rules remain the competence of the Authority of the State where the flight will take place. The applicant shall therefore also ensure compliance with the relevant regulations of that State.~~

For the purpose of this Subpart, the 'Authority' shall be:

(a) the Authority of the State of registry; or

(b) for unregistered aircraft, the Authority designated by the State which prescribed the identification marks.

GM 21.A.705 – Authority of the State (AUS)

For aircraft registered in accordance with DASR ARO.60, 'the Authority of the State of registry' refers to DASA.

~~**GM 21.A.705 Authority of the State**~~

~~Reserved.~~

21.A.707 - Application for military permit to fly

...

(b) Each application for a military permit to fly shall include:

1. ~~T~~the purpose(s) of the flight(s), in accordance with DASR 21.A.701;

2. ~~T~~the ways in which the aircraft does not comply with the applicable airworthiness requirements;

3. ~~T~~the flight conditions approved in accordance with DASR 21.A.710.

...

GM 21.A.707(b) – Application

The military permit to fly application form~~,~~ (DASR Form 21—Application for Part 21 Permit to Fly)~~, is to~~ should be obtained from the Authority.

21.A.708 - Flight conditions

Flight conditions include:

(a) ~~T~~the configuration(s) for which the military permit to fly is requested;

(b) ~~A~~any condition or restriction necessary for safe operation of the aircraft, including:

1. ~~T~~the conditions or restrictions put on itineraries or airspace, or both, required for the flight(s);

2. ~~The~~ any conditions and restrictions put on the flight crew to fly the aircraft required by the Authority;

3. ~~T~~the restrictions regarding carriage of persons other than flight crew;

4. ~~T~~the operating limitations, specific procedures or technical conditions to be met ~~(which may include the restrictions regarding carriage/release/firing of weapons)~~;

5. ~~T~~the specific flight test programme (if applicable);

6. ~~T~~the specific continuing airworthiness arrangements including maintenance instructions and the regime under which they will be performed.

(c) ~~T~~the substantiation that the aircraft is capable of safe flight under the conditions or restrictions of subparagraph (b);

(d) ~~T~~the method used for the control of the aircraft configuration, in order to remain within the established conditions.

GM 21.A.708(b) Flight conditions

DASR 21.A.708(b) requires recording of all conditions or restrictions that are necessary to ensure the safe operation of the aircraft. For military aircraft, the safe carriage or release of weapons and stores has to be equally considered. Therefore, any restrictions regarding the military kind of operations (e.g., Air to Air refuelling, Low Level Flight, Ship-Based-Operations and Landing, carriage or release of weapons and stores) should be documented under (b)(4), as appropriate.

GM1 21.A.708(b) - Flight conditions (AUS)

Flight conditions should also include:

a) required qualifications, training and experience of flight test personnel,

b) role(s),

c) environmental aspects,

d) weather limitations,

e) concurrent tasking,

f) other aircraft (air to air refuelling, chase aircraft etc.),

g) ship-borne operation, e.g. first of class flight trials, and

h) carriage or release of weapons and stores.

GM1 to 21.A.708(c) - Safe flight

Safe flight normally means continued safe flight and landing but in some limited cases~~,~~ (e.g. higher risk flight testing~~,~~) it can mean that the aircraft is able to fly in a manner that will primarily ensure the safety of overflown third parties, the flight crew and, if applicable other occupants.

This definition of 'safe flight' should not be interpreted as allowing a test pilot, equipped with a parachute and operating over a sparsely populated area, to set out on a test flight in the full knowledge that there is a high probability of losing the aircraft. The applicant's determination of safe flight should apply Aviation Safety principles to eliminate safety hazards and risks So Far As is Reasonably Practicable (SFARP), or if it is not reasonably practicable to do so, minimise these hazards and risks SFARP. This can be achieved through application of the risk management requirements outlined in DASR SMS~~.A.25(b)2.2~~ to ensure, so far as is reasonably practicable the aircraft will carry out the flight without damage or injury to the aircraft and its occupants or to other property or persons whether in the air or on the ground.

...

GM3 to 21.A.708(c) – Operation of Overweight Aircraft

This GM provides information and guidance with respect to permit to fly for operating an aircraft 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. The criteria mentioned below may also be used as a starting point to discuss the approval of other overweight operations with the Authority.

1. GENERAL.

The excess weight that may be authorized using the criteria below refer to overweight operations as defined above and would normally be limited to additional fuel, fuel carrying facilities, and navigational equipment necessary for the flight. Hence, other overweight operations may require additional considerations.

It is recommended that the applicant discuss the proposed flight with the TC holder of the aircraft to determine the availability of technical data on the installation of additional fuel carrying facilities and/or navigational equipment.

2. CRITERIA USED TO DETERMINE THE SAFETY OF ADDITIONAL FACILITIES.

In evaluating the installation of additional facilities, the Authority or the design organisation must find that the changed aircraft is safe for operation. To assist in arriving at such a determination, the following questions are normally considered:

a. Does the technical data include installation drawings, structural substantiating reports, weight, balance, new centre of gravity limits computations, and aircraft performance limitations in sufficient detail to allow a conformity inspection of the aircraft to be made?
b. In what ways does the aircraft not comply with the applicable certification specifications?
c. Are the fuel tanks vented to the outside? Are all areas in which tanks are located ventilated to reduce fire, explosion, and toxicity hazards?
d. Are the tanks even when empty strong enough to withstand the differential pressure at maximum operating altitude for a pressurized aircraft?
e. Have means been provided for determining the fuel quantity in each tank prior to flight?
f. Are shutoff valves, accessible to the pilot, provided for each additional tank to disconnect these tanks from the main fuel system?
g. Are the additional fuel tank filler connections designed to prevent spillage within the aircraft during servicing?
h. Is the engine oil supply and cooling adequate for the extended weight and range?

3. LIMITATIONS.

The following types of limitations may be necessary for safe operation of the aircraft:

a. Revised operational airspeeds for use in the overweight condition.
b. Increased pilot skill requirements.
c. A prescribed sequence for using fuel from various tanks as necessary to keep the aircraft within its centre of gravity range.
d. Notification to the control tower of the overweight take-off condition to permit use of a runway to minimize flight over congested areas.
e. Avoidance of severe turbulence. If encountered, the aircraft should be inspected for damage as soon as possible.

EXAMPLE of operating limitations which may be prescribed as part of the permit to fly:
Aircraft type: xxxxxx Model: yyyy
Limitations:

1. Maximum weight must not exceed 8 150 pounds.
2. Maximum quantity of fuel carried in auxiliary tanks must not exceed 106 gallons in fwd tank, 164 gallons in centre tank, and 45 gallons in aft tank.

3. Centre of gravity limits must not exceed (fwd) +116.8 and (aft) +124.6.
4. Aerobatics are prohibited.
5. Use of autopilot while in overweight condition is prohibited.
6. Weather conditions with moderate to severe turbulence should be avoided.
7. When an overweight landing is made or the aircraft has been flown through moderate or severe turbulence while in an overweight condition, the aircraft must be inspected for damage after landing. The inspections performed and the findings must be entered in the aircraft log. The pilot must determine, before the next take-off, that the aircraft is airworthy.
8. When operated in the overweight condition, the cruising speed (Vc) shall not exceed 185 m.p.h. and the maximum speed (Vne) shall not exceed 205 m.p.h.
9. Operation in the overweight condition must be conducted to avoid areas having heavy air traffic, to avoid cities, towns, villages, and congested areas, or any other areas where such flights might create hazardous exposure to person or property on the ground.

…

21.A.709 - Application for approval of flight conditions

(a) Pursuant to DASR 21.A.707(c) and when the applicant has not been granted the privilege to approve the flight conditions, an application for approval of the flight conditions shall be made ~~to the Authority~~ in a form and manner established by the Authority.

(b) Each application for approval of the flight conditions shall include:

1. ~~T~~the proposed flight conditions;

2. ~~T~~the documentation supporting these conditions; and

3. ~~A~~a declaration that the aircraft is capable of safe flight under the conditions or restrictions of paragraph DASR 21.A.708(b).

…

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

Together with the application, the documentation required by DASR 21A.709(b) ~~should~~ 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.

…

21.A.710 - Approval of flight conditions

(a) When approval of the flight conditions is related to the safety of the design, the flight conditions shall be approved by:

1. ~~T~~the Authority; or

2. ~~A~~an appropriately approved design organisation, under the privilege of DASR 21.A.263(c)(6).

(b) When approval of the flight conditions is not related to the safety of the design, the flight conditions shall be approved by the Authority, or the appropriately approved organisation that will also issue the military permit to fly.

(c) Before approving the flight conditions, the Authority or the approved organisation ~~under DASR 21.A.711(b) or DASR 21.A.711(c)~~ must be satisfied that the aircraft is capable of safe flight

under the specified conditions and restrictions. The Authority may make or require the applicant to make any necessary inspections or tests for that purpose.

GM 21.A.710 - Approval of flight conditions

1. The approval of flight conditions is related to the safety of the design, when:

   a) the aircraft does not conform to an approved design; or

   b) an Airworthiness Limitation, a Certification Maintenance Requirement or an Airworthiness Directive has not been complied with; or

   c) the intended flight(s) are outside the approved envelope~~.~~;

   d) the permit to fly is issued for the purpose of DASR 21.A.701(a)(15).

2. Examples when the approval of flight conditions is not related to the safety of the design are:

   a) production flight testing for the purpose of conformity establishment;

   b) delivery / export flight of a new aircraft the design of which is approved;

   c) demonstrating continuing conformity with the standard previously accepted by the Authority for the aircraft or type of aircraft to qualify or re-qualify for a (restricted~~–~~) Certificate of Airworthiness.

…

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

(a) ~~A permit to fly (EMAR Form 20a) may be issued by the Authority under the conditions specified in EMAR 21.B.525.~~The Authority shall issue a military permit to fly:

   1. ~~U~~upon presentation of the data required by DASR 21.A.707;

   2. ~~W~~when the flight conditions ~~of~~ referred to in DASR 21.A.708 have been approved in accordance with DASR 21.A.710; and

   3. ~~W~~when the Authority, through its own investigations, which may include inspections, or through procedures agreed with the applicant, is satisfied that the aircraft conforms to the design defined under DASR 21.A.708 before flight.

(b) An appropriately approved design organisation may issue a military permit to fly (DASR Form 20b—Military Permit to Fly - Approved Organisation)~~,~~ under the privilege granted under DASR 21.A.263(c)(7), when the flight conditions referred to in DASR 21.A.708 have been approved in accordance with DASR 21.A.710.

(c) An appropriately approved production organisation may issue a military permit to fly (DASR Form 20b) under the privilege granted under DASR 21.A.163(e), when the flight conditions referred to in DASR 21.A.708 have been approved in accordance with DASR 21.A.710.

(d) Reserved ~~An appropriately approved continuing airworthiness management organisation may issue a permit to fly (DASR Form 20b) under the privilege granted under DASR M.A.711, when the flight conditions referred to in DASR 21.A.708 have been approved in accordance with DASR 21.A.710.~~

(e) The military permit to fly shall specify the purpose(s) and any conditions and restrictions, which have been approved in accordance with DASR 21.A.710.

(f) For permits issued under subparagraph (b), (c.) or (d), a copy of the military permit to fly and associated flight conditions shall be submitted to the Authority at the earliest opportunity but not later than three days from the permit being issued.

(g) Upon evidence that any of the conditions specified in DASR 21.A.723(a) are not met for a military permit to fly that an organisation has issued pursuant to subparagraph (b), (c.) or (d), that organisation shall revoke that military permit to fly immediately and inform without delay the Authority.

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

~~As an alternative means of compliance to Subpart P requirements the military permit to fly for an aircraft allocated for flight test development should be issued in compliance with the Military Permit to Fly (MPTF) procedure in defining the approval process for the flight test conditions. The MPTF process has been specifically developed for use in the Military Flight Test environment and enables closer cooperation between participating nations to utilise a single MPTF.~~

...

21.A.719 – Transferability

(a) A military permit to fly is not transferable.

(b) (reserved)

...

21.A.723 - Duration and continued validity

(a) A military permit to fly shall be issued for a ~~stated period of validity and~~ maximum of 12 months, unless otherwise specified by the Authority, and shall remain valid subject to:

1. ~~C~~compliance with the conditions and restrictions of DASR 21.A.711(e) associated to the military permit to fly;

2. ~~T~~the military permit to fly not being surrendered or revoked ~~(under EMAR 21.B.530)~~; ~~or~~

3. ~~T~~the aircraft remaining on the same register.

(b) (Reserved)

(c) Upon surrender or revocation, the military permit to fly shall be returned to the Authority.

...

SUBPART Q - IDENTIFICATION OF PRODUCTS, PARTS AND APPLIANCES

21.A.801 - Identification of products

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

1. ~~M~~manufacturer's name;

2. ~~P~~product designation;

3. ~~M~~manufacturer's Serial number; and

4. ~~A~~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).

21.A.803 - Handling of identification data

...

(c) By way of exception from paragraphs (a) and (b), any person or organisation performing maintenance work under the applicable associated implementing rules may, in accordance with methods, techniques and practices established by the Authority:

1. ~~R~~remove, change, or place the identification information referred to in DASR 21.A.801(a) on any aircraft, engine, propeller, propeller blade, or propeller hub, or in DASR 21.A.807(a) on an APU; or

2. ~~R~~remove an identification plate referred to in DASR 21.A.801, or DASR 21.A.807 for an APU, when necessary during maintenance operations.

(d) No person shall install an identification plate removed in accordance with subparagraph (c)(2)~~,~~ on any aircraft, engine, propeller, propeller blade, or propeller hub other than the one from which it was removed.

21.A.804 - Identification of parts and appliances

(a) Each part or appliance shall be marked permanently and legibly with:

1. ~~A~~a name, trademark, or symbol identifying the manufacturer in a manner identified by the applicable design data; and

2. ~~T~~the part number, as defined in the applicable design data; and

3. ~~T~~the letters AUSMPA (Australian Military Part Approval) for parts or appliances produced in accordance with approved design data not belonging to the type-certificate holder of the related product, except for AUSMTSO articles.

(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.

GM 21.A.804(a)(1) - Identification of parts and appliances

It is not the intent of DASR 21.A.804(a)(1) to introduce an obligation for a production organisation (manufacturer) to mark new parts or appliances with information which is not identified by the military design approval holder. Therefore, the physical marking of parts and appliances is only required when established by the military design approval (MTC, MSTC, AUSMTSO, repair, change) holder.

The design approval holder is required to identify to the manufacturer how the marking in accordance with DASR 21.A.804(a)(1) should be done. This can be limited to identifying a marking field, possible depth and/or means etc., without prescribing the actual text or symbols to be used.

~~**AMC 21.A.804(a)(3) - Identification of parts and appliances**~~

~~Mark 'EMPA' (European Military Part Approval) is a generic designation that is to be adapted by each Nation. Thus, the letter 'E' should be replaced by the ISO 3166–1:2006 (or STANAG 1059 Edition 8)* three letter code in order to distinguish identification of parts and appliances produced under each nation approval. This requirement has been incorporated into DASR by replacing 'EMPA' with AUSMPA (AUS is the NATO trigram for Australia). For information: 'AUT' is the trigram for Austria.~~

~~**GM 21.A.804(a)(3) - Identification of parts and appliances**~~

~~Mark 'EPA' (European Part Approval) for parts and appliances produced under EASA approval that can be installed in military aircraft, should be considered as a recognised mark instead of 'AUSMPA' (Australian Military Part Approval) in the same manner as defined on DASR AMC 21.A.804(a)(3) for parts and appliances produced under each nation approval.~~

21.A.805 - Identification of critical parts

In addition to the requirement of DASR 21.A.804, each manufacturer of a part to be fitted on a type-certificated product which has been identified as a critical part shall permanently and legibly mark that part with a part number and a serial number.

21.A.807 - Identification of AUSMTSO articles

(a) Each holder of an AUSMTSO authorisation under DASR 21 Subpart O shall permanently and legibly mark each article with the following information:

1. ~~T~~the name and address of the manufacturer;
2. ~~T~~the name, type, part number or model designation of the article;
3. ~~T~~the serial number or the date of manufacture of the article or both; and
4. ~~T~~the applicable AUSMTSO number.

(b) By way of exception from paragraph (a), if the Authority agrees that a part is too small or that it is otherwise impractical to mark a part with any of the information required by paragraph (a), the authorised release document accompanying the part or its container shall include the information that could not be marked on the part.

(c) Each person who manufactures an APU under DASR 21 Subpart G or Subpart F shall identify that APU by means of a fire-proof 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.

DASR AMENDMENT RECORD
DCP 2024 - 014

DASR CLAUSE: DASR GM 21.A.14(c)

RATIONALE FOR CHANGE

The purpose of this DCP is to correct a typographical error.

CURRENT REGULATION TEXT

Attention should also focus on the processes to meet the Safety Management System requirements (DASR 21.A.239(c)) equivalence. This is to ensure that the holder organisation's risk management of operational hazards is based on a sound risk and safety management system

REVISED REGULATION TEXT

Attention should also focus on the processes to meet the Safety Management System requirements (DASR 21.A.239(d)) equivalence. This is to ensure that the holder organisation's risk management of operational hazards is based on a sound risk and safety management system

Australian Government
Department of Defence
Defence Aviation Safety Authority

Defence Aviation Safety Authority

DASR AMENDMENT RECORD
DCP 2024-005

DASR CLAUSE: GM 66.A.15 Eligibility (AUS)

RATIONALE FOR CHANGE

The regulation clause is a clear statement that to be eligible for a MAML, an applicant must be at least 18 years of age. Remaining GM is not relevant to DASR 66.A.15.

The GM is redundant and has been deleted.

CURRENT REGULATION TEXT

1. Licences are required in order to issue a Certificate of Release to Service (CRS) following any on-aircraft maintenance. Whilst off-aircraft maintenance of components must have a DASR Form 1 – sometimes referred to as a CRS - the individual issuing the component's DASR Form 1 is not required to hold a licence – see DASR 145.A.30(i).

2. Applicants may apply for a licence at 18 years of age. However, in accordance with DASR 145.A.35(m), individuals are not permitted to issue a Certificate of Release to Service for an aircraft until they are 21 years old.

REVISED REGULATION TEXT

N/A delete GM in toto.

Australian Government
Department of Defence
Defence Aviation Safety Authority

Defence Aviation Safety Authority

DASR AMENDMENT RECORD
DCP 2024-005

DASR CLAUSE: GM2 66.A.20(a)1 - Line maintenance (AUS)

RATIONALE FOR CHANGE

The GM this repeats the regulation, is ambiguous and could detract from clear understanding of the regulation.

Therefore, the GM is to be deleted.

CURRENT REGULATION TEXT

Where Line maintenance involves more than one person, a Category B MAML holder with appropriate privileges shall issue the CRS.

REVISED REGULATION TEXT

N/A GM is to be deleted in toto.

Australian Government
Department of Defence
Defence Aviation Safety Authority

Defence Aviation Safety Authority

DASR AMENDMENT RECORD
DCP 2024-005

DASR CLAUSE: GM1 66.A.20(a)3(ii) - Certification Privileges (AUS)

RATIONALE FOR CHANGE

Regulation clause 66.A.20(a)(3)(ii) relates to Category B2 MAML holders. The GM is ambiguous and could cause confusion when a Category B2 MAML holder has not attained a Category A MAML.

The GM has also been amended for consistency by replicating GM1 66.A.20(a)1.

CURRENT REGULATION TEXT

DASR AMC 145.A.30(g) paragraph 2 gives an indicative list of simple minor scheduled Line maintenance and simple defect rectifications, which may constitute category A tasking. A B2 MAML holder who has attained an A category, will have the A category privileges and therefore can issue CRS for those tasks they have personally performed.

REVISED REGULATION TEXT

For an indicative list of simple minor scheduled Line maintenance and simple defect rectification refer to DASR AMC 145.A.30(g), paragraph 2.

Australian Government
Department of Defence
Defence Aviation Safety Authority

Defence Aviation Safety Authority

DASR AMENDMENT RECORD
DCP 2023 - 035

DASR CLAUSE: 145.A.35(m)

RATIONALE FOR CHANGE

DASR 145.A.35(m) currently requires that the minimum age for certifying staff and support staff shall be 21 years. This is consistent with all global CAA and the vast majority of MAA. However, it is possible that the minimum qualifications (knowledge and experience) for the award of a Category A MAML can be achieved prior to an applicant reaching 21 years of age. The minimum two-year experience requirements for a Category B MAML (versus six-month minimum experience for Category A) means that it is highly unlikely that any Category B MAML applicants will be under 21 years. Reducing the minimum age for certifying staff from 21 years to 18 years, for minor scheduled line maintenance and simple defect rectification, has a positive impact of the achievement of capability by allowing the authorisation of additional certifying staff.

A Defence Flight Safety Bureau human factors technical expert analysis identified that it was difficult to find scientific evidence supporting the imposition of a 21-year-old threshold. This expert analysis identified that the main criteria for authorising certifying staff should be careful selection of applicants, proper job analysis to ensure that all required skills are adequately addressed in training, completion of the required training, and the results of formal course assessments. Limiting the reduction in minimum age to minor scheduled line maintenance and simple defect rectification (non-complex maintenance that has been personally performed by the person issuing a CRS) inherently limits any risk. The privileges of a MAML holder cannot be exercised without being authorised as certifying staff by a DASR 145 Approved Maintenance Organisation (AMO). This 145 AMO authorisation already includes an individual assessment of a MAML holder's currency, general competence, understanding of human factors, and appropriate attitude towards safety – see DASR 145.A.35(a) & (c)-(f).

Given this exception is a deviation from EMAR Part 145 regulations, there is the potential that the proposed changes might affect recognition of ADF maintenance by other CAA / MAA. As the benefit to capability is limited to the certification of minor scheduled line maintenance and simple defect rectification, it is reasonable to limit the exception to this scope only (minimal deviation from EMAR) to minimise recognition risk.

The proposed change does not appreciably reduce the level of aviation safety but does reduce the compliance burden.

CURRENT REGULATION TEXT

The minimum age for certifying staff and support staff shall be 21 years.

REVISED REGULATION TEXT

The minimum age for certifying staff and support staff shall be 21 years. By exception, for minor scheduled line maintenance and simple defect rectification, using privileges described in DASR 66.A.20(a)(1) or DASR 66.A.20(a)3(ii), the minimum age for certifying staff shall be 18 years.

Australian Government
Department of Defence
Defence Aviation Safety Authority

Defence Aviation Safety Authority

DASR AMENDMENT RECORD
DCP 2024-004

AMC 145.A.10 - Scope (AUS)

RATIONALE FOR CHANGE

A review DASR 145 green text noted that most of the green text in AMC 145.A.10 is actually EMAR text. Therefore, text has been changed to black text. The remaining green text isn't related to capability or safety and has been deleted. The AMC title has also been changed remove (AUS) which is used to denote unique Australian content. Additional paragraphs have been added to align with EMAR paragraph numbering and highlight that EMAR text was considered not applicable to DASR.

CURRENT REGULATION TEXT

AMC 145.A.10 – Scope (AUS)

1. Line maintenance should be understood as any maintenance that is carried out before flight to ensure that the aircraft is fit for the intended flight.
   a. Line maintenance may include:

      Trouble shooting.

      Defect rectification.

      Component replacement with use of external test equipment if required. Component replacement may include components such as engines and propellers.

      Scheduled maintenance and/or checks including visual inspections that will detect obvious unsatisfactory conditions/discrepancies but do not require extensive in depth inspection.

      It may also include internal structure, systems and power plant items which are visible through quick opening access panels/doors.

      Minor repairs and modifications which do not require extensive disassembly and can be accomplished by simple means.

   b. For temporary or occasional cases (AD's, SB's) the Quality Manager may accept base maintenance tasks to be performed by a line maintenance organisation provided all requirements are fulfilled as defined by the MAA.
   c. Maintenance tasks falling outside these criteria are considered to be base maintenance.
   d. Aircraft maintained in accordance with "progressive" type programmes should be individually assessed in relation to this paragraph. In principle, the decision to allow some "progressive" checks to be carried out should be determined by the assessment that all tasks within the particular check can be carried out safely to the required standards at the designated line maintenance station.

REVISED REGULATION TEXT

AMC 145.A.10 - Scope

1. (a) Line Maintenance is defined in the DASR Glossary of Terms.

   (b) For temporary or occasional cases (Airworthiness Directives (ADs), Service Bulletins (SBs) or national equivalent) the Quality Manager may accept base maintenance tasks to be performed by a line maintenance organisation provided all requirements are fulfilled as defined by the MAA.

   (c) Base Maintenance is defined in the DASR Glossary of Terms.

   (d) Aircraft maintained in accordance with 'progressive' type maintenance programmes should be individually assessed in relation to this paragraph. In principle, the decision to allow some 'progressive' checks to be carried out should be determined by the assessment that all tasks within the particular check can be carried out safely to the required standards at the designated line maintenance station.

2. NOT APPLICABLE.

3. NOT APPLICABLE

DASR AMENDMENT RECORD
DCP 2024-004

DASR CLAUSE:AMC M.A.303 - Airworthiness Directives (AUS)

RATIONALE FOR CHANGE

The current text is considered ambiguous and provides no value.

CURRENT REGULATION TEXT

Should there be a discrepancy or difficulty in carrying out an Airworthiness Directive (AD) on a Defence aircraft, eg if the Defence aircraft is of a different configuration in the area affected by an AD applicable through Recognition, the CAMO should seek the advice of the AD delegate or relevant MDOA performing MTC holder obligations. The outcome of such advice should establish whether the AD remains applicable; requires amendment or supplementation to incorporate on Defence aircraft; or requires conversion into a Defence specific AD.

REVISED REGULATION TEXT

Nil. remove green text in toto.

Australian Government
Department of Defence
Defence Aviation Safety Authority

Defence Aviation Safety Authority

DASR AMENDMENT RECORD
DCP 2024-004

DASR CLAUSE: GM M.A.303 - Airworthiness Directives (AUS)

RATIONALE FOR CHANGE

Text is considered ambiguous and adds no value.

CURRENT REGULATION TEXT

As detailed in DASR 21.A.3B—Airworthiness Directives, and DASR AMC 21.A.3B 'applicable Airworthiness Directives (AD)' are those issued or adopted by the Authority, Authority delegate or applicable through Recognition. DASR GM 21.A.3B provides further clarification on equivalent mechanisms/instruments when recognised MAA do not use the term AD.

REVISED REGULATION TEXT

NIL remove green text to M.A.303 in toto.

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Australian Government
Department of Defence
Defence Aviation Safety Authority

Defence Aviation Safety Authority

DASR AMENDMENT RECORD
DCP 2024 - 007

DASR CLAUSE: ACD.50.A

RATIONALE FOR CHANGE

DASA updated the wording in DASR ACD.50.A to align with contemporary QMS language.

CURRENT REGULATION TEXT

An ACDSP must utilise a QMS to achieve consistency, continuity and compliance of safe service provision through quality planning, assurance, control and improvement.

REVISED REGULATION TEXT

An ACDSP must utilise a Quality Management System (QMS) to achieve consistency, continuity and compliance of safe service provision— through quality planning, quality assurance, quality control and quality improvement.

Australian Government
Department of Defence
Defence Aviation Safety Authority

Defence Aviation Safety Authority

DASR AMENDMENT RECORD
DCP 2023 - 017

DASR CLAUSE: ANSP

RATIONALE FOR CHANGE

Bowtie analysis and benchmarking against similar regulations in MAA (NLD and UK) and CAA (CASA and NZCAA) showed a need for additional controls and supporting material in GM and AMC. This was supported by comments from Stakeholders and the RC.

CURRENT REGULATION TEXT

See Below Enclosure 1 to NPA 2023-017 Revision 2 - REVISION 0 PROPOSED DASR ANSP 'AIR NAVIGATION SERVICE PROVIDERS' (BP33417556)

REVISED REGULATION TEXT

See Below Enclosure 1 to NPA 2023-017 Revision 2 - REVISION 0 PROPOSED DASR ANSP 'AIR NAVIGATION SERVICE PROVIDERS' (BP33417556)

NPA 2023-017 REVISION 0

PROPOSED DASR ANSP

‘AIR NAVIGATION SERVICE PROVIDERS’

Contents

SECTION 1: ADDITIONS TO THE DASP GLOSSARY AND ACRONYMS LIST

1. The following **new** definitions are proposed for the DASP glossary:

Aeronautical Data *(from ICAO Annex 15)*

A representation of fact, concepts or instructions in a formalised manner suitable for communication, interpretation or processing.

Aeronautical Data Originator* *(from AIRCDRE Tindal, BJ7889091)*

An entity responsible for providing source Aeronautical Data and Aeronautical Information to AIS providers for publication in the Integrated Aeronautical Information Package and on aeronautical charts.

Aeronautical Information Service (AIS) *(from ICAO Annex 15)*

A service established within the defined area of coverage responsible for the provision of Aeronautical Data and Aeronautical Information necessary for the safety, regularity and efficiency of air navigation.

Air Traffic Control Service* *(based on ICAO Annex 11 and AIRCDRE Tindal BJ7889091)*

A service provided for the purpose of:

(a) preventing collisions between

i. aircraft

ii. aircraft and obstructions on the manoeuvring area

(b) expediting and maintaining an orderly flow of air traffic.

The Air Traffic Control Service comprises any one or combination of: an area control service, an approach control service and an aerodrome control service.

Air Traffic Management Network Functions* *(from AIRCDRE Tindal, BJ7889091)*

Provision of the information communications technology network that connects the range of ATM systems.

Communications, Navigation and Surveillance Systems (CNS Services)* (based on AIRCDRE Tindal BJ7889091)

Services to ensure the availability, continuity and effective performance of Communications, Navigation and Surveillance systems which are used, or intended to be used, in the delivery of an ANS.

Data Integrity *(from RTCA DO-200B)*

Assurance that Aeronautical Data and its value has not been lost or altered since the data origination or authorised amendment.

Data Services* (*from AIRCDRE Tindal, BJ7889091)*

The provision of aeronautical databases either directly to aircraft operators for loading into air or ground-based mission systems, or to Aeronautical Information Services providers. This Aeronautical Data does not include data not specifically relevant to air navigation such as aircraft weight and balance data.

Data Service Provider (from AIRCDRE Tindal, BJ7889091)

A Data Service Provider receives, assembles, translates, selects, formats, distributes or integrates Aeronautical Data and information that is released as an authoritative source for use in aeronautical databases on aircraft or in operational aviation systems, applications and equipment.

Flight Procedure Design Services (FPD Services)* *(from AIRCDRE Tindal BJ7889091)*

The design, documentation and validation of flight procedures including the ongoing review and maintenance of flight procedures.

Meteorological Services *(from ICAO Annex 3)*

A service that provides weather information services to support the safety, regularity and efficiency of aviation activities.

Regression Testing* *(based on CENELEC 50128 and IEC62279)*

A test process re-running functional and non-functional tests to ensure that previously developed and tested software still performs as expected after a change. Regression Testing also includes testing software not amended during the latest upgrade to ensure the software change has not affected interface control data.

2. The following **modified** definitions are proposed for the DASP glossary:

Air Navigation Service (ANS)* *(from AIRCDRE Tindal BJ7889091)*

Those services provided to air traffic during all phases of operations (approach, aerodrome and enroute). ANS comprises Air Traffic Management (ATM), Communication Navigation Surveillance (CNS) systems services, Meteorological Services for air navigation (MET), Aeronautical Information Services (AIS), Aeronautical Data services (DAT), Flight Procedure Design Services (FPD) and ATM network functions.

Air Traffic Management (ATM)* *(based on ICAO PANS/ATM Doc 4444)*

A generic term encompassing the dynamic, integrated management of air traffic and airspace in a safe, economical and efficient manner through the provision of facilities and seamless services in collaboration with all parties involving airborne and ground-based functions. The three subsets of ATM are Air Traffic Services (ATS), Airspace Management (ASM) and Air Traffic Flow Management (ATFM), although only ATS is regulated under DASR.

Air Traffic Services (ATS) * *(from AIRCDRE Tindal, BJ7889091)*

A term which collectively encompasses the Air Traffic Control Services (area control service, approach control service and aerodrome control service), an air traffic advisory service, an alerting service, a flight information service and battlefield airspace control.

Exposition*

The document or documents that contain the material specifying the scope of work deemed to constitute sufficient evidence to justify organisational approval and showing how the organisation complies with a DASR.

3. The following new or modified acronyms are proposed for the DASP Acronyms List:

ACRONYM	**EXPANSION**
AIM	Aeronautical Information Management
ANSPC	Air Navigation Service Provider Certificate
ANSPE	Air Navigation Service Provider Exposition
CAA	Civil Aviation Authority
DSP	Data Service Provider
FPD	Flight Procedure Design
IFP	Instrument Flight Procedure
PANS	Procedures for Air Navigation Services (ICAO)

SECTION 2: NEW DASR ANSP PART ONLY

The following replaces the extant DASR ANSP Part **in toto**.

DASR ANSP – Air Navigation Service Providers (ANSP)

ANSP.10 – ORGANISATIONAL APPROVAL (AUS)

(a) Providers of the following Air Navigation Services (ANS) must operate only to the extent approved in the ANSP Certificate (ANSPC) issued by DASA: ▸ GM ▸ AMC

1. Air Traffic Service (ATS)
2. Communication, Navigation, Surveillance (CNS) Services
3. Aeronautical Information Service (AIS)
4. Flight Procedure Design (FPD) Service.

ANSP.20 – ANSP CERTIFICATE (AUS)

(a) An ANSP must use an ANSP Exposition (ANSPE) to apply to DASA for: ▸ GM ▸ AMC

1. issue of an ANSPC, or attached Service Provision Conditions (SPC)
2. variation to an ANSPC, or attached SPC.

ANSP.30 – ORGANISATIONAL STRUCTURE (AUS)

(a) A certified ANSP must define its organisational structure to include: ▸ GM ▸ AMC

1. the authority, duties and responsibilities of all positions performing ANSP functions, including the management positions responsible for safety and quality management functions
2. the relationship and reporting lines between these positions and other parts of the organisation
3. formal relationships with external contributors to the service provision that may directly influence the safety of their services.

ANSP.40 – SAFETY MANAGEMENT SYSTEM (AUS)

(a) A certified ANSP must utilise a Safety Management System (SMS) in accordance with DASR SMS. ▸ GM

ANSP.50 – QUALITY MANAGEMENT SYSTEM (QMS) (AUS)

(a) A certified ANSP must utilise a quality management system (QMS) to achieve consistency, continuity and compliance of safe service provision—through quality planning, quality assurance, quality control and quality improvement. ▸ GM ▸ AMC

ANSP.60 – OPERATIONS ORDERS, INSTRUCTIONS AND PUBLICATIONS (OIP) (AUS)

(a) A certified ANSP must utilise authorised OIP that are easily accessible and contain the procedures, instructions and information required for personnel to perform their duties. ▸ GM ▸ AMC

(b) A certified ANSP providing Air Traffic Control (ATC) must utilise OIP that: ▸ GM ▸ AMC

1. define ATS procedures and ATC separation standards
2. are harmonised with national civil practice and International Civil Aviation Organisation (ICAO) Standards and Recommended Practices so far as is reasonably practicable
3. detail the coordination of activities and services, including the exchange of relevant information, with:
   i. Aerodrome Operators
   ii. providers of Meteorological Services
   iii. AIS providers
   iv. CNS providers
   v. other ANSPs
4. detail contingency arrangements to deal with failures or irregularities in the systems used to provide ATC
5. define ANSP personnel fitness for duty requirements.

(c) A certified ANSP that provides CNS Services must utilise OIP that define how: ▸ GM ▸ AMC

1. the availability, continuity, accuracy and integrity of services are ensured
2. interruptions to provided services are communicated to affected organisations
3. changes to extant systems are managed.

(d) A certified ANSP that provides an AIS must: ▸ GM ▸ AMC

1. utilise OIP that define Aeronautical Information product development and delivery procedures
2. operate IAW the Letter of Acceptance (LOA) issued by DASA.

(e) A certified ANSP that provides FPD Services must utilise OIP that define how: ▸ GM ▸ AMC

1. Aeronautical Data for the design of flight procedures is either obtained from authoritative sources or verified and validated by the FPD Services provider

2. flight procedures are designed, including how design criteria are determined

3. the integrity of software systems used in the design of flight procedures is assured

4. changes to software systems used in the design of flight procedures are managed to ensure no detriment to Aviation Safety

5. flight procedures are published

6. periodic reviews of published procedures are conducted.

ANSP.70 – EQUIPMENT SYSTEMS AND INSTALLATIONS (AUS)

(a) A certified ANSP must ensure that equipment, systems and installations used or intended for use in the provision of ANS: ▸ GM ▸ AMC

1. support the safe and effective provision of the service

2. are verified and tested to ensure they comply with relevant technical and operational requirements and present no detriment to Aviation Safety and operational capability ▸ GM ▸ AMC

3. are protected against physical and cyber threats from external and internal sources.

ANSP.80 – PERSONNEL COMPETENCY AND LICENSING (AUS)

(a) A certified ANSP must ensure that personnel are qualified, competent, current and authorised to undertake their assigned duties. ▸ GM ▸ AMC

(b) A certified ANSP must only provide an Air Traffic Control Service utilising licenced Air Traffic Controllers. ▸ GM ▸ AMC

(c) A certified ANSP that provides FPD Services must ensure all personnel who design instrument flight procedures are qualified, competent and current in instrument procedure design. ▸ GM ▸ AMC

ANSP.90 – SERVICES PROVIDED BY NON-CERTIFIED PROVIDERS (AUS)

(a) A certified ANSP which uses data provided by a Data Services Provider (DSP) or another ANSP must ensure contractual arrangements regarding the supply of data in any form or for use by any operational system include requirements on the DSP to: ▸ GM

1. provide services only within the scope of a Service Level Agreement or documents issued by the relevant CAA or MAA

2. comply with the service delivery provisions of the current version of RTCA ‘Standards for Processing Aeronautical Data’

3. advise the ANSP where the DSP has subsequently identified deficiencies or errors in released aeronautical databases

4. advise the ANSP where any CAA or MAA has changed the conditions of approval of the DSP as a source of Aeronautical Data.

(b) A certified ANSP that uses data provided by a DSP must advise all MAOs when released aeronautical databases, or updates to any existing aeronautical databases, are identified to have deficiencies or errors.

SECTION 3: NEW DASR ANSP PART, AMC and GM

The following replaces the extant DASR ANSP Part, AMC and GM **in toto**. AMC in purple text. GM in brown text.

DASR ANSP – Air Navigation Service Providers (ANSP)

ANSP.10 – ORGANISATIONAL APPROVAL (AUS)

(a) Providers of the following Air Navigation Services (ANS) must operate only to the extent approved in the ANSP Certificate (ANSPC) issued by DASA: ▼GM ▼AMC

AMC ANSP.10(a) – Organisational approval (AUS)

a. An ANSP should ensure external organisations, used in support of ANSP activities, operate to standards equivalent to those with which the ANSP is required to comply.

b. An ANSP that provides Aeronautical Information Service (AIS) must also operate IAW the Letter of Acceptance (LOA) issued by DASA.

GM ANSP.10(a) – Organisational approval (AUS)

a. **Purpose**. **(Context)** Defence Air Navigation Services (ANS) support the safe operation of Aircraft in Airspace and on the ground at airports. **(Hazard)** Ineffective ANS provision can compromise Aviation Safety. **(Defence)** This regulation requires ANSP-AM providing ANS to ensure ANS operations are conducted safely by an Approved Organisation.

b. The issue of an ANSP Certificate (ANSPC) supplies the basis for the judgement of suitability of an ANS that it will be maintained and operated to approved Standards and Limitations, by competent and authorised individuals who are acting as members of an Approved Organisation.

c. A DASA issued Letter of Acceptance (LOA) confirms an organisation has demonstrated compliance to a recognised standard (eg RTCA DO-200B or EUROCAE ED-76A) for processing aeronautical data with regards to a specific database. Complying organisations will have defined quality requirements for aeronautical data, detailed processing procedures, and an established and maintained Quality Management System (QMS) associated with the aeronautical data process. This is aimed to ensure data quality has been maintained throughout all phases of the data handling process. Organisations seeking an LOA are to apply to DASA in writing, declaring that their aeronautical data process for a specific database is compliant to a recognised standard. DASA will issue an LOA when satisfied the applicant organisation has met all the requirements.

1. Air Traffic Service (ATS)

2. Communication, Navigation. Surveillance (CNS) Services

3. Aeronautical Information Service (AIS)

4. Flight Procedure Design (FPD) Service.

ANSP.20 – ANSP CERTIFICATE (AUS)

(a) An ANSP must use an ANSP Exposition (ANSPE) to apply to DASA for: ▾ GM ▾ AMC

1. issue of an ANSPC, or attached Service Provision Conditions (SPC)

2. variation to an ANSPC, or attached SPC.

AMC ANSP.20(a) – Preparation of an ANSP Exposition (AUS)

a. The ANSP Exposition (ANSPE) should include a compliance matrix and the following information for the ANSP Certificate (ANSPC):

i. **ANSP name.** Force Element Group (FEG) or equivalent

ii. **ANSP location.** Location of the ANSP headquarters

iii. **Declaration.** A statement that operations will be in accordance with the attached Service Provision Conditions (SPC).

b. The ANSPE should include the following information for the ANSPC SPC:

i. Accountable Manager (AM) listed by command or management position, eg 'CDR SRG'

ii. Hazard Tracking Authority (HTA) within the ANSP

iii. safety manager (per GM DASR.SMS.A.25(b)(1)(1.3))

iv. Air Navigation Services (ANS) provided.

c. **Specific approvals.** An ANSP may request a specific approval for a particular service type, a means of providing a service, location at which services are provided, or for all services operated by the ANSP.

d. **Operational limitations.** An ANSP may request an operational limitation for a particular service or for all services conducted, to assure safe operations of a system or sub-system within the ability or maturity of the ANSP. An ANSP may have operational limitations imposed, particularly during introduction to service. Operations, operator experience or training, Synthetic Training Device establishment, or capability trials may limit the role or environment in which the ANSP may safely conduct operations until further review of the SPC. Examples of operational limitations could include non-deployability of tactical equipment, or synthetic training device usage for licence endorsement.

e. The ANSPE should demonstrate how the ANSP will meet these regulations and provide the service safely by reference to relevant Orders, Instructions and Publications (OIP).

f. The ANSPE should contain details of external organisations involved in the provision of ANS by the ANSP. Those details should include:

i. the name and functions of the external organisation

ii. the services provided, the contracted period for the provision of the services and the specific dates or times the services are provided by the external organisation

iii. the periods during which those services are provided

iv. the content of formal agreements eg Service Level Agreements (SLA), or other quality and service continuance assurance arrangements.

g. **Accountable Manager attestations and signature.** The Accountable Manager should make the following attestations and sign the ANSPE:

I am accountable for [insert organisation] compliance with the Defence Aviation Safety Regulation.

This ANSP Exposition for ANSP Certification and Service Provision Conditions is complete and correct.

I am satisfied that appropriate arrangements are in place to meet the Defence Aviation Safety Regulation and support the scope of operations contained in the Service Provision Conditions.

GM ANSP.20(a) – ANSP Certificate (AUS)

a. **Purpose. (Context)** Defence ANS support the safe operation of aircraft in airspace and on the ground at airports. **(Hazard)** Ineffective ANS provision can compromise Aviation Safety. **(Defence)** This regulation requires the ANSP Accountable Manager (ANSP-AM) to ensure sufficient information for DASA to issue or vary an ANSPC or Service Provision Conditions.

b. DASA will issue an ANSPC when satisfied that the applicant organisation can satisfy the requirements of DASR ANSP.20. The ANSPC authorises the provision of the service. The ANSPC will contain:

i. ANSP name

ii. ANSP location

iii. reference to Service Provision Conditions (SPC) including the words ‘operations must be conducted in accordance with the attached Service Provision Conditions’

iv. period of validity.

c. **ANSP SPC**. Each ANSPC has an attached SPC that records the:

i. Accountable Manager

ii. Hazard Tracking Authority appointments

iii. services provided and locations at which those services are provided

iv. operating systems utilised by the service

v. contracts, agreements or other arrangements between the ANSP and supporting third parties

vi. conditions and/or operational limitations (where required, these are prescribed by DASA for a system or sub-system within the ability or maturity of the ANSP, and usually include reference to a plan and timeline to remove the limitation upon DASA review)

vii. signature by The Authority endorsing the SPC.

d. **Initial Issue of an ANSPC and attached SPC**. The applicant organisation must submit to DASA an ANSP Exposition (ANSPE), which includes a compliance matrix. DASA will issue a new ANSPC when satisfied the applicant organisation has met all the requirements.

e. **Application for reissue or variation to an ANSPC**. The ANSP-AM should amend the extant ANSPE and compliance matrix, and submit these to DASA, highlighting those ANSP items being varied. DASA will issue a new ANSPC when satisfied the applicant organisation has met all the requirements.

f. **Application for variation of ANSPC SPC**. The ANSP-AM should amend the extant ANSPE and compliance matrix and submit this to DASA, highlighting those SPC items being varied. DASA, when satisfied, will issue an updated SPC for the ANSP. Application for variation to an SPC is required, at a minimum, when there is:

i. addition, removal of, or change to an ANS

ii. request to impose or remove specific approvals

iii. request to impose or remove operational limitations

iv. a significant change to the systems used to provide the ANS

v. a significant change to third party arrangements involved in the provision of or support of ANS.

g. **Addition of a service to the ANSPC SPC**. The ANSPE for the addition of a service to an ANSPC SPC addresses whether the ANSP can safely operate and maintain their systems and services. The ANSPE should reference any acquisition documentation and a documented Risk Decision Brief (safety case or equivalent) to demonstrate how the ANSP will safely transition the new capability into service.

h. **Provision of evidence**. Organisations should make full use of existing data and documents rather than creating unique documents with no enduring value once the certificate is issued. Where existing documents are used as evidence they should be referenced in the ANSPE and relevant sections may be included in the ANSPE as attachments.

i. **Significant change**. A significant change is one that involves a change in technology, procedures or organisation structure that will have an impact on the way in which the ANSP provides ANS or that requires users of the system to make changes in technology, procedures or organisation structure.

ANSP.30 – ORGANISATIONAL STRUCTURE (AUS)

(a) A certified ANSP must define its organisational structure to include: ▼GM ▼AMC

1. the authority, duties and responsibilities of all personnel performing ANSP functions, including the management positions responsible for safety and quality management functions

2. the relationship and reporting lines between personnel performing ANSP functions and other parts of the organisation

3. formal relationships with external contributors to the service provision that may directly influence the safety of their services.

AMC ANSP.30(a) – Organisational structure (AUS)

a. An ANSP should ensure their organisational structure includes:

i. an Accountable Manager (usually FEG commander or equivalent)

ii. an appropriate chain of command

iii. sufficient appropriately qualified personnel

iv. Key Staff with appropriate experience

v. facilities which are sufficient and suitable for the type of services provided

vi. suitable, documented, policies, processes and procedures

vii. an SMS IAW DASR ANSP.40

viii. a QMS IAW DASR ANSP.50.

GM ANSP.30(a) – Organisational structure (AUS)

a. **Purpose**. **(Context)** Defence ANS support the safe operation of aircraft in airspace and on the ground at airports. **(Hazard)** Ineffective ANS provision can compromise Aviation Safety. **(Defence)** This regulation requires the ANSP-AM to ensure ANSP operations are conducted as an approved organisation and managed to ensure Aviation Safety.

b. An ANSP is an organisation that can consist of operational, maintenance, logistics and engineering personnel, usually as part of a Force Element Group (FEG) or equivalent force structure, which provides ANSP services to a defined scope.

c. An ANSP should list Key Staff (including engineering and maintenance appointments that contribute to the safe operation of an aviation system) in their organisational structure. Where Key Staff are employed in organisations external to the military unit, contractor or tasked organisation, which form the core of the ANSP, then the ANSP must also define the formal relationships with those organisations in which the personnel are employed (other contributors to the service provision that may directly influence the safety of ANS).

d. ANSP.30(a)3 requires ANSP organisations to define all formal relationships with all contributors to the service provision and define the external inputs that can influence the quality of the services provided. The ANSPE should refer to the formal agreements or MOUs in place.

e. External contributors to the provision of services may include both Defence organisations and organisations or agencies external to Defence.

ANSP.40 – SAFETY MANAGEMENT SYSTEM (AUS)

(a) A certified ANSP must utilise a Safety Management System (SMS) in accordance with DASR SMS. ▼ GM

GM ANSP.40(a) – Safety Management System (AUS)

a. **Purpose**. **(Context)** Defence ANS support the safe operation of aircraft in airspace and on the ground at airports. **(Hazard)** Ineffective ANS provision can compromise Aviation Safety. **(Defence)** This regulation requires the ANSP-AM to ensure a Safety Management System (SMS) is utilised by a Certified ANSP.

b. The ANSP's SMS should ensure that services or systems provided by external contributors to the service do not erode safety. Controls to prevent the erosion of safety include formal agreements that specify safety requirements.

ANSP.50 – QUALITY MANAGEMENT SYSTEM (QMS) (AUS)

(a) A certified ANSP must utilise a quality management system (QMS) to achieve consistency, continuity and compliance of safe service provision—through quality planning, quality assurance, quality control and quality improvement. ▼ GM ▼ AMC

AMC ANSP.50(a) – Quality Management System (AUS)

a. ANSPs should have a QMS that achieves the following purposes:

i. **Quality planning.** Quality planning defines the quality policy and approach to meet the safety needs of the ANSP.

ii. **Quality assurance.** Quality assurance, provided through a quality assurance program, contains procedures to verify all activities are being conducted in accordance with applicable safety requirements.

iii. **Quality control.** Quality control managed by appointed representatives to monitor regulatory compliance with, and adequacy of procedures and services, to ensure safe operations.

iv. **Quality improvement.** Quality improvement consists of reviews and remedial action as appropriate, for the continuous improvement of the safety of the services provided.

b. **Services contracted to an external organisation supporting an ANSP.** The ANSP-AM may contract or task an organisation to perform services on behalf of the ANSP—forming an integral part of the ANSP's system—hence the contracted or tasked organisation is required to work under the quality system of the ANSP. The contracting or tasking ANSP retains the responsibility for all contracted or tasked services irrespective of who is undertaking them. The ANSP-AM is ultimately responsible and therefore accountable for ensuring ANS provision as an approved organisation and managed to ensure Aviation Safety. To exercise this responsibility the ANSP-AM should be satisfied that the actions taken by contracted or tasked organisations meet the standards required by DASR ANSP. Hence, the contracted or tasked organisation is required to have a quality management system equivalent to that of the ANSP. The ANSP should therefore manage such activities by:

i. active control through direct involvement

ii. endorsing the recommendations made by the contracted or tasked organisation

iii. ensuring the contract or task documentation includes an obligation on the external organisation to upon request, make all documentation supporting the contracted or

tasked organisation's provision of contracted or tasked services available to Defence, including:

(a) records (which may include any contracts, inspection documents, and accident reporting and incident reporting requirements)

(b) documentation which may include documents provided to the recognised CAA or MAA, operations manuals, maintenance records, individual competency and currency records, safety occurrence reports and investigation reports.

c. FDP service procedures should include (in addition to the DASR ANSP.50) requirements as per ICAO Doc 8168 – PANS-OPS and ICAO Doc 9906 – *Quality Assurance Manual for Flight Procedure Design*.

GM ANSP.50(a) – Quality Management System (AUS)

a. **Purpose**. **(Context)** An ANSP-AM has regulatory requirements to ensure compliance and conformance. **(Hazard)** Compromised compliance and conformance of regulatory requirements can adversely affect the safe delivery of capability. **(Defence)** This regulation requires an ANSP-AM to utilise a QMS to ensure ANS provision is conducted safely by an approved organisation.

b. ANSPs may use ISO9001 or equivalent certification by an appropriately accredited organisation covering the appropriate scope of service provision. However, there is no specific requirement for external accreditation of the QMS.

c. ANSPs may integrate their QMS with their other management systems (eg SMS) into a single management system, commensurate with the size and scope of the organisation. However, integrated systems must remain compliant with all relevant DASRs.

d. The ANSP's QMS should ensure that the level of safety is not eroded by services or technical systems provided by external contributors to the service. The ANSP should specify the required quality standards through formal arrangements and agreements.

ANSP.60 – OPERATIONS ORDERS, INSTRUCTIONS AND PUBLICATIONS (OIP) (AUS)

(a) A certified ANSP must utilise authorised OIP that are easily accessible and contain the procedures, instructions and information required for personnel to perform their duties. ▼GM ▼AMC

AMC ANSP.60(a) – Operations OIP (AUS)

a. The ANSP operations OIP management system should ensure the acquisition, production, maintenance and updates of OIP such that:

i. OIP contain the standards and procedures required by personnel to perform their duties

ii. OIP are complete, current and uniquely identified

iii. OIP are relevant, accurate and unambiguous for their intended use and environment

iv. OIP in electronic form have effective search and navigation functionality

v. OIP are accessible to the personnel who need them

vi. new issues, reissues, and amendments are made when changes have been approved by a relevant authority

vii. OIP are harmonised with national civil practice and ICAO so far as is reasonably practicable

viii. OIP amendments are promptly released, to ensure the OIP continues to support Aviation Safety

ix. personnel are expeditiously informed of amendments

x. personnel can easily identify the effect of any amendment by its format or content

xi. hierarchies are established which confirm the precedence of any specific manual

xii. mechanisms used to store, distribute and access OIP do not degrade the content and condition of the OIP

xiii. OIP contain their authority for use, document name, date of issue and document amendment status

xiv. OIP are provided in a medium satisfying contemporary human machine interface design principles and are compatible with user requirements

xv. OIP with related content are aligned, consistent and have minimal duplication

xvi. OIP management records are accessible, accurately maintained, controlled, and traceable

xvii. OIP can be reproduced to any previous status

xviii. OIP include contingency plans to allow timely and effective response to those emergencies and abnormal events which may significantly degrade or interrupt the provision of ANSP services

xix. personnel are aware of the process for reporting errors or changes in the operational or technical environment which may require changes to OIP.

b. ANSPs must ensure personnel perform their duties in accordance with those OIP.

c. OIP should be reviewed:

i. on a regular basis (at least once every three years)

ii. after major events (eg organisational structure changes)

iii. after technology changes (introduction of new equipment), and

iv. after changes in safety regulations.

d. OIP should include requirements for the retention of operational data and documents for the purpose of safety investigation.

e. ANSPs should develop a system to update OIP resulting from changes that originate within the ANSP, including:

i. changes resulting from the installation of new equipment

ii. changes in response to operating experience

iii. changes in the ANSP policies and procedures

iv. changes in the ANSPC.

f. ANSPs should establish policy addressing OIP errors, amendments and corrections. The policy should address formal notification to all users.

g. ANSPs should establish policy to:

i. manage OIP

ii. define the standard format for OIP.

GM ANSP.60(a) – Operations OIP (AUS)

a. **Purpose**. **(Context)** Defence ANS support the safe operation of aircraft in airspace and on the ground at airports. **(Hazard)** ANS may be compromised when OIP are incorrect or inaccessible to personnel. **(Defence)** This regulation requires the ANSP-AM to ensure that personnel have access to the information they require to perform their duties, so that the ANS is conducted safely by an approved organisation**.**

b. ANSP Orders, Instructions and Publications (OIP) includes all aspects of the ANS (including operations, engineering, maintenance, supply, support, and logistics).

c. **National harmonisation.** Defence ANSP provide services to civil aircraft as required and military aircraft often operate in civilian controlled airspace. ANS procedures require harmonisation in order to ensure interoperability in a safe and effective manner. As far as possible, Defence should align ANSP standards and procedures to those used by CASA—and based on ICAO Standards and Recommended Practices (SARPS)—to ensure airspace users receive services to a common standard when flying in Australian airspace.

d. A standard format for OIP may include:

i. a compliance statement

ii. an approval page

iii. a structure of manual

iv. a list of effective pages

v. a record of normal revisions

vi. a record of temporary revisions

vii. revision highlights

viii. a distribution list

ix. a table of contents

x. chapter numbering

xi. paragraph numbering

xii. page numbering

(b) A certified ANSP providing Air Traffic Control (ATC) must utilise OIP that: ▼GM ▼AMC

AMC ANSP.60(b) – Air Traffic Control (ATC) OIP (AUS)

a. The basis for ATC OIP should include:

i. ICAO Annex 11 – *Air Traffic Services*

ii. ICAO Doc 4444 – *Procedures for Air Navigation Services Air Traffic Management*

iii. Australian Airspace Regulations

iv. CASR Part 172 – *Air Traffic Services* (and associated *Manual of Standards*)

v. NATO Standard MPP-02 – *Helicopter Operations from Ships other than Aircraft Carriers (HOSTAC)*

vi. ANP4312 – *Royal Australian Navy Action Information Organisation User Instruction*.

b. ATC personnel fitness for duty requirements must comply with DASR AVFM and DASR MED.

GM ANSP.60(b) – Air Traffic Control (ATC) OIP (AUS)

a. Defence is committed to CASA to provide to civil aviation an equivalent level of safety to that provided under the CASR (the *Subsidiary Agreement for the Transparency of Safety Oversight to the Delivery of Defence Air Traffic Services to Civil Aviation Operations* refers). This regulation allows for assurance, and continuing visibility of this commitment to CASA.

b. ANSPs may utilise shared civil-military documents, such as the Manual of Air Traffic Services (MATS), to enable harmonisation.

c. Where ICAO separation standards are varied due to operational considerations:

i. the application of variation to an air traffic separation standard must be authorised by the MAO-AM, Civil Air Operator Chief Pilot, or foreign unit commander responsible for the aircraft to which the reduced standard will be applied

ii. reduction or variations to separation standards must be published in the Defence AIP or OIP

iii. there is no restriction on who may propose a change to separation standards, but consultation should involve the Defence ANSP to ensure any such change will not compromise safety of other flight operations.

1. define ATS procedures and ATC separation standards

2. are harmonised with national civil practice and International Civil Aviation Organisation (ICAO) Standards and Recommended Practices so far as is reasonably practicable

3. detail the coordination of activities and services, including the exchange of relevant information, with:

   i. Aerodrome Operators,

   ii. providers of Meteorological Services,

   iii. AIS providers

   iv. CNS providers

   v. other ANSPs

4. detail contingency arrangements to deal with failures or irregularities in the systems used to provide ATC

5. define ANSP personnel fitness for duty requirements.

(c) A certified ANSP that provides CNS services must utilise authorised OIP that define how:
▼GM ▼AMC

AMC ANSP.60(c) – CNS Services (AUS)

a. The basis for CNS OIP should include (AUS) CASR Part 171 – *Aeronautical telecommunications service and radionavigation service providers*.

b. **Distribution of information.** Where ANSPs distribute information or Aeronautical Data to users, ANSPs should:

   i. confirm the accuracy, sufficiency, completeness and currency of the information, including the source of such information, before such information is distributed

   ii. distribute the information in a suitable format for users

   iii. ensure that information is distributed in a timely manner and kept current

   iv. use means of communication which ensure the protection of data from interference and corruption

   v. establish procedures with AIS providers to ensure expeditious communication of relevant information.

GM ANSP.60(c) – CNS Services (AUS)

a. **Purpose. (Context)** Communications, Navigation and Surveillance systems (CNS) enable ANS to support the safe operation of aircraft in airspace and on the ground at airports**. (Hazard)** Ineffective CNS Services can compromise Aviation Safety. **(Defence)** This regulation requires the ANSP-AM to ensure technical support for CNS systems used for Defence ANS is provided safely by an approved organisation.

b. ANSP must communicate CNS system availability and, where applicable, accuracy and integrity to affected organisations through an AIS. CNS providers should establish procedures with AIS providers to ensure expeditious communication of relevant information.

1. the availability, continuity, accuracy and integrity of services are ensured

2. interruptions to provided services are communicated to affected organisations

3. changes to extant systems are managed.

(d) A certified ANSP that provides an AIS must: ▾ GM ▾ AMC

AMC ANSP.60(d) – Aeronautical Information Services (AIS) (AUS)

a. The basis for AIS OIP should include:

i. ICAO Annex 2 – *Rules of the Air*

ii. ICAO Annex 4 – *Aeronautical Charts*

iii. ICAO Annex 11 – *Air Traffic Services*

iv. ICAO Annex 15 – *Aeronautical Information Services*

v. Australian Airspace regulations

vi. ICAO Doc 10066 – *Procedures for Air Navigation Services Aeronautical Information Management*

vii. ICAO Doc 9839 – *Quality Assurance for Aeronautical Information Services*

viii. (AUS) CASR Part 175 – *Aeronautical information management.* (Defence AIP will follow the 28-day Aeronautical Information Regulation and Control (AIRAC) cycle).

ix. (AUS) CASR Part 173 – *Instrument flight procedure design*

x. RTCA DO-200B – *Standards for Processing Aeronautical Data*

xi. EUROCAE Document ED-76A – *Standards for Processing Aeronautical Data*

xii. Australian Signals Directorate – *Information Security Manual*.

b. The AIS OIP should detail:

i. how the provider ensures the provision of Aeronautical Data and Aeronautical Information necessary for the safety and efficiency of air navigation

ii. how processes ensure the timely collection, processing, storing, integration, verification, validation, exchange and delivery of quality-assured Aeronautical Information

iii. the range of provided Aeronautical Information products

iv. the data format and quality to ensure the data is suitable for the intended end use

v. how Data Integrity is ensured

vi. how the provider ensures data used in the process of providing Aeronautical Data and Aeronautical Information are only obtained from trusted or approved sources and a list of those sources

vii. the mechanisms which allow the digital exchange and supply of Aeronautical Data and Aeronautical Information

viii. how information is exchanged with other AIS providers

ix. how the ANSP ensures that information is updated and distributed in a timely manner

x. the process by which the means of communication of Aeronautical Information are protected from interference and corruption.

GM ANSP.60(d) – Aeronautical Information Services (AIS) (AUS)

a. **Purpose. (Context)** Defence Aeronautical Information Services (AIS) support the safe operation of aircraft in airspace and on the ground at airports. **(Hazard)** Ineffective AIS provision can compromise Aviation Safety. **(Defence)** This regulation requires the ANSP-AM to ensure AIS personnel have access to the information they require in order to perform their duties.

b. Aeronautical Information products include:

i. publications that advise those flight procedures and airspace requirements used to plan and conduct flights nationally and internationally

ii. Aeronautical Data supporting mission planning tools

iii. visual charts used for navigation and planning purposes

iv. publications containing information on departure and approach procedures for each:

(a) certified aerodrome

(b) relevant overseas aerodrome

v. instrument flight procedures as approved for runways listed in the AIP.

c. Ensuring data integrity includes error identification, investigation, correction and communication to users.

d. **Approved and trusted sources of data.** The AIS provider may consider Aeronautical Data Originators authoritative based on approval by a MAA or CAA or nomination by a Defence agency and advised to the AIS provider. The ANSP must document how they trust an Aeronautical Data Originator.

1. utilise OIP that define Aeronautical Information product development and delivery procedures

2. operate IAW the Letter of Acceptance (LOA) issued by DASA.

(e) A certified ANSP that provides FPD Services must utilise OIP that define how: ▼GM ▼AMC

AMC ANSP.60(e) – Flight Procedure Design Services (AUS)

a. The basis for Flight Procedure Design (FPD) Services OIP should include:

i. ICAO Annex 4 – *Aeronautical Charts*

ii. ICAO Annex 11 – *Air Traffic Services*

iii. ICAO Annex 15 – *Aeronautical Information Services*

iv. ICAO Doc 10066 – *Procedures for Air Navigation Services Aeronautical Information Management* (PANS/AIM)

v. ICAO Doc 8168 – *Procedures for Air Navigation Services Operations* (PANS/OPS) Vols 1 and 2

vi. ICAO Doc 9906 Volume 1-6 – *Quality Assurance Manual for Flight Procedure Design*

vii. ICAO Doc 10068 – *Manual on the Development of a Regulatory Framework for Instrument Flight Procedure Design Service*

viii. (AUS) CASR 173 – *Instrument Flight Procedure Design*

ix. RTCA DO-200B – *Standards for Processing Aeronautical Data*.

b. **Procedures**. FPD Services OIP should include:

i. the process of IFP approval for release

ii. IFP design criteria (a statement indicating the ANSP has adopted ICAO PANS-OPS Doc 8168 Volume II (or other approved design criteria)—with a list of deviations from it—is sufficient)

iii. criteria utilised to develop procedures for the establishment of aerodrome operating minima

iv. qualification and competencies for IFP designers

v. requirements for periodic reviews and continuous maintenance of IFPs

vi. requirements for ground and flight validations of IFPs as detailed in ICAO Doc 9906 – *Quality Assurance Manual for Flight Procedure Design* Vol 5.

GM ANSP.60(e) – Flight Procedure Design Services (AUS)

Purpose. (Context) Flight Procedure Design (FPD) Services support the safe operation of aircraft in airspace and on the ground at airports. **(Hazard**) Ineffective FPD service provision can compromise Aviation Safety. **(Defence)** This regulation requires the ANSP-AM to ensure FPD Services personnel have access to the information and software systems necessary to design safe procedures.

1. Aeronautical Data for the design of flight procedures is either obtained from authoritative sources or verified and validated by the FPD Services provider

2. flight procedures are designed, including how design criteria are determined

3. the integrity of software systems used in the design of flight procedures is assured

4. changes to software systems used in the design of flight procedures are managed to ensure no detriment to Aviation Safety

5. flight procedures are published

6. periodic reviews of published procedures are conducted.

ANSP.70 – EQUIPMENT SYSTEMS AND INSTALLATIONS (AUS)

(a) A certified ANSP must ensure that equipment, systems and installations used or intended for use in the provision of ANS: ▾ GM ▾ AMC

AMC ANSP.70 (a) – Equipment, systems and installations (AUS)

a. **Equipment, systems and installations**. Equipment, systems and installations should be designed, manufactured, installed, tested, calibrated, commissioned, maintained and modified to ensure they:

i. support the provision of services in a safe, efficient, continuous and sustainable manner consistent with any foreseen level of overall demand

ii. are fit for their intended purpose

iii. meet the required operational performance and safety targets for all foreseeable operating conditions and for their whole operational life

iv. meet all applicable safety requirements

v. meet technical standards as detailed in the DASDRM such that an inverse relationship exists between the probability that any failure can result in a total functional failure and the severity of its effect on ANS

vi. account for limitations related to human capabilities and performance.

b. **Performance monitoring and reporting**. An ANSP should monitor and at least annually report the performance of its equipment, systems and installations to users of the service. The ANSP may achieve reporting requirements by publishing performance data on the ANSP website or by including the data in hardcopy or electronic newsletters.

c. **Equipment underperformance.** ANSP must identify and so far as reasonably practicable, rectify the causes of, or causal factors resulting, in underperformance of equipment, systems and installations. ANSP must then identify any hazards to aviation safety associated with the underperformance of equipment, systems and installations. ANSP must eliminate or otherwise minimise the associated risk from identified hazards to aviation safety.

d. **Changes to equipment, systems and installations**. ANSPs should:

i. have procedures for managing safety when introducing new systems or modifying existing equipment, systems and installations and their support arrangements

ii. provide evidence showing the risks to health and safety, and to workers and other persons, have been eliminated so far as is reasonably practicable, and if it is not reasonably practicable to eliminate these risks, to show those risks have been minimised so far as is reasonably practicable

iii. manage changes to system configuration and data to ensure system safety levels are retained or enhanced

iv. ensure overall system safety is retained or enhanced when system upgrades are introduced to service

v. ensure system safety levels are retained or enhanced when they introduce additional elements to the system.

e. **Security threats**. ANSPs should ensure:

i. the physical and cyber security of equipment, systems and installation so as to prevent unlawful interference impacting on the provision of services

ii. they establish a system, including policy and procedures, to ensure physical and cyber security deficiencies and breaches that may interfere with a service do not become causal factors of Aviation Safety hazards.

f. **Release from operations**. An ANSP should have systems for:

i. release from operations—the process of withdrawal from use of a system, equipment or installation from the operational environment

ii. return into operations—the process whereby the system, equipment or installation is checked and restored to operational use, to ensure that it is safe and fit for purpose prior to its release into service.

g. The release from operations and return into operations procedures should be designed to ensure there is no detriment to system safety.

h. **Provision of technical services**. Technical services (design, maintenance, production) for any system, equipment and/or installation intended to be used in the provision of an ANS must:

i. have documented procedures for the services that are readily available

ii. ensure the necessary calibrated equipment, tools and material are available for use to perform the work required

iii. ensure the working environment is appropriate for the tasks carried out

iv. maintain appropriate records of design, maintenance and production

v. include test schedules, with Regression Testing, to ensure the integrity of the system, equipment or installation serviceability before delivery for operational use.

i. An ANSP providing design services for any system, equipment or installation intended to be used in the provision of an ANS must:

i. establish and maintain a design assurance system for the control and supervision of the design, and any design change

ii. ensure each design, design change or repair solution complies with the applicable design requirements and all safety hazards have been assessed and controlled SFARP

iii. provide effective configuration management in order to maintain effective control of the approved configuration

iv. establish test schedules, that include Regression Testing, to ensure the integrity of the system, equipment or installation serviceability before delivery for operational use.

j. An ANSP performing maintenance on any system, equipment or installation must:

i. ensure maintenance is performed in accordance with approved maintenance programs

ii. utilise maintenance policy to ensure that damage is assessed and modifications and repairs are carried out

iii. provide testing appropriate to the type of equipment and its application, including, where necessary:

(a) environmental

(b) regression

(c) ground and

(d) flight checking

iv. establish procedures to detect and rectify maintenance errors that could result in a failure, malfunction, or fault endangering the safe operation of the equipment if not performed properly

v. ensure the activities do not impact ANS system safety.

k. An ANSP should protect against cyber threats and means of ensuring this protection should include information from:

i. ICAO Cybersecurity Policy Guidance https://www.icao.int/aviationcybersecurity/Documents/Cybersecurity%20Policy%20Guidance.EN.pdf

ii. Australian Signals Directorate – *Information Security Manual*.

l. **Contracted Activities.** An ANSP should address all aspects of DASR ANSP.70 (a) when an ANSP contracts of purchases any part of its:

i. activities

ii. support systems or

iii. network functions

to external organisations or from external organisations.

m. **Air Traffic Management Network Functions.** Air Traffic Management Network Functions are critical to effective ATM services. Physical and cyber threats to Air Traffic Management Network Functions present a hazard to Aviation Safety. Air Traffic Management Network Function protection controls should:

i. identify critical information and communications technology systems and data used for aviation purposes and, in accordance with a risk assessment, develop and implement measures to protect them from unlawful interference

ii. ensure that the measures implemented protect the confidentiality, integrity and availability of the identified critical systems and data.

iii. include, inter alia, security by design, supply chain security, network separation, and the protection against, or limitation of any remote access capabilities in accordance with the risk assessment.

GM ANSP.70 – Equipment, systems and installations (AUS)

a. **Purpose. (Context)** Defence ANS support the safe operation of aircraft in airspace and on the ground at airports. **(Hazard)** Ineffective ANS provision can compromise Aviation Safety. **(Defence**) This regulation requires the ANSP-AM to ensure equipment, systems and installations are provided safely by an approved organisation.

b. **Operational service.** Operational service means use of system in the provision of an Air Navigation Service.

c. **Prescription of design standards**. The DASDRM details ATM/CNS equipment design standards and includes requirements for software safety assurance. Where appropriate, DASA will base standards on international best practice and national interoperability requirements. Where necessary, the ANSP may seek advice from DASA on design standards for other ANS equipment. DASA may provide such advice via a Delegate of the Safety Authority (DoSA) with scope to prescribe and interpret design safety standards for specified equipment, systems and installations.

d. **Interfaces with other providers**. ANSPs should define interfaces and performance agreements with all other equipment, systems and installations contributors to the service provision, which may directly influence the safety of the ANSP services.

e. **Reasonable level of demand.** An ANSP should develop system architecture to provide sufficient capacity and redundancy to ensure continuity of service in all credible scenarios, as identified through safety analysis. This includes increases in demand caused by credible scenarios such as power outages, internet outages and weather events.

f. **System commissioning.** Before placing new systems or system components into operational use or returning components (removed from operational service for modification or major repair activity) to operational service, the ANSP should document and review a summary of test procedures and results. Additionally, the ANSP should seek recommendation from technical and operational personnel before returning systems to operational use.

g. **Testing.** When conducting testing of systems or system elements prior to introduction to operational service, following modification or changes to data, test and verification schedules and procedures should ensure all potential failure modes and impacts on system safety and effectiveness are tested. This should include Regression Testing to ensure identification and rectification of unintended changes to system performance.

1. support the safe and effective provision of the service

2. are verified and tested to ensure they comply with relevant technical and operational requirements and present no detriment to Aviation Safety and operational capability
▼GM ▼AMC

AMC ANSP.70(a)2. – Equipment, systems and installations(AUS)

a. An ANSP is responsible for demonstrating, through the production of evidence, that the design and construction of the equipment, systems and installations provided, or intended to be provided meet the certification basis. This evidence may consist of reports, drawings, specifications, calculations, analysis etc.

b. Partial compliance with the certification basis is not permitted. Where the applicant cannot justify meeting a design requirement in the certification basis, the applicant should pursue approval for tailoring of the certification basis as provided in AMC DASA ANSP.70(a)2.c.

c. DASA may approve any tailoring of the above design requirements, on the basis that:

i. a safety argument demonstrates an equivalent level of safety that can be achieved through a tailored design requirement, or

ii. compliance with the design requirement would adversely affect Defence capability, and risks to aviation safety can be eliminated or otherwise minimised SFARP through alternate means.

d. ANSPs must support proposals for tailoring to the certification basis per paragraph c.(ii) with a documented rationale that includes:

i. confirmation that Defence has a well-defined capability imperative, and that meeting the prescribed design requirements would impede achievement of that capability imperative

ii. a description of the proposed tailoring, including any additional operational procedures that will be employed to eliminate or otherwise minimise risk

iii. confirmation that appropriate consultation, cooperation and coordination has been conducted between all persons with a shared duty to ensure health and safety for aerodrome users

iv. confirmation that the applicant, with assistance from users, has clearly characterised the risk due to the tailored design requirements

v. confirmation that the relevant aircraft Military Air Operator(s) has agreed that risks have been eliminated or otherwise minimised SFARP, and both the ANSP and MAO(s) have agreed to retain any residual risk.

e. The applicant should make compliance demonstration evidence available to DASA who may inspect the evidence on a non-exhaustive basis.

GM ANSP.70(a)2. – Initial acceptance and return to service following modification or maintenance

a. ANSPs may base procedures and processes for commissioning of new systems and verification and testing of systems following modification or maintenance on those used for aircraft and other aviation systems as detailed in DASR.21.A.20.

3. are protected against physical and cyber threats from external and internal sources.

ANSP.80 – PERSONNEL COMPETENCY AND LICENSING (AUS)

(a) A certified ANSP must ensure that personnel are qualified, competent, current and authorised to undertake their assigned duties. ▼GM ▼AMC

AMC ANSP.80(a) – Personnel competency and licensing (AUS)

a. ANSPs should:

i. ensure tasks are undertaken by suitably competent and authorised personnel, including contractor personnel

ii. determine staffing requirements for a service consistent with the defined and reasonable level of demand and ensure sufficient qualified, competent and authorised personnel are provided

iii. maintain training, competency assessment and checking programs for their personnel that include the provision of the following training types:

(a) initial

(b) recurrent

(c) recency

(d) differences

(e) on the job training (OJT)

iv. define minimum qualification, experience, recency and currency requirements for each operational role, including those involved in the provision of training and checking, and technical personnel

v. conduct non-technical skills training (to comply with DASR NTS)

vi. include required authorisations or competencies in OIP.

GM ANSP.80(a) – Personnel competency and licensing (AUS)

a. **Purpose**. **(Context)** The safe delivery of ANS is supported by knowledge, skills and behaviours benchmarked against contemporary training and learning standards. **(Hazard)** Undesired ANS personnel knowledge, skills and behaviours can affect the safe delivery of ANS and compromise Aviation Safety. **(Defence)** This regulation requires an ANSP-AM to establish qualification and competency-based training systems to:

i. ensure ANSP personnel are adequately trained and authorised to perform their specified duties

ii. provide ANSP personnel with the requisite knowledge and skills to support the desired behaviours for safe ANS provision

iii. actively monitor and correct knowledge, skills and behaviours in ANSP personnel, to ensure that the required standards are maintained.

b. There will be differing competencies among technical personnel depending on what aspects of the equipment or systems they are responsible for; and the role the equipment or system plays in the safety of the service. Therefore, DASA does not prescribe any single competency or licensing framework for these roles. The ANSP, by the varying nature of the equipment and systems they use or support, has flexibility to select competencies that are appropriate to each specific role. This flexibility enables the ANSP to identify the tasks and skillsets required to hold specific competency, authorisation or qualification.

c. ANSPs may use CASA, EASA and ICAO standards for technical personnel competency to manage competencies.

(b) A certified ANSP must only provide an Air Traffic Control Service utilising licenced Air Traffic Controllers. ▼GM ▼AMC

AMC ANSP.80(b) – Air traffic controller licensing (AUS)

a. The basis for the licencing of air traffic controllers should include:

i. ICAO Annex 1 – *Personnel Licencing*

ii. (AUS) CASR Part 65 – *Personnel Licencing*.

b. A person must not have responsibility for an air traffic control function to be performed in connection with any air traffic service that it provides unless:

i. the person holds an ATC licence with a rating for the function and an endorsement for the controlled aerodrome for which, or the airspace in relation to which, the person performs the function; or

ii. the person performs the function under the supervision of another person who holds an ATC licence with a rating for the function and an endorsement for the controlled aerodrome for which, or the airspace in relation to which, the person performs the function.

GM ANSP.80(b) – Air traffic controller licensing (AUS)

a. The ATC licence issued to a qualified individual by DASA must clearly state that compliance with ICAO training and competency standards has been achieved. DASA appoints the Officer Commanding No 44 Wing as a Delegate of the Safety Authority for the licensing of Air Traffic Controllers through the relevant licensing system.

b. In the interest of national harmonisation, ANSPs may consider the provisions in (AUS) CASR Part 65 – *ATS Licensing* for inclusion in the ANSP licensing system.

(c) A certified ANSP that provides FPD Services must ensure all personnel who design instrument flight procedures are qualified, competent and current in instrument procedure design. ▼GM ▼AMC

AMC ANSP.80(c) – Instrument flight procedure designer training and currency (AUS)

a. The basis for flight procedure designer training and currency should include:

i. ICAO Doc 9906 – *Quality Assurance Manual for Flight Procedure Design* Vols 1 and 2

ii. (AUS) CASR 173 – *Instrument flight procedure design.*

ANSP.90 – SERVICES PROVIDED BY NON-CERTIFIED PROVIDERS (AUS)

(a) A certified ANSP which uses data provided by a Data Services Provider (DSP) must ensure contractual arrangements regarding the supply of data in any form or for use by any operational platform include requirements on the DSP to: ▼ GM

GM ANSP.90(a) – Aeronautical Data from third parties (AUS)

a. **Purpose**. **(Context)** Aeronautical Data comes in many forms. Aeronautical Data is used in all contemporary aviation activities and may originate from numerous sources. **(Hazard)** Aviation Safety can be compromised if data creation; collation; integration and distribution standards; and processes are not fit for purpose. **(Defence)** This regulation requires the ANSP-AM to utilise contractual arrangements to ensure that Aeronautical Data from third parties does not compromise Aviation Safety.

b. Aeronautical databases include databases that support the flight operation of aircraft for the purposes of primary Communication, Navigation and Surveillance (CNS) or supplementing CNS (eg flight management systems, terrain databases, obstacle databases and aerodrome mapping databases).

c. Aeronautical databases include applications loaded into electronic flight bags but do not include databases having no safety effect eg in-flight entertainment systems.

d. Aeronautical Data may be sourced from third party organisations which are not subject to DASR ANSP eg Boeing Digital Solutions (Jeppesen) and OzRunways P/L.

1. provide services only within the scope of a Service Level Agreement or other document issued by the relevant CAA or MAA

2. comply with the service delivery provisions of the current version of RTCA ‘Standards for Processing Aeronautical Data’

3. advise the ANSP where released aeronautical databases have subsequently been identified to have deficiencies or errors

4. advise the ANSP where any CAA or MAA has changed the approval or conditions of approval of the DSP as a source of Aeronautical Data.

(b) A certified ANSP that uses data provided by a DSP must advise all MAOs when released aeronautical databases, or updates to any existing aeronautical databases, are identified to have deficiencies or errors. ▼ GM

GM ANSP.90(b) – Aeronautical Data error advice (AUS)

Purpose. **(Context)** Aeronautical Data comes in many forms. It is used in all contemporary aviation activities and may originate from numerous sources. **(Hazard)** Aviation Safety can be compromised if data creation, collation, integration and distribution standards, and processes are not fit for purpose. **(Defence)** This regulation requires the ANSP-AM to ensure that Aeronautical Data does not compromise Aviation Safety.

Australian Government
Department of Defence
Defence Aviation Safety Authority

Defence Aviation Safety Authority

DASR AMENDMENT RECORD
DCP 2020 - 028

DASR CLAUSE: Various

RATIONALE FOR CHANGE

The purpose of this DCP is to remove the DASR ARO.40 Aircraft Crash Protection (CP). In lieu, compliance to CP design requirements from the Defence Aviation Safety Design Requirements Manual (DASDRM), and the application of DASR SMS assures the protection of aircraft occupants during survivable crashes—without the need for a specific CP DASR.

CURRENT REGULATION TEXT

See Below Enclosure 1 to DCP 2020-028 Revision 2 - PROPOSED CHANGES TO DASP VOLUME 2 DASR.ARO - AUTHORITY REQUIREMENTS FOR AIR OPERATION (BP40970881)

REVISED REGULATION TEXT

See Below Enclosure 1 to DCP 2020-028 Revision 2 - PROPOSED CHANGES TO DASP VOLUME 2 DASR.ARO - AUTHORITY REQUIREMENTS FOR AIR OPERATION (BP40970881)

DCP 2020-028 REVISION 2

PROPOSED CHANGES TO DASP GLOSSARY - AUTHORITY REQUIREMENTS FOR AIR OPERATION

Notes to readers:

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

a. deleted text is marked with ~~strike through~~;

b. new or amended text is highlighted in grey.

DASP Glossary

~~**Contemporary Crash Protection Design Requirement (CCPDR) ***~~

~~Design requirements prescribed by a National Aviation Authority (NAA) and /or a Military Aviation Authority (MAA), which form the basis to certify the aircraft Type.~~

~~**Crash Protection (CP)**~~

~~Requirements designed to protect occupants and improve the chances of survival, during the initial impact phase as well as subsequent evacuation and post evacuation phases of a survivable crash.~~

DCP 2020-028 REVISION 2

PROPOSED CHANGES TO DASP VOLUME 2 DASR.ARO - AUTHORITY REQUIREMENTS FOR AIR OPERATION

Notes to readers:

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

c. deleted text is marked with ~~strike through~~;

d. text highlighted in green is Australian unique text; and

e. new or amended text is highlighted in grey.

DASR.ARO - Authority Requirements for Air Operations

ARO.40 ~~– Aircraft Crash Protection (DAAD 002/16)~~

~~(a) The MAO must maintain a system to eliminate or otherwise minimise risk So Far As is Reasonably Practicable (SFARP) to personnel on aircraft that do not meet CCPDR.~~

(b) The MAO must evaluate Defence aircraft against CCPDR periodically while in service and when significant changes are proposed to Defence aircraft Configuration, Role and operating Environment (CRE) at intervals not exceeding five years, or as specified by the Authority.

(Reserved)

GM ARO.40.A - Maintaining a system to treat CP risk to personnel

1. Purpose. The purpose of this regulation is to provide assurance that risks to personnel on Defence aircraft are appropriately characterised and treated, where compliance with CCPDR cannot be achieved for the aircraft type.

2. Applicability. This Regulation only applies to aircraft which cannot satisfactorily comply with all elements of CCPDR.

3. The core working components of this Regulation support a risk based approach, where risk is identified, analysed, evaluated, communicated and managed by the appropriate entity. The CP risk management framework and the associated risk assessment process described here should be considered in conjunction with DASR.SMS The framework can then be used to define the means to assess risk, identify treatments, assess the benefit of operational or technical treatments, make a judgement of whether any residual risk has been minimised SFARP and define the appropriate Risk Management Authority (RMA) who is responsible for retaining any residual CP risk.

4. Mission specific CP considerations. 'Standing' risk assessments should be based on standard/routine aircraft CRE and any risks identified would be eliminated or otherwise minimised SFARP via Orders, Instructions, Procedures (OIP). Hence, it is assumed that any key risks will be identified and managed. Mission specific risks refers to risks that would arise from non-standard or operational contingency tasks where additional consideration should be given to any impacts on survivability in the event of a survivable crash. Assessment of mission specific risks can be an ongoing process and captured under Core Risk Profiles (CRP), Mission Risk Profiles (MRP) or Risk Management Plans (RMP) through the Risk Management process. A balanced approach to treating risks is required, in order to achieve the mission. This may include assessing the benefits of exposing Defence personnel to any risks, for example, whether the need to carry passengers outweighs any risks associated with a contingency scenario, or the carriage of specific Dangerous Goods (DG).

AMC ARO.40.A - Maintaining a system to treat CP risk to personnel

1. To optimise occupant protection, a systems approach to Crash Protection (CP) is necessary, encompassing the following key initial airworthiness and flight operations CP principles. The key to an optimised CP system for a particular aircraft is balance between the principles such that any one factor is not significantly degraded.

2. Initial airworthiness CP principles include:

a. **Aircraft crash resistance.** The ability of the aircraft structure to provide a protective shell for occupants in the event of a survivable crash is a key factor for occupant survival. The structure and equipment should be designed to allow deformation in a controlled, predictable manner so that forces imposed upon the occupants will be tolerable while still maintaining a protective shell. This aspect also relates to the restraint of concentrated (or high) mass items, to prevent parts of the aircraft becoming projectiles within the cabin during a crash creating crushing or blunt trauma hazards (eg engines/transmission/blades coming through the roof, internally mounted items dislodging, and so on).

b. **Occupant retention.** Protection should be afforded to occupants by the aircraft's retention system, which comprises the seat, seat retention and occupant restraint system assembly. The retention system plays a major role for all aircraft types in preventing

occupant contact injuries associated with body parts flailing into aircraft structures. For helicopters the retention system also plays a predominant role in energy absorption.

c. **Cargo and equipment retention.** Restraint systems should be designed to control cargo and ancillary equipment displacements that are hazardous to occupants during a survivable crash.

d. **Post-crash emergency escape provisions.** Occupants should retain the ability to rapidly evacuate the aircraft during non-crash ground emergencies, and after survivable crash conditions. The ability to escape is impacted by aircraft deformation, lighting, escape hatches, and so on.

e. **Post-crash injury prevention.** The crash protection system should be designed to prevent post-crash environmental hazards that could seriously injure occupants. For hazards which cannot be prevented, the crash protection system should protect occupants from exposure to the hazards. Potential post-crash environmental hazards include fire, toxic fumes and submersion. This principle can be extended to include equipment that can improve post-crash survivability after the crash sequence. Such equipment includes first aid kits, survival kits and emergency locator transmitters.

3. Flight Operations CP considerations include:

a. **Cargo and equipment configuration.** Cargo (including role equipment) configuration in an aircraft can have significant implications on CP and post-crash egress. Consideration must be applied to the way in which this cargo is arranged (its orientation, presence of sharp edges etc) and where that cargo is restrained in the aircraft. Specific examples include operating with life rafts in helicopter cabins or specialist medical equipment on AME fixed wing aircraft.

b. **Secondary seating.** There are operational circumstances where MEP cannot be seated in crashworthy seats during flight and must utilise non-standard restraints and/or seating, eg Special Operations contingency loading. The CP risks for these circumstances should be routinely assessed and treated in accordance with DASR ORO.70.B – Non-standard aircraft restraint and seating.

c. **Carriage of personal equipment.** Equipment carried on the individual, eg ALSE, load carriage equipment, body armour, should be risk assessed and treated in the context of CP and DASR ORO.70 – Carriage of Personnel on Defence Aircraft. Routinely reassessing the CP risks associated with the carriage of personal equipment is especially pertinent as there are many different forms and versions of ADF combat ensemble.

d. **Egress procedures.** Risks to egress in post-crash circumstances should be considered and treated as part of CP risk assessments. This should include consideration of cockpit/cabin configurations which can block egress routes or cargo/equipment which could make egress hazardous in a post-crash situation.

4. **CP Risk Management Framework.** CP risk assessments should involve a number of stakeholder agencies and organisations and are fundamental to achieving compliance to the Regulation. A system must be in place to treat the outstanding risks identified through the risk assessment process. General guidance on Risk Management is contained within the DASR.SMS, with this Regulation providing additional CP-specific context and guidance. CP risk assessment and treatment processes should be informed by reference to both these sources. The framework introduces common descriptors for consequence and likelihood, and a common safety risk matrix across the aviation safety and WHS domains. It also introduces likelihood definitions for system level and activity level contexts, which enables risk assessments to be translated across safety management systems. This process involves establishing the risk assessment context, conducting a CP evaluation, establishing the pre-treatment risk level, identifying and prioritising risk treatments, establishing the post-treatment risk level and communicating the outcomes to the appropriate authority to inform risk treatment decisions.

5. **Establish the CP Context.** The context of the risk analysis for CP is that the risks to occupants for design related shortfalls are only realised in the event of a 'survivable' crash. Although CP

risks are usually related to aircraft designs which are not fully compliant to the CCPDR, risk treatments will eliminate or otherwise minimise the risk SFARP through either operational or design controls, eg cease or minimise flight over water if there is insufficient life rafts/life raft capacity in accordance with the CCPDR. Design related controls aim to improve aircraft crash performance by following principles contained in the Defence Aviation Safety Design Requirements Manual (DASDRM).

a. The CP evaluation is to be conducted by the relevant CASG PO or SPO for acquisition and in-service aircraft types and Service Chiefs for potential new aerospace capability options. This is conducted in accordance with DASR Part 21 and the Authority prescribed CCPDR in the DASDRM. The result will be an overall level of CP provided to occupants in the event of a survivable crash, expressed in terms of the CP risk level definitions in Table 1.

Table 1 – CP Shortfalls Definitions

Level of CP Provided to	Description
Good	The level of CP provided to occupants largely meets the CCPDR.
Moderate	The level of CP provided to occupants exhibits some shortfalls against CCPDR. The envelope for 'potentially survivable crashes' is therefore reduced.
Poor	The level of CP provided to occupants exhibits significant shortfalls against CCPDR. The envelope for 'potentially survivable crashes' is therefore markedly reduced.

b. Where there are shortfalls against the CP design requirements, the risks associated with those shortfalls need to be identified, analysed and evaluated to inform risk treatment decisions. The risks associated with CP shortfalls will be at their most extreme in a worst case survivable crash and it is these risks that should be considered in the risk assessment.

6. **Pre-treatment Risk Assessment.** The level of risk associated with CP shortfalls, based on the existing CP attributes of the design for the current ADF CRE must be established to inform risk treatment decisions. The risk context includes the aircraft CP design and operating context as defined in the Statement of Operating Intent and Usage (SOIU) and supporting operational instructions that may include roles, missions/profiles, operating environment, annual rate of effort and passenger carriage requirements. This risk analysis must be conducted collaboratively by the relevant CASG PO or SPO for airworthiness aspects and MAO representatives for operational aspects. The key activities to be completed include:

a. Identification of the worst case survivable crash scenario within the ADF CRE. This activity is largely subjective as it is based on the ADF operating context (roles, missions/profiles, etc).

b. **Establishing Consequence.** The evaluation of the CP design against the CCPDR (Good, Moderate or Poor) is used to inform the pre-treatment consequence in the event of a survivable crash. The Guidance column in Table 2, together with informed judgement of the operating context by technical and operational representatives, should be used to establish the consequence level.

Table 2 – Safety Consequence and CP Guidance Descriptors		
Consequence Label	**Safety Matrix Definition**	**Guidance in CP Context – in the event of a survivable crash**
(E) Catastrophic	• Multiple fatalities **OR** 10 or more injuries/illnesses categorised as **'Critical'**	CP Level of Poor – the envelope is significantly reduced. Where there are multiple occupants on-board (typically crew and passengers in vicinity of >10 occupants), it would be expected that there would be multiple fatalities and serious injuries
(D) Critical	• Single fatality and/or permanent disability **OR** 10 or more injuries/illnesses categorised as **'Major'**	CP Level of Poor – the envelope is significantly reduced. Where there are few occupants on-board (typically crew only), it would be expected that there would be at least one fatality and serious injury
(C) Major	• Serious injury or illness requiring immediate admission to hospital as an in-patient and/or permanent partial disability **OR** 10 or more injuries/illnesses categorised as **'Moderate'**	CP Level of Moderate – the envelope is reduced; however, there is a moderate amount of crash protection. Fatalities are not expected to occur, but could occur
(B) Moderate	• Injury or illness causing no permanent disability, which requires non-emergency medical attention by a registered health practitioner **OR** 10 or more injuries/illnesses categorised as **'Minor'**	CP Level of Good – shortfalls are not significant, so the envelope is only marginally reduced. Occupants are not likely to sustain serious injuries, but if occurring it is likely that the injuries are somewhere between serious and minor
(A) Minor	• Minor injury or illness that is treatable in the workplace (first aid) or by a registered health practitioner, with no follow up treatment required	CP Level of Good – while this is potentially a CP context consequence, it is only likely in the 'best case' survivable crashes and would therefore not normally be applicable

c. **Establishing Likelihood.** Likelihood for the CP risk analysis is the likelihood given for the probability of a survivable crash occurring on a per annum basis. This likelihood will be based on a combination of available data inputs including the worst case survivable crash scenario, accident rates (where available for the aircraft being assessed or similar aircraft types), fleet ROE, System Safety Program data (where available and appropriate for use in determining a crash rate) and ADF operating context as defined in the SOIU. Note that an indicative quantitative value for likelihood can be expressed in terms of the percentage likelihood of a survivable crash occurring on a per annum basis, based on the aircraft ROE and the predicted survivable crash rate. Refer to Table 3.

Table 3 – Safety Likelihood and CP Guidance Descriptors			
Likelihood (p.a.) = Predicted Future Crash Rate (crashes/hour x Annual Rates of Effort (ROE) (hours/year) **Likelihood Label** (per year)	**Safety Matrix Definition for *System Context***	***Qualitative Guidance* on the likelihood of a survivable crash**	***Qualitative Guidance* on the likelihood of a survivable crash occurring during fleet operations on a per annum basis**
(5) Almost Certain	• Expected to occur several times a year or often during the system life cycle • Is known to occur frequently in similar systems being used in the same role and operating environment	• Aircraft with known poor safety records and significant safety deficiencies in the ADF CRE context • Aircraft that fly all their operations in the 'challenging environment'	Greater than 20% chance per annum
(4) Probable	• Expected to occur one or more times per year or several times in the system life cycle • Is known to have occurred, but is not certain to occur	• Aircraft that fly high risk flight profiles for most of their operations and/or experiencing high rates of effort are likely to fall under this definition of likelihood • Aircraft that fly the majority of their operations in the 'challenging environment'	Greater than 10% but less than 20% chance per annum
(3) Occasional	• Expected to occur less than once per year or infrequently during the system life cycle	• Aircraft that fly high risk profiles for a substantial part of their operational life	Greater than 5% but less than 10% chance per annum
(2) Improbable	• Not expected to occur, but possible to experience one or more events during the system life cycle	• Aircraft that usually fly low risk flight profiles in a 'benign environment', however sometimes fly high risk profiles as required	Greater than 3% but less than 5% chance per annum
(1) Rare	• Only expected to occur in rare or exceptional circumstances or no more than once during the system life cycle	• Aircraft that fly a majority of their operations in the 'benign environment' • Aircraft that almost always fly low risk profiles and operate similar to RPT aircraft	Less than 3% chance per annum

d. **Establishing Likelihood.** Likelihood for the CP risk analysis is the likelihood given for the probability of a survivable crash occurring on a per annum basis. This likelihood will be based on a combination of available data inputs including the worst case survivable crash scenario, accident rates (where available for the aircraft being assessed or similar aircraft types), fleet ROE, System Safety Program data (where available and appropriate for use in determining a crash rate) and ADF operating context as defined in the SOIU. Note that an indicative quantitative value for likelihood can be expressed in terms of the percentage likelihood of a survivable crash occurring on a per annum basis, based on the aircraft ROE and the predicted survivable crash rate. Refer to Table 3

Table 3 – Safety Likelihood and CP Guidance Descriptors			
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(5) Almost Certain	• Expected to occur several times a year or often during the system life cycle • Is known to occur frequently in similar systems being used in the same role and operating environment	• Aircraft with known poor safety records and significant safety deficiencies in the ADF CRE context • Aircraft that fly all their operations in the 'challenging environment'	Greater than 20% chance per annum
(4) Probable	• Expected to occur one or more times per year or several times in the system life cycle • Is known to have occurred, but is not certain to occur	• Aircraft that fly high risk flight profiles for most of their operations and/or experiencing high rates of effort are likely to fall under this definition of likelihood • Aircraft that fly the majority of their operations in the 'challenging environment'	Greater than 10% but less than 20% chance per annum
(3) Occasional	• Expected to occur less than once per year or infrequently during the system life cycle	• Aircraft that fly high risk profiles for a substantial part of their operational life	Greater than 5% but less than 10% chance per annum
(2) Improbable	• Not expected to occur, but possible to experience one or more events during the system life cycle	• Aircraft that usually fly low risk flight profiles in a 'benign environment', however sometimes fly high risk profiles as required	Greater than 3% but less than 5% chance per annum
(1) Rare	• Only expected to occur in rare or exceptional circumstances or no more than once during the system life cycle	• Aircraft that fly a majority of their operations in the 'benign environment' • Aircraft that almost always fly low risk profiles and operate similar to RPT aircraft	Less than 3% chance per annum

e. **Establishing Likelihood** - Example. If the survivable crash rate for an aircraft type is determined as 8.5 x 10-6 survivable crashes per flight hour and the fleet annual ROE is 6 500 hours, then the likelihood of a survivable crash occurring on a per annum basis is expressed as: Likelihood = (8.5 x 10-6) x (6 500) = 0.051 = 5.1%. Based on the quantitative guidance, the likelihood is evaluated as OCCASIONAL (between 5% and 10%). The qualitative guidance, in conjunction with operational and technical staff judgements, should be used to validate the evaluation, especially when the calculated value is on the margins of likelihood levels, like the above example calculation. Further analysis of the aircraft type and its CRE may determine that the value calculated is not representative of the actual likelihood. Where appropriate justification is provided, the likelihood level should be adjusted to reflect the level judged to be more appropriate. For example, based on a qualitative analysis, IMPROBABLE may more accurately describe the likelihood for the example case.

f. **Guidance on determining relevant survivable crashes for CP risk analysis**. Many of the issues encountered with the results of risk analysis from implementation of the previous CP policies have been due to poor quantitative evaluation of the risks to occupants in the event of a survivable crash, based on a limited analysis of the survivable crashes for the given aircraft type. In many cases the derived likelihood of a survivable crash occurring has not been representative of future crash rates. Usually, simple extrapolation of the historical accident rates is not indicative of future crash rates of an aircraft. A critical analysis of the accident data can dramatically improve the accuracy of predicted survivable crashes. There will always be uncertainty in predicting future events and a sound analysis of the likelihood should clearly identify and communicate any

uncertainty in the predicted crash rate. Poor examples are seen where the crash rate utilised for CP risk analysis is the raw number of accidents experienced divided by the total operational hours flown. This approach can be very misleading, as it usually takes into account accidents that occurred many years into the past which are likely not relevant to the current and future airworthiness framework or the aircraft's current CRE.

g. A survivable crash is difficult to define and it is almost impossible, in most cases, to obtain detailed crash data to determine which crashes were survivable or not. Therefore, it is very difficult to establish an accurate prediction of future survivable crash rates. As a minimum, the preferred approach is to apply a 'reasonable estimate' of the survivable crash rates. However, if this cannot be established then the analysis may assume that most crashes or serious accidents and incidents included in data sets are survivable in order to determine the most applicable likelihood from one of the five definitions in Table 3. That is, an estimation of the accident rate of the aircraft is the 'best guess' for the CP risk analysis. Careful assessment and judgement is required to filter applicable data, when considering aspects such as the nature of the crash, deaths versus injuries, world-wide versus single operator data and categories of aircraft damage.

h. The crash rate should be expressed as a likelihood of a survivable crash occurring on a per annum basis. This is important because the exposure of the risk to occupants is directly related to the rate of effort of the aircraft. The more hours the aircraft operates, the greater the exposure and the greater the likelihood of an accident occurring per year. The converse applies.

i. Both the qualitative and quantitative guidance in the Guidance columns in Table 3 should be considered by the technical and operational representatives, together with their informed knowledge of the operating context, to determine the likelihood level. The qualitative guidance should be used to assist the evaluation of the likelihood in conjunction with the predicted future crash rate to provide an outcome that suitably reflects the risk level to occupants in the event of a survivable crash.

j. **Establish the CP risk level.** Apply the established likelihood and consequence determinations to the Defence Harmonised Risk Matrix contained in the DASR.SMS to establish the pre-treatment CP risk level (Very Low, Low, Medium, High, Very High).

7. **CP Risk Treatment.** Assess the availability and suitability of risk reduction options (controls) according to the standard risk management hierarchy of controls, for each shortfall identified against the CCPDR. The assessment is to consider the controls in order of most to least effective, per the standard hierarchy of controls described in DASR.SMS. The end-state for this step is an approved list of additional controls to be implemented for the aircraft system. The key activities to be completed include:

a. Perform a joint airworthiness and operational assessment to review all design based controls, review the current operational controls, and identify possible new controls as per the hierarchy of control options, including any known 'good practice'.

b. Assess the implementation cost (financial, capability, etc) for each proposed control.

c. Determine the treatments to be implemented in order to reduce the pre-treatment CP risk level SFARP. In determining the practicability of implementing a control, the applicable Capability Manager should be consulted to ensure there is no unacceptable degradation in the aircraft's operational performance/capability, and a Cost Benefit Analysis (CBA) should be produced to support the decision process. A CBA may be as simple as a basic cost versus benefit statement, through to a comprehensive and detailed analysis. This could include consideration of factors such as capability impact, effect on crew training/workload, etc.

8. The focus of the CP risk assessment to this point has been in the 'safety' dimension using the Defence Harmonised Risk Matrix. The other dimensions of the risk management framework (Mission, Capability, Reputation, Financial and Environment) should also be reviewed to assess the wider implications of the controls being applied for CP. Changes to the risk profile in other risk management dimensions may drive changes to the proposed controls for the safety risk.

Accordingly, there will be an iterative approach to the assessment to ensure an appropriate balance between safety and mission, capability, reputation, financial and environment as deemed appropriate by Commanders, Managers and the Authority. Risk Registers, which are currently managed for each aircraft type, should be reviewed for possible flow-on changes to other risks being managed. Where necessary, risks should be updated to consider flow-on impacts to other risk management dimensions, ie the controls to be implemented for CP may impact other aspects of the aviation system, and flow-on impacts managed under DASR.SMS.

9. **Treatment Decision.** Decide, at the appropriate management levels, on the controls to be applied, the priority, and the organisation to implement each control. In making this determination, the decision process for the CP risk analysis and evaluation is to be documented, including the reasons for accepting or rejecting the assessed treatment options, and presented to management to inform risk treatment decisions.

10. **Post-treatment Risk Assessment.** Similar to the pre-treatment risk assessment, the key activities are re-establishment of the overall CP level (Table 1), re-establishment of the consequence (Table 2) and likelihood (Table 3) levels, and finally, determination of the post-treatment CP risk level using the Defence Harmonised Risk Matrix.

11. **Risk Management Decision.** Risk management authorities (RMA) reside within the Chain of Command. Unless the relevant Service Chief directs otherwise, based on the final (post-treatment) CP risk level, the CP risk should be processed and retained as per the Risk Retention Thresholds' table within the DASR.SMS. This is to include the proposed controls (Treatment Plan), action agencies, and timeframes for implementation (priority). Additionally, updates to other risk dimension risks should also be presented to the appropriate Risk Management Authority (RMA).

12. **Risk documentation.** In accordance with DASR.SMS Regulation, CP risk treatment documentation should be produced, reviewed and stored by the responsible organisation as part of their SMS structure.

13. **Changes to aircraft CRE**. Proposed changes to the CRE of an aircraft have the potential to affect the CP attributes of an aircraft from both an airworthiness and flight operations perspective. For example, a modification that adds significant weight to a helicopter may change the crash impact attenuation properties of the undercarriage. A change in aircraft operating environment may alter the prevalent crash types for which the aircraft was designed. Changes to an aircraft's CRE must be carefully assessed to ensure the level of CP inherent in the original design and its operation are not compromised, and any impacts on extant CP attributes are evaluated to identify treatment options and confirm that associated risks are reduced SFARP.

14. **Contracted, leased and civil certified aircraft.** Where aircraft are contracted/leased by Defence to carry Defence personnel and the CRE is the same as, or substantially similar to civilian Regular Public Transport (RPT) or Charter, the risks being retained by the relevant RMA would be the same or very similar (assuming the same CRE) as for civilian use under the instrument issued by the relevant Civil Aviation Authority (CAA). Therefore, the risks associated with the aircraft's CP attributes and approval by the relevant CAA provides a basis for an assessment of the risks by the relevant authority. Any identified shortfalls must also be analysed to ensure the risk posed does not warrant treatment to support the determination that the CP risks are minimised SFARP.

15. **Planned Withdrawal Date.** Aircraft close to the Planned Withdrawal Date (PWD) are subject to the requirements of this Regulation. The risks associated with CP shortfalls of Defence aircraft close to PWD must be assessed to ensure the risks in the event of a survivable crash are minimised SFARP. However, due to the expected significantly lower operating hours in the remaining life of an aircraft close to the PWD, the likelihood of a survivable crash occurring is significantly reduced and therefore any benefits gained through treating shortfalls to CCPDR are likely to be significantly reduced. Consequently, treatments are less likely to be reasonably practicable, with the exception of those which are relatively low cost and can be implemented in a short timeframe. The above needs to be considered when involving conducting an assessment and retaining any residual risk, for an aircraft that has been identified for withdrawal from service.

16. **Limited Configuration Control.** Defence may pursue support arrangements involving Limited Configuration Control (LCC) to maintain configuration parity with other operators to minimise in-service support costs and avoid an 'orphan' or unique fleet. Regardless, aircraft with LCC are subject to the requirements of this Regulation

GM ARO.40.B – Periodic review of risk assessments

1. **Purpose.** The purpose of this Regulation is to assure that the CP risk treatments remain applicable to changes in CCPDR and/or CRE.

2. **Applicability.** This Regulation applies to all Defence aircraft, regardless of whether or not they initially met CCPDR.

3. CCPDR are not fixed in time, are subject to change and are prescribed by the Authority. In-service management is essential to ensure that CP risks are continually assessed and treated by platform. Furthermore, aircraft CRE can change due to a variety of factors and external pressures. Hence CP risk treatments must be routinely reviewed to ensure their currency.

AMC ARO.40.B – Periodic review of risk assessments

1. The requirement to review CCPDR assessments more frequently may utilise a risk based approach. Therefore, aircraft which represent a high risk, or the level of risk is not well understood, should be subject to more frequent scrutiny. Conversely, infrequent scrutiny may be more appropriate for low risk aircraft, such as those which afford a high level of CP.

Australian Government
Department of Defence
Defence Aviation Safety Authority

Defence Aviation Safety Authority

DASR AMENDMENT RECORD
DCP 2024 - 008

DASR CLAUSE: GM ARO.100(c).d.ii

RATIONALE FOR CHANGE

DASA updated the wording to remove outdated terminology.

CURRENT REGULATION TEXT

change to Aircraft airworthiness instrument, eg transition from SFP to MRTC

REVISED REGULATION TEXT

change to Aircraft airworthiness authorisation, eg transition from MPTF to MTC

DASR AMENDMENT RECORD
DCP 2024 – 011

DASR CLAUSE: DASR GM ARO.60.A.2

RATIONALE FOR CHANGE

As the Defence Aviation Safety Assurance Manual (DASAMAN) has been withdrawn, references need to be updated or removed. This change replaces a reference to DASAMAN Section 3 Chapter 2 with a reference to DASP Manual Volume 3 Chapter 6.1 Annex B – Defence Registration.

CURRENT REGULATION TEXT

1. **Purpose.** The purpose of this regulation is to allow capability managers to best determine whether an aircraft should be on the Defence register. There may be occasions when it is in Defence's interest for aircraft to remain on another register.

2. DASA is the custodian of the Defence Register and is responsible to ensure its validity. Information pertaining to the management of the Defence register, including addition and removal of aircraft is detailed in the Defence Aviation Safety Assurance Manual, Section 3 Chapter

REVISED REGULATION TEXT

1. **Purpose.** The purpose of this regulation is to allow capability managers to best determine whether an aircraft should be on the Defence register. There may be occasions when it is in Defence's interest for aircraft to remain on another register.

2. DASA is the custodian of the Defence Register and is responsible to ensure its validity. Information pertaining to the management of the Defence register, including addition and removal of aircraft is detailed in DASP Manual Volume 3 Chapter 6.1.1 Annex B – Defence Registration.

DASR CLAUSE: M.A.304

RATIONALE FOR CHANGE

Green text added to DASR M.A.304(b) to include data approved by the MTC holder (under privilege) to align with change to DASR 21.A.263(d) (DCP 2022-032).

CURRENT REGULATION TEXT

Damage shall be assessed and modifications and repairs carried out using as appropriate

a) data approved by the MAA; or

b) data approved by a DASR 21 Design Organisation; or

c) NOT APPLICABLE;

d) data produced by an organisation accepted by the MAA.

REVISED REGULATION TEXT
Damage shall be assessed and modifications and repairs carried out using as appropriate a) data approved by the MAA; or b) data approved by a DASR 21 Design Organisation or MTC holder organisation; or c) NOT APPLICABLE; d) data produced by an organisation accepted by the MAA.

DASR CLAUSE: GM M.A.304(b)
RATIONALE FOR CHANGE
GM inserted to explain how foreign data for civil derivative aircraft approved under privilege using DASR 21.A.263(d) is consumed under this regulation.
NEW REGULATION TEXT
If granted the privilege under DASR 21.A.263(d), a holder of an MDOA or MTC may approve data, including major modifications, for some civil-derivative aircraft if the data has been previously approved by a recognised CAA.

DASR AMENDMENT RECORD
DCP 2019 - 037

DASR CLAUSE: AMC M.A.304(d)

RATIONALE FOR CHANGE

This update simplifies the direct consumption of repairs and minor modifications by improving clarity, specifying major repair approval holder obligations and removing the need to ensure holder obligations for minor modifications and repairs. Editorial amendments included to align to DASR 21.

CURRENT REGULATION TEXT

Scope

1. Data may be consumed under this sub-clause if it is accessed through recognition (see recognition web-page) and processed in accordance with this AMC.

2. Only the following may be consumed under DASR M.A.304(d):

    a. data for repairs, including ‘MAJOR’ repairs in some circumstances; and

    b. data for modifications classified as ‘minor’.

Procedures

3. The CAMO shall establish procedures to assess and process data intended for consumption under DASR M.A.304(d). The procedures shall identify how data accessed through recognition can be assessed as suitable in accordance with the recognition certificate caveats and consumed. As described below, the data will in some circumstances require additional processing prior to consumption, such as:

    a. identifying the classification of the modification or repair as ‘MAJOR’ or ‘minor’,

b. assessing ‘MAJOR’ repair data as suitable for consumption,

c. assessing alternate instruments as suitable for consumption, and

d. assessing technical information and instructions as acceptable for consumption.

Classification

4. The existing classification of modifications and repairs originating from some recognised airworthiness systems is valid within the DASA system because the ‘MAJOR’ / ’minor’ definition is aligned to DASR 21.A.91 - Classification of changes in type design. The relevant recognition certificate will identify where this is the case.

5. Where the recognition certificate indicates that use of the data is subject to further classification, the CAMO must ensure that the modification or repair is appropriately classified as ‘MAJOR’ or ‘minor’ in accordance with DASR 21.A.91 Classification of changes in type design. Classification may be done by:

    a. the CAMO, through a procedure issued by DASA;

    b. a DASR 21J MDO with the appropriate scope and privilege;

    c. the MTC holder in accordance with the TCAE, where a DASR 21J MDO is not available for the relevant aircraft type; or

    d. DASA.

CAMO classification of an approved design product

6. This provision, referenced at paragraph 5a, enables the CAMO to identify modifications and repairs that are clearly ‘minor’. All other designs should then either be treated as ‘major’ or classified by another organisation listed at paragraph 5.

7. Classification by the CAMO shall be done in accordance with a procedure developed by the CAMO and issued by DASA. Such a procedure shall, as a minimum:

    a. result in a ‘minor’ determination only where clearly supported by the characteristics of the data, ie the assessment is not complex or uncertain; and

b. identify the specific CAMO personnel authorised to conduct or approve the classification, including their qualifications, knowledge and experience relevant to making such determinations.

Consumption of MAJOR repairs

8. A recognition certificate may enable the consumption of data for 'MAJOR' repairs without further approval of the data. The circumstances under which direct consumption may occur will be influenced by the specific support arrangements in place for each platform; such as the design organisations developing the repair, the type, scope, or location of repairs, and other relevant factors. The CAME shall document the procedures to assess 'major' repair data for consumption on a platform-by-platform basis.

9. Where the CAMO assessment of a MAJOR repair identifies that the data is not acceptable for direct consumption, that data may be passed to an appropriate design organisation for processing of approval in accordance with DASR 21 Subpart M Repairs and subsequent consumption via DASR M.A.304(a) or M.A.304(b).

Alternate instruments

10. Each recognition certificate lists the 'native' instruments issued within the corresponding airworthiness system. Cases may arise where a design organisation could normally issue a native instrument but is restricted from doing so, for reasons such as:

    a. legal restrictions prohibiting the organisation from issuing an approval to a military customer or against a DASA type certificate; or

    b. the approval not being subject to the oversight of the parent airworthiness authority because it is for a military customer, against a DASA type certificate or slightly outside the organisation's scope.

    c. in such cases, DASA may agree the data may be consumed as an 'alternate' instrument where the CAMO can demonstrate to DASA's satisfaction that:

    d. it is not feasible for the design organisation to attain a DASR 21 Subpart J design organisation approval or provide the data under subcontract to such an organisation;

    e. the organisation is a suitable provider of the required data, i.e. the work is within the scope of the organisation's approval (or similar) or so closely aligned that no hazards to airworthiness are introduced;

    f. the design data is developed, and the alternate instrument is issued, using the same personnel and processes by which the organisation provides a similar product acceptable through recognition;

g. the caveats set out in the relevant recognition certificate are applied to the greatest practicable extent; and

h. any other controls necessary to ensure safety are in place.

Technical information and instructions, eg Service Bulletins

11. The airworthiness instruments named in the recognition certificate annexes are generally the instruments issued by the recognised authority, or by a design organisation, to approve a modification or repair. Rather than these instruments, Defence organisations will often receive technical information or instructions describing the embodiment of the corresponding modification or repair, eg a Service Bulletin.

12. In such cases, and where eligible, the technical information or instructions should be treated in accordance with the corresponding recognition scope, conditions and caveats as if it were the underlying airworthiness instrument. For example:

    a. A service bulletin describing the embodiment of a minor modification should be treated like an approval of minor change to type design or its equivalent in the recognised system.

    b. A technical instruction describing the embodiment of a major repair should be treated like an approval of major repair design or its equivalent in the recognised system.

13. **Eligibility**. To be eligible for treatment under this subclause, technical information or instructions describing the embodiment of a modification or repair must be:

    a. issued by a type of organisation acceptable through recognition to issue any type of airworthiness instrument, such as an approval of minor change to type design; and

    b. issued in accordance with a procedure agreed by the recognised airworthiness authority, eg under the privilege of a design organisation approval.

14. **Classification**. The technical information or instructions may clearly indicate that the modification or repair is classified as ‘minor’ or ‘major’ in the recognised system. Where this is not the case, or where the relevant recognition annex identifies that instruments issued within that system require classification, the data should first be treated in accordance with the ‘Classification’ section above.

15. **Status**. Eligible technical information or instructions are not an ‘alternate’ instrument described above because they are issued with the agreement of the recognised authority.

REVISED REGULATION TEXT

Scope

1. Data is produced by an organisation accepted by DASA if:

    a. the data originates from an organisation oversighted by a recognised aviation authority; and

    b. the CAMO ensures that the data is acceptable in accordance with this AMC and the applicable recognition certificate (see DASA Recognition web page).

2. The following may be consumed in accordance with a procedure approved by DASA:

    a. data for repairs, including in some circumstances, data classified as major; and

    b. data for modifications classified as minor.

Classification

3. The existing classification of modifications and repairs originating from some recognised airworthiness systems is valid within the DASP because the major / minor definition is aligned to DASR 21.A.91 *Classification of changes to a type-certificate*. The relevant recognition certificate will identify whether this is the case.

4. Where the data does not have a valid classification, it may be treated as 'major' or classified by one of the following organisations:

    a. the CAMO (see para 6);

    b. the MTC holder in accordance with the TCAE;

    c. a DASR 21 Design Organisation with the appropriate scope and privilege; or

    d. DASA.

Note: Classification via a CAMO or MTC holder procedure should be pursued in advance of classification by a DASR 21 Design Organisation or DASA.

5. References to 'major' and 'minor' classifications throughout this AMC refer to those made through the provisions of either paras 3 or 4 above.

6. **CAMO classification of an approved modification or repair.** This provides the CAMO limited scope to identify modifications and repairs that are clearly 'minor'. All other modifications and repairs should then either be treated as 'major' or classified by another organisation. Classification by the CAMO shall be done in accordance with a procedure, approved by DASA, which shall, as a minimum:

    a. result in a 'minor' determination only where clearly supported by the characteristics of the data, ie the assessment is not complex or uncertain (does not require review of detailed design or engineering data)

    b. identify how CAMO personnel are authorised to conduct or approve the classification, including their necessary qualifications, knowledge and experience relevant to making such determinations.

7. CAMOs seeking to apply this provision should engage DASA and the MTC holder early for platform- and context-specific advice on suitable procedures.

Procedures

8. The CAMO shall establish procedures to assess and process data intended for direct consumption under DASR M.A.304(d) in accordance with this AMC and the applicable recognition certificates.

9. Where the CAMO assessment identifies that a repair or modification is not acceptable for direct consumption, that data may be passed to an appropriate organisation for approval in accordance with DASR 21 and subsequent consumption via DASR M.A.304(a) or M.A.304(b).

10. **Major repairs.** If the procedure includes direct consumption of data for major repairs, MTC holder endorsement is required in order to ensure:

    a. major repair holder obligations will be carried out in accordance with the TCAE per the intent of DASR 21.A.451 *Obligations and Australian Military Part Approval (MPA) marking;*

    b. the MTC holder can fulfil obligations for aircraft structure and propulsion system integrity per DASR 21.A.44(c).

11. Prior to directly consuming data for a modification or repair, the CAMO shall ensure that the data is:

    a. applicable to the Defence aircraft type and compatible with the Defence configuration, role and environment;

    b. consistent with the scope, conditions and caveats of the applicable recognition certificate (see DASA Recognition web page);

    c. where relevant, supported by instructions for continuing airworthiness comprising descriptive data and accomplishment instructions prepared in accordance with the applicable requirements.

12. Figure 1 below outlines the process described in this AMC.

Note due to size constraints, Figure 1 is not included in this amendment record (file located at BP42274354).

Alternate artefacts

13. In cases where a design organisation is unable to provide the recognised equivalent artefact to an ADF consumer under existing oversight arrangements, DASA may agree that the CAMO can consume an alternate artefact where it can demonstrate to DASA's satisfaction that:

    a. it is not feasible for the design organisation to attain a DASR 21 Subpart J design organisation approval, or provide the data under subcontract to such an organisation (through DASR 21.A.239(c));

    b. the data for modifications or repairs is developed, and the alternate artefact is issued, using the same personnel and processes by which the organisation provides a similar service under the oversight of a recognised aviation authority;

    c. the organisation is a suitable provider of the required data;

    d. appropriate controls are in place to ensure safety; and

    e. the MTC holder has endorsed the consumption of the alternate artefact.

Technical information and instructions, eg Service Bulletins

14. The airworthiness approvals named in the recognition certificate annexes are generally the approvals issued by the recognised authority, or by a design organisation, to approve a modification or repair. Rather than these approvals, Defence organisations will often receive technical information or instructions describing the embodiment of the corresponding modification or repair, eg a Service Bulletin.

15. In such cases, and where eligible, the technical information or instructions should be treated in accordance with this AMC and the corresponding recognition scope, conditions and caveats as if it were the underlying airworthiness instrument. For example:

    a. A service bulletin describing the embodiment of a minor modification should be treated like an approval of minor change to type design or its equivalent in the recognised system.

    b. A technical instruction describing the embodiment of a major repair should be treated like an approval of major repair design or its equivalent in the recognised system.

16. **Eligibility**. To be eligible for treatment under this subclause, technical information or instructions describing the embodiment of a modification or repair must be:

    a. issued by an organisation acceptable, through recognition, to issue a design approval; and

    b. issued in accordance with a procedure agreed by the recognised authority, ie under existing oversight arrangements.

17. **Classification**. The technical information or instructions may clearly indicate that the modification or repair is classified as ‘minor’ or ‘major’ in the recognised system. Where this is not the case, or where the relevant recognition certificate identifies the classification system does not align to DASR, the data should first be treated in accordance with the ‘Classification’ section above.

18. **Status**. Eligible technical information or instructions are not an ‘alternate’ instrument described above because they are issued with the agreement of the recognised authority.

DASR AMENDMENT RECORD
DCP 2019 - 037

DASR CLAUSE: GM M.A.304(d)

RATIONALE FOR CHANGE

Some text and the diagram from GM moved to AMC.

CURRENT REGULATION TEXT

The purpose of DASR M.A.304(d) is to allow the CAMO to consume data for repairs and 'minor' modifications through recognition. This provision enables access to data packaged in a variety of different ways originating from within civil and military airworthiness systems around the world. The complexity of the CAMO's procedures for consuming such data will be determined by the types of modifications and repairs to be consumed, their source and the associated support constructs.

Alternate instruments (see DASR AMC M.A.304(d) will only be acceptable from organisations outside Australia.

Figure 1 below outlines the provisions of DASR M.A.304(d).

Note due to size constraints, Figure 1 is not included in this amendment record

REVISED REGULATION TEXT
The purpose of DASR M.A.304(d) is to allow the CAMO to consume data for repairs and ‘minor’ modifications through recognition. This provision enables access to data packaged in a variety of different ways originating from within civil and military airworthiness systems around the world. The complexity of the CAMO’s procedures for consuming such data will be determined by the scope of DASA’s recognition of the foreign system, the types of modifications and repairs to be consumed, their source and the associated support constructs.

Australian Government
Department of Defence
Defence Aviation Safety Authority

Defence Aviation Safety Authority

DASR AMENDMENT RECORD
DCP 2024 - 013

DASR CLAUSE: SPA.50 – DEFENCE NAVIGATION APPROVALS (AUS)

RATIONALE FOR CHANGE

In the 29 Feb 24 version of DASR SPA.50, the PBN supplementary capabilities are shown in AMC SPA.50(a)b.i(k)(iii) as a sub set of the RNP AR approval. However, PBN supplementary capabilities are navigation approvals in their own right.
Therefore, AMC SPA.50(a) has been revised in this proposal, updating supplementary capabilities under AMC SPA.50(a)b.i.(l).

CURRENT REGULATION TEXT

See Below Enclosure 1 to DCP 2024 - 013 - DASR AMENDMENT RECORD (EDITORIAL) – DCP 2024-013 (BP40783798)

REVISED REGULATION TEXT

See Below Enclosure 1 to DCP 2024 - 013 - DASR AMENDMENT RECORD (EDITORIAL) – DCP 2024-013 (BP40783798)

BP40783798

DASR AMENDMENT RECORD (EDITORIAL) – DCP 2024-013

Editorial change for Jul 24 DASR release.

Current text excerpt

AMC SPA.50(a) –OpSpec variations for PBN, RVSM and NAT HLA (AUS)

Extant AMC SPA.50(a)b.i…

(k) RNP AR (RNP AR APCH and RNP AR DP Operations may include One Engine Inoperative (OEI) procedures), including:

(i) RNP AR APCH

(ii) RNP AR DP

(iii) PBN supplementary capabilities:

(a) APV / Baro-VNAV

(b) Radius to Fix (RF)

(c) Fixed Radius Transition (FRT)

(d) Time of Arrival Control (TOAC)

(e) use of suitable area navigation systems on conventional routes and procedures (both en route and terminal)

Revised text (only related to para format changes indicated in yellow highlight – nil other changes)

AMC SPA.50(a) –OpSpec variations for PBN, RVSM and NAT HLA (AUS)

Updated AMC SPA.50(a)b.i…

(k) RNP AR (RNP AR APCH and RNP AR DP Operations may include One Engine Inoperative (OEI) procedures), including:

(i) RNP AR APCH

(ii) RNP AR DP

(l) PBN supplementary capabilities:

(i) APV / Baro-VNAV

(ii) Radius to Fix (RF)

(iii) Fixed Radius Transition (FRT)

(iv) Time of Arrival Control (TOAC)

(v) use of suitable area navigation systems on conventional routes and procedures (both en route and terminal)