#### **RECORD OF CHANGE – DASR RELEASE 28 OCT 2022**

- 1. This document records all changes to the Defence Aviation Safety Regulation (DASR) introduced in the 28 Oct 22 release. An overview of noteworthy changes is available in the <a href="Summary of Change">Summary of Change</a>.
- 2. 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.
- 3. 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.
- 4. 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.
- 5. 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.
- 6. 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.

Table 2. Index of changes

Short Title (DCP Reference)	Amendment Record	Change Classification	DASR Clause				
DASR 21 – Aircraft Design, Production and Certification							
Amendments to DASR 21 Subpart M <i>Repairs</i> to introduce EMAR 21 2.0 changes (DCP 2021-017)		Major	DASR 21 Subpart M (several)				
DASR 139 – Aerodromes							
Removal of reference to an Aerodrome Database within GM DASR 139.10 General (DCP 2022-014)		Minor	GM to 139.10(3)				
DASR 145 – Requirements for Maintenance Organisations							
Removal of redundant sentence from GM 145.A.60(a) Occurrence reporting (DCP 2022-022)		Editorial	GM to 145.A.60(a)				
DASR 147 – Aircraft Maintenance Training Organisations							
Provision of guidance for the qualifications and experience required for the Training Manager, Quality Manager and Examination Manager (DCP 2021-038)		Minor	AMC1 to 147.A.105(b)				
DASR ACD – Air Cargo Delivery							
Review of DASR ACD Air Cargo Delivery (DCP 2021-018)		Major	DASR ACD (all)				
DASR Aircrew							
Standardised use of term UMTP (DCP 2022-012)		Editorial	AMC to AIRCREW.10.A(3) GM to ORO.15.A DASR Glossary				
DASR MED – Medical							
Amend incorrect terminology in DASR MED (DCP 2022-016)		Editorial	GM(a) to MED.05(g)				



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**Defence Aviation Safety Authority** 

# DASR AMENDMENT RECORD DCP 2022 - 014

DASR CLAUSE: GM 139.10

#### **RATIONALE FOR CHANGE**

Removal of GM 139.10 para 3 will remove DASA liability and maintenance of a database that uses aerodrome data not currently managed by DASA and at risk of redundancy due to external ownership. There is no value add for DASA to maintain a register of this information, as DASR 139 is focused on certified aerodromes only. This information and DASA artefacts for Certified Aerodromes will be listed on the DASA Intranet site.

#### **CURRENT REGULATION TEXT**

- 1. **Purpose.** The purpose of this regulation is to articulate the Authority's requirements for the regulatory oversight of Defence certified Aerodromes and Aerodrome Operators. The Defence Aviation Authority or delegate will determine those aerodromes requiring certification. There is no requirement under these regulations to be an Authority-approved Aerodrome Operator when operating a non-certified aerodrome.
- 2. DASR.139 articulates the requirements for the operator approval, certification, and management of Defence Certified Aerodromes. These regulations seek to align with the requirements of CASR Part 139 and ICAO Annex 14. Military specific tailoring for the Defence context is included within these DASR.139 regulations and the aerodrome design requirements contained in the Airworthiness Design Requirements Manual (ADRM).
- 3. All Defence aerodromes are recorded in the Aerodromes Database maintained by DASA. New Defence aerodromes should be entered into the database prior to first operational use.
- 4. The Military Air Operator (MAO) is ultimately accountable for safe flight operations of aircraft. The MAO is approved to operate at certified aerodromes, non-certified aerodromes and any other non-defined areas where it is safe to do so, in accordance with DASR.ORO.05.

## **REVISED REGULATION TEXT**

- 1. **Purpose.** The purpose of this regulation is to articulate the Authority's requirements for the regulatory oversight of Defence certified Aerodromes and Aerodrome Operators. The Defence Aviation Authority or delegate will determine those aerodromes requiring certification. There is no requirement under these regulations to be an Authority-approved Aerodrome Operator when operating a non-certified aerodrome.
- 2. DASR.139 articulates the requirements for the operator approval, certification, and management of Defence Certified Aerodromes. These regulations seek to align with the requirements of CASR Part 139 and ICAO Annex 14. Military specific tailoring for the Defence context is included within these DASR.139 regulations and the aerodrome design requirements contained in the Airworthiness Design Requirements Manual (ADRM).
- 3. The Military Air Operator (MAO) is ultimately accountable for safe flight operations of aircraft. The MAO is approved to operate at certified aerodromes, non-certified aerodromes and any other non-defined areas where it is safe to do so, in accordance with DASR.ORO.05.

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**Defence Aviation Safety Authority** 

## DASR AMENDMENT RECORD DCP 2022 - 022

#### DASR CLAUSE:GM 145.A.60(a)

#### **RATIONALE FOR CHANGE**

DASR 145.A.60(a) regulation text is a clear statement 'The maintenance organisation shall report to the NMAA and all further addressees as required by national regulations any condition of the aircraft or component identified by the maintenance organisation that has resulted or may result in an unsafe condition that hazards seriously the flight safety.'

The first sentence of the associated GM 145.A.60(a) 'DASR 145 organisations are required to report any condition or occurrence that may result in an unsafe condition.' has the same intent as the regulation text. However, this text adds no value and potentially introduces ambiguity between the regulation and GM text.

#### **CURRENT GM TEXT**

DASR 145 organisations are required to report any condition or occurrence that may result in an unsafe condition.

Occurrences are likely to be identified as failures, malfunctions or defect identified during the operation of the aircraft or conduct of maintenance.

Occurrences also include human factors that may result in an unsafe condition that are identified during maintenance or maintenance management.

A list of occurrences to be reported are detailed in the BR Appendix 1 - 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 145 organisations:

SECTION II: AIRCRAFT TECHNICAL

SECTION III: AIRCRAFT MAINTENANCE AND REPAIR

SECTION V: IMMEDIATE NOTIFICATION OF ACCIDENTS AND SERIOUS INCIDENTS

NOTE: Relevant occurrences may occur in other Sections in AMC GR.40 - Occurrence Reporting, eg Section I and Section IV, that require reporting by the DASR 145 organisation.

#### **REVISED GM TEXT**

Occurrences are likely to be identified as failures, malfunctions or defect identified during the operation of the aircraft or conduct of maintenance.

Occurrences also include human factors that may result in an unsafe condition that are identified during maintenance or maintenance management.

A list of occurrences to be reported are detailed in the BR Appendix 1 - 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 145 organisations:

SECTION II: AIRCRAFT TECHNICAL

SECTION III: AIRCRAFT MAINTENANCE AND REPAIR

SECTION V: IMMEDIATE NOTIFICATION OF ACCIDENTS AND SERIOUS INCIDENTS

NOTE: Relevant occurrences may occur in other Sections in AMC GR.40 - Occurrence Reporting, eg Section I and Section IV, that require reporting by the DASR 145 organisation.



**Defence Aviation Safety Authority** 

# DASR AMENDMENT RECORD DCP 2021-038

**DASR CLAUSE: 147.A.105 (b)** 

#### **RATIONALE FOR CHANGE**

New Australian GM to be added to DASR 147.A.105(b) to provide DASR 147 MTO with guidance in regards to what qualifications and experience are required for the Training Manager, Quality Manager and Examination Manager for a DASR 147 MTO.

#### **CURRENT REGULATION TEXT**

N/A

#### **REVISED REGULATION TEXT**

#### GM 147.A.105(b) - Personnel requirements (AUS)

#### 1. Training Manager (TM)

#### a. Qualifications:

- (i) Recommended:
  - Certificate IV in Training and Assessment or equivalent qualification in Training or other comparable qualification acceptable to DASA
- (ii) Desirable:
  - Tertiary qualifications in management
  - Graduate Diploma in Adult and Vocational Education and Training
  - Graduate Diploma of Adult Language, Literacy and Numeracy
  - Bachelor or Masters degree in education with an adult education focus
  - Certificate IV or Diploma of Aeroskills
  - DASA/CASA B or C category licence

#### b. Experience:

- At least three years of Aviation experience including:
  - Two years experience as staff of DASA or an organisation holding an Organisational Approval, under DASA, CASA or other comparable experience acceptable to DASA, and
  - One year experience in aviation training.

## 2. Quality Manager (QM)

#### a. Qualifications:

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#### (i) Recommended:

• Diploma level, or equivalent qualification in Quality Management or other comparable qualification acceptable to DASA.

#### (ii) Desirable:

• Diploma level, or equivalent, qualification in Quality Auditing issued by an Australian registered training organisation (RTO) or other comparable qualification acceptable to DASA

#### b. Experience:

- At least five years of Aviation experience including:
  - Two years experience as staff of DASA or an organisation holding an Organisational Approval, under DASR, CASA or other comparable experience acceptable to DASA, and
  - Three years experience in aviation quality management.

## 3. Examination Manager (EM)

#### a. Qualifications:

- (i) Recommended:
  - Certificate IV in Training and Assessment or equivalent qualification in Training or other comparable qualification acceptable to DASA
- (ii) Desirable:
  - Tertiary qualifications in management
  - Graduate Diploma in Adult and Vocational Education and Training
  - Graduate Diploma of Adult Language, Literacy and Numeracy
  - Bachelor or Masters degree in education with an adult education focus
  - Certificate IV or Diploma of Aeroskills
  - DASA/CASA B or C category licence

## b. Experience:

- At least three years of Aviation experience including:
  - Two years experience as staff of DASA or an organisation holding an Organisational Approval, under DASR, CASA or other comparable experience acceptable to DASA, and
- One year experience in aviation training.



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## DCP 2022-017

## CHANGES TO DASR 21 SUBPART M - REPAIRS

#### **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. text highlighted in green is Australian unique text; and
- c. new or amended text is highlighted in grey.

#### DASR 21 SUBPART M — REPAIRS

#### 21.A.431A - Scope

- (a) This Subpart establishes the procedure for the approval of a repair design of a product, part or appliance, and establishes the rights and obligations of the applicants for, and holders of, those approvals.
- (b) Reserved.
- (c) (b) A 'repair' means elimination of damage and/or restoration to an airworthy condition following initial release to service by the manufacturer of any product, part or appliance.
- (d) (e)The Eelimination of damage by replacement of parts or appliances without the necessity for design activity shall be considered as a maintenance task and shall therefore require no approval under this DASR.
- (e) (d)A repair to an AUSMTSO article other than an Auxiliary Power Unit (APU) shall be treated as a change to the AUSMTSO design and shall be processed in accordance with DASR 21.A.611.
- (f) In this Subpart, the references to type-certificates include type-certificates and restricted type-certificates.

#### GM 21.A.431A - Scope

Manuals and other instructions for continued airworthiness (such as the Manufacturers Structural Repair Manual, Maintenance Manuals and Engine Manuals provided by the holder of the type-certificate, supplemental type-certificate, or APU AUSMTSO authorisation as applicable) for operators, contain useful information for the development and approval of repairs.

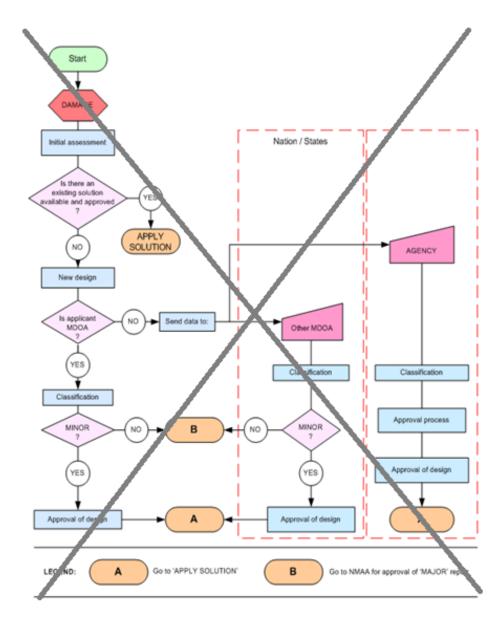
When these data are explicitly identified as approved, they may be used by operators without further approval to cope with anticipated in-service problems arising from normal usage provided that they are used strictly for the purpose for which they have been developed.

Approved data is data which is approved either by the Authority, or by an appropriately approved design organisation.

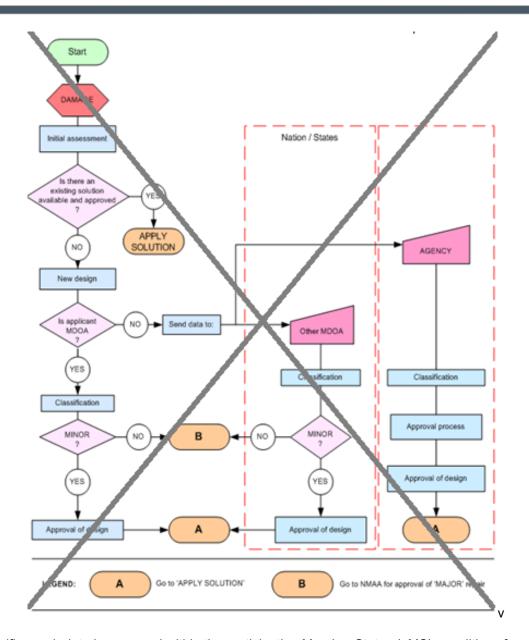
NB: Flow Chart 1 addresses the procedures that should be followed for products where the State of design is a participating Member State.

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Flow Chart 2 addresses procedures that should be followed for products where the State of design is not a participating Member State.



When specific repair data is approved within the participating Member States (pMS), conditions for acceptance may be defined in the respective recognition agreement in accordance with EMAD-R.

When specific repair data is approved outside of the Community, conditions for acceptance may be defined in the bilateral arrangements between the Community and the competent authority of a third country. In the absence of such arrangement, the repair data shall follow the approval route as if it was designed and approved within the Community.

Repairs approved under the framework of a recognised N/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.

## GM 21.A.431A(e)(d) Repairs to Australian military technical standard order (AUSMTSO) articles other than auxiliary power units (APUs)

A repair to an AUSMTSO article other than an APU can be either be seen:

1. Under 21.A.611 in the context of an AUSMTSO authorisation, i.e., when an article as such is specifically approved under 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, Subpart O, and 21.A.611 in particular, should be followed; or
- 2. When a DASR 145 / DASR M organisation is designing a new repair (based on data not published in the TC 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 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'.

#### 21.A.431B - Standard repairs

(Reserved)

#### 21.A.432A - Eligibility

- (a) Any organisation that has demonstrated, or is in the process of demonstrating, its capability according to DASR 21.A.432B shall be eligible as an applicant for a major repair design approval under the conditions laid down in this Subpart.
- (b) Any organisation shall be eligible to apply for approval of a minor repair design.

#### 21.A.432B - Demonstration of capability

- (a) An applicant for a major repair design approval shall demonstrate its capability by holding a design organisation approval, issued by the Authority in accordance with DASR 21 Subpart J.
- (b) By way of derogation from paragraph (a), as an alternative procedure to demonstrate its capability, an applicant may seek Authority agreement for the use of procedures setting out the specific design practices, resources and sequence of activities necessary to comply with this Subpart.
- (c) By way of derogation from paragraph (a) and (b), any government organisation applying for a major repair design approval may demonstrate its capability by having an agreement in place, accepted by the Authority, in accordance with DASR 21.A.2 and DASR 21.A.14(c) with a design organisation which has access to the type design data. The agreement shall include detailed statements how the actions and obligations are delegated to enable the government organisation, in cooperation with the contracted organisation, to comply with the requirements of DASR 21 Subpart J, including demonstration of compliance with DASR 21.A.451.

#### GM 21.A.432B - Alternative procedures

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

#### AMC 21.A.432B(cd) - 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 DASR 21.A.14(a) compliant design organisation to ensure the undertaking of specific actions and obligations. The Authority acknowledges some extant platform procurement/ support arrangements will preclude availability of a DASR 21.A.14(a) compliant organisation to provide execution of holder functions. In these cases any alternative procedures for establishing a Design Assurance System or Safety Management System should be acceptable to the Authority in fulfilling the obligations required under DASR 21.A.451.

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

- (a) An application for a repair design approval shall be made in a form and manner established by the Authority.
- (b) An application for a major repair design approval shall include, or be supplemented after the initial application by, a certification programme containing:
  - 1. a description of the damage and repair design identifying the configuration of the type design upon which the repair is made;
  - an identification of all areas of the type design and the approved manuals that are changed or affected by the repair design;
  - an identification of any reinvestigations necessary to demonstrate compliance of the repair
    design and areas affected by the repair design with the type-certification basis incorporated by
    reference in, as applicable, either the type-certificate, the supplemental type-certificate or the
    APU AUSMTSO authorisation;
  - 4. any proposed amendments to the type-certification basis incorporated by reference in, as applicable, either the type-certificate, the supplemental type-certificate or the APU AUSMTSO authorisation:
  - a proposal for a breakdown of the certification programme into meaningful groups of compliance demonstration activities and data, including the means and process proposed to be followed to demonstrate compliance with DASR 21.A.433(a)(1) and references to related compliance documents;
  - 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 and the potential impact of that non-compliance on product safety; and
  - 7. the specification whether the certification data is prepared completely by the applicant or on the basis of an arrangement with the owner of the type-certification data.

#### AMC 21.A.432C(a) - Form and manner

Notification of an intended 'MAJOR'major Rrepair requiring Authority approval can be made using DASR Form 31 – Notification of MAJORMajor Change / MAJORMajor Repair. Submission of DASR Form 31 initiates dialogue that enables the Authority to guide the applicant through the 'MAJOR'major Rrepair 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 NAA / 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.432C(b)(1) - Description

The description of the repair should consist of:

- the pre- and post-repair configuration;
- a drawing or outline of the repair;
- a list of the detailed features;
- a description of the type and extent of the inspection; and
- an outline of the damage.



#### AMC 21.A.432C(b)(3) - Identification of reinvestigations

The identification of reinvestigations does not refer to the demonstration of compliance itself, but to the list of the affected airworthiness requirements, 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;
- 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 involvement of the Authority in the verification of the compliance demonstration activities and data.

#### 21.A.433 - Requirements for a repair design

- (a) The applicant for approval of a A repair design shall only be approved:
  - 1. when it has been Ddemonstrated, following the certification programme referred to in DASR 21.A.432C(b), that the repair design complies ance with the type-certification basis and environmental protection requirements (where applicable) incorporated by reference in, as applicable, either the type-certificate, the er-supplemental type-certificate or the APU AUSMTSO authorisation, as well as with any amendments established and notified by the Authority; applicable, or those in effect on the date of application (for repair design approval), plus any amendments to the type-certification basis the Authority finds necessary to establish a level of safety equal to that established by the type-certification basis incorporated by reference in the type-certificate or supplemental type-certificate or APU AUSMTSO authorisation;
  - 2. Submit all necessary substantiation data, when requested by the Authority; when compliance with the type-certification basis that applies in accordance with (a)(1) has been declared and the justifications of compliance have been recorded in the compliance documents;
  - 3. Declare compliance with the type-certification basis and environmental protection requirements (where applicable) of paragraph a.1 when no feature or characteristic has been identified that may make the product unsafe for the uses for which certification is requested; and
  - 4. where the applicant has specified that it provided certification data on the basis of an arrangement with the owner of the type-certification data in accordance with DASR 21.A.432C(b)(7):
    - (i) when the holder has indicated that it has no technical objection to the information submitted under (a)(2); and
    - (ii) when the holder has agreed to collaborate with the repair design approval holder to ensure discharge of all obligations for continued airworthiness of the changed product through compliance with DASR 21.A.451.
- (b) Where the applicant is not the type-certificate or supplemental type-certificate or APU AUSMTSO authorisation holder, as applicable, the applicant may comply with the requirements of paragraph (a) through the use of its own resources or through an arrangement with the type-certificate or supplemental type-certificate or APU AUSMTSO authorisation holder as applicable. The applicant shall submit to the Authority the declaration referred to in (a)(2) and, on request by the Authority, all necessary substantiation data.

GM 21.A.433(a)(1) - Notification by the Authority (AUS)

The Authority may designate any amendments to the type-certification basis incorporated by reference in, as applicable, either the type-certificate, the supplemental type-certificate or the APU AUSMTSO authorisation, which the Authority considers necessary for maintaining a level of safety equal to that previously established and notify them to the applicant for a repair design.

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

- Relevant substantiation data associated with a new major repair design and record keeping should include:
  - a. the identification of the damage identification and the reporting source;
  - b. the major repair design approval sheet identifying the applicable specifications and references of justifications;
  - c. the repair drawing and/or instructions and scheme identifier;
  - d. 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 holder, if its advice on the design has been sought;
  - e. the structural justification (static strength, fatigue, damage tolerance, flutter, etc.) or references to this data:
  - f. the effect on the aircraft, engines and/or systems (performance, flight handling, etc., as appropriate);
  - g. the effect on the maintenance programme;
  - h. the effect on Aairworthiness Llimitations, the Fflight Mmanual and the Operating manual;
  - i. any weight and moment changes; and
  - j. special test requirements.
- 2. Relevant minor repair documentation includes paragraphs 1(a) and (c). Other points of paragraph 1 may be included where necessary. If the repair is outside the approved data, a justification for the classification is required.
- 3. 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. Special consideration should also be given to Life-Llimited parts and Ccritical Pparts, notably with the involvement of the military type-certificate MTC or MSTC holder, when deemed necessary under 21.A.433(b)(a)(4).
- 5. Repairs to engine or APU critical parts would normally only be accepted with the involvement of the MTC holder.

#### AMC1 21.A.433(a) - Repair Design (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 - Application for Approval of MAJOR Repair Design.

Compliance demonstration evidence may use prior certification by an NAA / NMAA, whose certification is recognised by the Authority, in accordance with AMC to DASR 21.A.20 — Demonstration of compliance with the type-certification basis and environmental protection requirements (AUS).

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

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

#### GM 21.A.435(a) - Classification of repairs

1. Clarification of the terms Major/Minor

In line with the definitions given in 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.)

Repairs that require a re-assessment and re-evaluation of the original certification substantiation data to ensure that the aircraft still complies with all the relevant requirements, are to be considered as major repairs.

Repairs whose effects are considered minor and require minimal or no assessment of the original certification substantiation data to ensure that the aircraft still complies with all the relevant requirements, are to be considered 'minor'.

It is understood that not all the certification substantiation data will be available to those persons/organisations classifying repairs. A qualitative judgement of the effects of the repair will therefore be acceptable for the initial classification. The subsequent review of the design of the repair may lead to it being re-classified, owing to early judgements being no longer valid.

#### 2. Airworthiness concerns for 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' 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 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' should not be limited to those listed above.

#### 3. Examples of '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 'major'. Also, inspections and changes to inspection frequencies not required as part of the approval to ensure continued airworthiness do not cause classification as '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

DASA approval 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 organisations that do not hold an MDOA. 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 NAA / 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 implies that the MDOA holder issues the approval without DASA's involvement. DASA 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 point 21.A.435, and the service period should be defined when the temporary repair is approved.

#### (4) Fatique and damage tolerance

An approved design issued before the fatigue and damage-tolerance evaluation has been completed, should specify the limited service period.

#### 21.A.437 - Issue of a repair design approval

When it has been declared and has been shown that the repair design meets the applicable type-certification basis and environmental protection requirements (where applicable) of DASR 21.A.433(a)1, it shall be approved:

- (a) the Authority; or
- (b) By an appropriately approved organisation that is also the type-certificate or the supplemental typecertificate or APU AUSMTSO authorisation holder, under a procedure agreed with the Authority; or
- (c) For minor repairs only, by an appropriately approved design organisation under a procedure agreed with the Authority.

#### GM 21.A.437 - Issue of repair design approval

#### Approval by MDOA holder

Approval of repairs through the use of procedures agreed with the Authority, means an approval issued by the MDOA holder without requiring Authority involvement. The Authority will monitor 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 under their MDOA privilege.

#### Previously approved data for other applications

When it is intended to use previously approved data for other applications, it is expected that applicability and effectiveness would be checked with an appropriately approved design organisation. 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 previous approved repair design, (structural justifications still valid, possible airworthiness limitations unchanged), the solution can be considered approved and can be used again.

#### 3. Temporary repairs

These are repairs that are life limited, to be removed and replaced by a permanent repair after a limited service period. These repairs should be classified under DASR 21.A.435 and the service period defined at the approval of the repair.

#### 4. Fatigue and damage tolerance

When the repaired product is released into service before the fatigue and damage tolerance evaluation has been completed, the release should be for a limited service period, defined at the issue of the repair.

#### GM 21.A.437(a) - Issue of repair design approval (AUS)

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.

#### AMC 21.A.437(b) - Issue of repair design approval

In order for the approved design organisation that is also the type-certificate, supplemental type-certificate or APU AUSMTSO authorisation holder to approve 'MAJOR' repair design the following should be considered applicable:

- a. The type-certificate, supplemental type-certificate or APU AUSMTSO authorisation holder being approved under DASR 21 Section A Subpart J;
- b. Procedures having been established that comply with DASR 21 Section A Subpart M as agreed with the Authority;
- c. The type-certification basis for the product, part or appliance to be repaired having been identified together with all other relevant requirements;
- d. All records and substantiation data including documents demonstrating compliance with all relevant airworthiness requirements being held for reviews by the Authority;
- e. A summary list of all 'MAJOR' repair approvals being provided to the Authority on a regular basis as agreed with the Authority:
- f. Whether the repair design is affected by the presence of any supplemental type-certificate.

AMC1 to 21.A.437(b) - Issue of a design approval - by an organisation that is the type-certificate holder (AUS)

An MDOA holder executing the obligations of a type-certificate holder on their behalf, as described by DASR 21.A.44 - Obligations of the holder, shall also be entitled to seek an Authority privilege to include the approval of designs for 'MAJOR' repairs.

#### 21.A.439 - Production of repair parts

Parts and appliances to be used for the repair shall be manufactured in accordance with production data based upon all the necessary design data as provided by the repair design approval holder:

- (a) under DASR 21 Subpart F; or
- (b) by an organisation appropriately approved in accordance with DASR 21 Subpart G; or
- (c) by an appropriately approved maintenance organisation.

#### GM 21.A.439 - Production of repair parts

A maintenance body, (organisation or person), may manufacture parts for repair purposes when approved under DASR 21 Section A Subpart G. In addition, a maintenance organisation may manufacture parts for its own repair purposes when expressly authorised by the Authority.

#### 21.A.441 - Repair embodiment

- (a) The embodiment of a repair shall be made by an appropriately approved maintenance in accordance with DASR 145, or by a production organisation appropriately approved in accordance with DASR 21 Subpart G, under in accordance with the privilege provided for in DASR 21.A.163(d) privilege.
- (b) The design organisation shall transmit to the organisation performing the repair all the necessary installation instructions.

#### GM 21.A.441(a) - Repair Embodiment

Repairs should be accomplished by an organisation or person in accordance with the relevant airworthiness requirements.

The holder of a production organisation approval under DASR 21 Section A Subpart G may accomplish repairs to new aircraft, within its terms of approval, under the privilege of DASR 21.A.163(d).

#### 21.A.443 - Limitations

A repair design may be approved subject to limitations, in which case the repair design approval shall include all necessary instructions and limitations. These instructions and limitations shall be transmitted by the repair design approval holder to the operator in accordance with a procedure agreed with the Authority.

#### GM 21.A.443 - Limitations

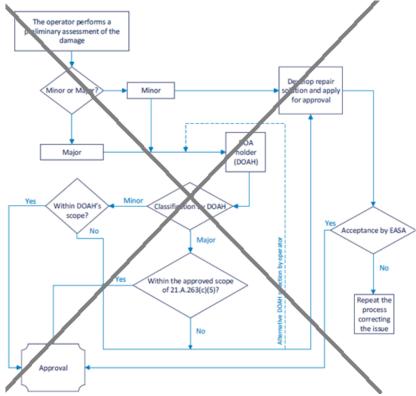
Instructions and limitations associated with repairs should be specified and controlled by those procedures required by the applicable procedures.

#### 21.A.445 - Unrepaired damage

- (a) When a damaged product, part or appliance, is left unrepaired, and is not covered by previously approved data, the evaluation of the damage for its airworthiness consequences may only be made:
  - 1. by the Authority; or
  - 2. by an appropriately approved design organisation under a procedure agreed with the Authority.
  - 3. Any necessary limitations shall be processed in accordance with the procedures of DASR 21.A.443.
- (b) Where the organisation evaluating the damage under paragraph (a) is neither the Authority nor the type-certificate or supplemental type-certificate or APU MTSO authorisation holder, this organisation shall justify that the information on which the evaluation is based is adequate either from its organisation's own resources or through an arrangement with the type-certificate or, supplemental type-certificate or APU MTSO authorisation holder, or manufacturer, as applicable.

#### GM 21.A.445(b) - Unrepaired damage

This is not intended to supersede the normal maintenance practices defined by the type-certificate holder, (e.g., blending out corrosion and re-protection, stop drilling cracks, etc.), but addresses specific cases not covered in the manufacturer's documentation.



## AMC 21.A.445 - Unrepaired damage (AUS)

A repair design approval using the provisions of DASR 21.A.445 can be used to establish the aircraft is in an airworthy condition provided compliance with the applicable type-certification basis can be demonstrated. Showings of compliance can be subject to limitations such as additional inspections or a limit on the duration of the approval.

For damage to aircraft structure left unrepaired and not covered by previously approved data, the evaluation of the damage should ensure:

- (a) The full extent of the damage is known (especially important for corrosion and composite materials).
- (b) Compliance with the strength requirements of the TCB.
- (c) The limitations account for anticipated damage growth and potential for inflation for secondary damage or failures.

#### 21.A.447 - Record-keeping

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

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

#### AMC1 to DASR 21.A.447 - Record keeping (AUS)

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

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

1. Relevant substantiation data associated with a new major repair design and record keeping should include:

- a. the identification of the damage identification and the reporting source;
- b. the major repair design approval sheet identifying the applicable specifications and references of justifications;
- c. the repair drawing and/or instructions and scheme identifier;
- d. 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 holder, if its advice on the design has been sought;
- e. the structural justification (static strength, fatigue, damage tolerance, flutter, etc.) or references to this data;
- f. the effect on the aircraft, engines and/or systems (performance, flight handling, etc., as appropriate);
- g. the effect on the maintenance programme;
- h. the effect on Aairworthiness Llimitations, the Fflight Mmanual and the Operating manual;
- i. any weight and moment changes; and
- j. special test requirements.
- 2. Relevant minor repair documentation includes paragraphs 1(a) and (c). Other points of paragraph 1 may be included where necessary. If the repair is outside the approved data, a justification for the classification is required.
- 3. 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. Special consideration should also be given to Life-Limited parts and Coritical Pparts, notably with the involvement of the military type-certificate MTC or MSTC holder, when deemed necessary under 21.A.433(b)(a)(4).
- 5. Repairs to engine or APU critical parts would normally only be accepted with the involvement of the MTC holder.

#### 21.A.449 - Instructions for continuing airworthiness

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

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

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

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

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

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

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

The contents of ICA can be divided into two categories:

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

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

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

## **DASR 21 Cross Reference Amendments**

Clause	Title	Was (Content)	Is (Content)	Reason for changes
GM 21.A.247	GM 21.A.247 - Significant changes in the design assurance system	3. Procedures g) the approval of the design of major repairs [DASR 21.A.437 or DASR 21.A.263(c)(5)].	3. Procedures g) the approval of the design of major repairs [DASR 21.A.435(b) or DASR 21.A.263(c)(5)].	Reference to 21.A.437 removed as this clause no longer exists, it has been replaced with 21.A.435(b) content.

OFFICIAL BP27680048

## DCP 2021-018 CHANGES TO DASR AIR CARGO DELIVERY

## **Contents**

Section 1: New DASR Glossary definitions

Section 2: New DASR ACD Implementing Regulation (IR) only

Section 3: New DASR ACD IR, Acceptable Means of Compliance (AMC) and Guidance

Material (GM)



## SECTION 1: NEW DASR GLOSSARY DEFINITIONS

1. DASA will add the following new or modified definitions to the DASR Glossary:

ACD Equipment: Equipment employed in ACD via Airdrop, Airland and External Lift on transport or rotary wing Aircraft; including ADE, pallets, restraint devices, chains, straps, nets and loading devices.

Aerial Delivery Equipment (ADE): Equipment employed on transport or rotary wing Aircraft in the aerial delivery of materiel; including slings, platforms, containers, parachutes, rigging materials, cloths, cords, tapes, threads and webbing (Note: Aerial delivery equipment does not include equipment employed in the aerial delivery of personnel).

Airdrop: Delivery of personnel or cargo from Aircraft in Flight.

Airland: The delivery of personnel, materiel or forces from an Aircraft after it has landed.

Air Cargo Delivery: A process that involves the loading (including the preparation, composition, configuration, placement and restraint) of air cargo, whatever it may be (including Passengers, freight, paratroopers, animals and EO materials) and the subsequent unloading of that air cargo—either on the ground, surface or while in the air. ACD includes Airland, Airdrop and External Lift.

Air Cargo Delivery Service Provider (ACDSP): An organisation approved by DASA to provide an Air Cargo Delivery (ACD) service to a defined scope.

Air Cargo Delivery Service Provider Certificate (ACDSPC): A certificate issued by DG DASA to authorise an Air Cargo Delivery Service Provider (ACDSP) to provide Air Cargo Delivery (ACD) Services as defined in the accompanying Service Provision Conditions (SPC) and in accordance with DASR ACD.

External Lift: The external carriage of air cargo by rotary wing aircraft.

General (Standard) Cargo: Cargo without special, hazardous or dangerous properties and therefore does

not require extra precautions or special handling for air transport

Key Staff: Appointments within a DASA approved organisation that contribute to the safe operation of an aviation system.

Non-Standard Cargo: Non-Standard Cargo is cargo that requires special handling, additional precautions or specific procedures developed for either its preparation, composition, configuration, loading, placement, restraint or unloading. Non-standard cargo includes Dangerous Goods, security-protected consignments, service weapons, safe hand, human remains, unaccompanied personal effects, live animals, mail, perishables, and unserviceable or crashed Aircraft. Non-Standard Cargo also includes the following, where special handling, additional precautions or specific procedures are required:

- cargo that is not contained in a unit load device or pallet certified for the aircraft cargo loading a. system
- cargo requiring attachment directly to the aircraft floor. b.



**Service Provision Conditions (SPC)**: An integral component of the Air Navigation Service Provider Certificate (ANSPC) or Air Cargo Delivery Service Provider Certificate (ACDSPC) that details:

- a. key positions
- b. the types of service the ANSP Air Navigation Service Provider (ANSP) or Air Cargo Delivery Service Provider (ACDSP) is certified to provide
- c. operating provisions.

The complexity of the service(s) may be further detailed in separate annexes. For example, ATM services may have a separate annex for each Defence site where services are provided.

2. DASA will add the following new acronyms to the DASR Acronym List.

**ADE:** Aerial Delivery Equipment

## SECTION 2: NEW DASR ACD IR ONLY

The following replaces the extant DASR ACD IR in toto.

#### ACD.10 - Organisational approval (AUS)

#### ▶ GM1 ▶ GM2 ▶ GM2 ▶ GM3

(a) An ACD Service Provider (ACDSP) must operate only to the extent approved in the ACDSP Certificate (ACDSPC) issued by DASA. ▶ GM

#### ACD.20 - ACDSP Certificate (AUS)

#### ▶ GM

- (a) An ACDSP applicant organisation must utilise a Compliance Statement (CS) to apply to DASA for:
   ▶ GM1 ▶ GM2 ▶ AMC1 ▶ AMC2
  - 1. issue of an ACDSPC, or attached Service Provision Conditions (SPC) ▶ GM
  - 2. reissue of, or variation to, an ACDSPC, or attached SPC. > GM
- (b) As an exception from DASR ACD.10(a) and DASR ACD.20(a), a MAO that conducts ACD does not require a separate ACDSPC or SPC. However, the MAO Operational Specification (OPSPEC) and CS must reflect the scope of ACD services provided IAW DASR ACD. ▶ GM ▶ AMC

## ACD.30 - Organisational structure (AUS)

- (a) An ACDSP must define its organisational structure to include: ▶ GM1 ▶ GM2 ▶ AMC
  - 1. the authority, duties and responsibilities of all personnel performing ACDSP functions, including the management personnel responsible for safety and quality management functions
  - 2. the relationship and reporting lines between these personnel and other parts of the organisation
  - 3. formal relationships with all other contributors to the service provision that may directly influence the safety of their services.

#### ACD.40 - Safety Management System (SMS) (AUS)

(a) An ACDSP must utilise an SMS in accordance with DASR SMS. ▶ GM

## ACD.50 - Quality Management System (QMS) (AUS)

(a) An ACDSP must utilise a QMS to achieve consistency, continuity and compliance of safe service provision through quality planning, assurance, control and improvement. ▶ GM1 ▶ GM2 ▶ AMC1 ▶ AMC2

## ACD.60 – ACD operations manuals (AUS)

#### ▶ GM

(a) MAOs conducting ACD and ACDSPs must utilise authorised ACD operations manuals. ACD operations manuals must contain the instructions, procedures and information required for safe



payload preparation, composition, configuration, loading, placement, restraint and unloading of the following ACD load types on Defence Aircraft: ▶ GM1 ▶ GM2 ▶ GM3 ▶ AMC1 ▶ AMC2

- 1. Passengers ▶ GM
- 2. General (standard) Cargo
- 3. Non-Standard Cargo. ▶ GM ▶ AMC1 ▶ AMC2
- (b) ACD operations manuals must detail procedures to ensure Suitability For Flight (as relevant to the ACD load) for Defence Aircraft and must be easily accessible by relevant personnel. ▶ AMC
- (c) An ACDSP must utilise a personnel fatigue management strategy. ▶ AMC
- (d) MAOs or Sponsors must utilise on board emergency procedures when carrying the ACD load types listed at ACD 60(a). ▶ GM

## ACD.70 - ACD Equipment, systems and installations (AUS)

MAOs conducting ACD and ACDSPs must ensure that ACD Equipment, systems and installations meet, and are maintained to, authorised standards; and support the safe provision of services.
 ▶ GM ▶ AMC

#### ACD.80 - ACD Competency management (AUS)

(a) The ACDSP must ensure personnel are competent and authorised to undertake their ACD duties. ▶ GM ▶ AMC

## **SECTION 3: NEW DASR ACD IR, AMC and GM**

The following replaces the extant DASR ACD IR, AMC and GM in toto. AMC in purple text. GM in brown text.

#### **ACD.10 – Organisational approval (AUS)**

→ GM1 → GM2 → GM3

#### **GM1 ACD.10 – ACD organisational approval (AUS)**

**Purpose**. **(Context)** Defence Aircraft are required to carry and deliver Passengers; and General Cargo and Non-Standard Cargo either internally or externally. **(Hazard)** Suitability For Flight can be compromised by ineffective management of the preparation, composition, configuration, loading, placement and restraint of Passengers, General Cargo and Non-Standard Cargo. **(Defence)** This regulation requires MAOs conducting ACD and ACD Service Providers (ACDSPs) to ensure ACD operations are conducted as an approved organisation and managed to ensure Suitability For Flight.

### GM2 ACD.10 - Aircrew applicability (AUS)

Anywhere the phrase 'MAOs conducting ACD' or 'MAO' is used in this regulation indicates applicability to Aircrew. Many of the regulatory controls in DASR ACD aimed at non Aircrew personnel for competency and fatigue management are achieved for Aircrew through DASR Aircrew, DASR ARO, DASR AVFM and DASR ORO.

#### **GM3 ACD.10 – Contractor/tasked organisations (AUS)**

An ACDSP can be a contractor/tasked organisation. In this case, the requirements of *DASPMAN Vol 1* Chap 3, paragraphs 12-14 are germane. A contractor/tasked organisation ACDSP may have a limited scope, for example a contractor/tasked organisation providing terminal services.

(a) An ACD Service Provider (ACDSP) must operate only to the extent approved in the ACDSP Certificate (ACDSPC) issued by DASA. ▼ GM

GM ACD.10(a) – ACDSP arrangements when force assigned (AUS)

In cases where an ALT or MALT is force assigned, ACD operations may occur under the parent unit's ACDSPC or under an ACDSPC issued to the relevant JTF HQ. The determination as to the appropriate ACDSPC holder will be dependent on the command and control arrangements, length of deployments, deployment preparation period and efficiency of service provision oversight. The determination as to the appropriate ACDSPC holder is a command decision

## ACD.20 - ACDSP Certificate (AUS)

→ GM

#### GM ACD.20 - ACD ACDSP Certificate (AUS)

**Purpose.** (Context) Defence Aircraft are required to carry and deliver Passengers; and General Cargo and Non-Standard Cargo either internally or externally. (Hazard) Suitability For Flight can be compromised by ineffective management of the preparation, composition, configuration, loading, placement and restraint of Passengers, General Cargo and Non-Standard Cargo. (Defence) This regulation requires MAOs conducting ACD and ACD

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Service Providers (ACDSPs) to ensure ACD operations are conducted as an approved organisation and managed to ensure Suitability For Flight

(a) An ACDSP applicant organisation must utilise a Compliance Statement (CS) to apply to DASA for:

▼ GM1 ▼ GM2 ▼ AMC1 ▼ AMC2

AMC1 ACD.20(a) – Preparation of a Compliance Statement (CS) (AUS)

- a. **ACDSP CS**. The ACDSP CS should include the following information for the ACDSP certificate:
  - i. **ACDSP name**. The FEG or equivalent.
  - ii. **ACDSP location**. Location of the headquarters and all permanent locations where ACD services will be provided.
  - iii. A statement that ACDSP operations will be in accordance with the attached Service Provision Conditions (SPC).
- b. The ACDSP CS should include the following information for the ACDSP SPC:
  - i. the Accountable Manager (AM), listed by command or management position, eg 'CDR CSG'
  - ii. Hazard Tracking Authority (HTA) within the ACDSP
  - iii. safety manager within the ACDSP (per DASR SMS)
  - iv. ACD services provided.
- c. Operational limitations. DASA prescribes operational limitations on the SPC to assure safe operations for a particular ACD service within the ability or maturity of the ACDSP. An operational limitation typically will include reference to a plan and timeline to remove the limitation upon DASA review. An ACDSP may apply to DASA to remove or impose an operational limitation on the SPC via the submission of a CS.
- d. **Service provision**. The CS should demonstrate how the ACDSP will meet DASR ACD and safely conduct ACD operations.
- e. **Accountable Manager attestation and signature**. The AM should make the following attestations and sign the CS:

I am accountable for [insert organisation] compliance with DASR. This Compliance Statement for ACDSP certification and Service Provision Conditions is complete and correct.

I am satisfied that appropriate arrangements are in place to meet DASR and support the scope of operations contained in the Service Provision Conditions.

- f. **Application for variation of an ACDSPC SPC**. The ACDSP AM should amend the extant CS and submit this to DASA, highlighting those SPC items being varied. DASA, when satisfied, will issue an updated SPC to the ACDSP. Application for variation to an SPC is required, at a minimum, when there is:
  - i. an addition, removal of, or change to an ACD service
  - ii. a request to impose or remove operational limitations.



## AMC2 ACD.20(a) ACD services contracted/tasked to an external organisation supporting an ACDSP (AUS)

- a. In accordance with the CS, the ACDSP may arrange for the provision of any ACD service listed on its SPC, to be carried out by an external organisation that is working under the quality system of the ACDSP. This refers to work being carried out by an external organisation not itself appropriately approved to carry out tasked/contracted services under DASR ACD.10 and is limited to the work scope permitted under DASR ACD.60 procedures. The ACDSP that contracts/tasks such work retains responsibility for all these tasked/contracted services irrespective of who is undertaking them. The ACDSP must list all such external organisations in the CS.
- b. The ACDSP should document management controls associated with contracted/tasked services in the associated written contract/tasking and be in accordance with the ACDSP's policy and procedures defined in their CS. When such tasks are contracted/tasked the ACDSP's management system is considered to be extended to the contracted/tasked organisation.
- c. Contracts/tasking should normally be limited to one organisation per ACDSPC. Where arrangements are made with more than one organisation the ACDSP should demonstrate that adequate co-ordination controls are in place and that the individual responsibilities are clearly defined in related contracts/tasking.
- d. Contracts/taskings should not authorise the contracted/tasked organisation to further contract/task to other organisations elements of the ACD tasks.
- e. The ACDSP should ensure that any findings arising from DASA monitoring of the contracted/tasked services will be closed to the satisfaction DASA. This provision should be included in the contract/tasking.
- f. The contracted/tasked organisation should agree to notify the ACDSP of any changes affecting the contract/tasking as soon as practicable. The ACDSP should then inform DASA. Failure to do so may invalidate DASA acceptance of the ACD elements of the contract.

#### GM1 ACD.20(a) - Provision of evidence for CS

**Provision of evidence.** Organisations should make use of existing data and documents to satisfy DASR ACD.20(a), rather than creating unique documents with no enduring value once the certificate is issued.

## GM2 ACD.20(a) - ACD services

The scope of ACD services may include services associated with the loading (including the preparation, composition, configuration, placement and restraint) of air cargo, whatever it may be (including Passengers, freight, paratroopers, animals and EO materials) and the subsequent unloading of that air cargo. ACD services may also include (where an ACDSPC is approved to do so) the design, development and approval of procedures for loading and unloading cargo. Figure GM2 ACD.20(a)-1, below, depicts the Defence ACD environment, in which ACD services may be provided—showing that ACD services may be in support of Passengers or Internal or External loads of General (Standard) Cargo or Non–Standard Cargo via Airland, Airdrop, or External Lift.

Air Cargo Delivery Includes DG Airland and Airdrop only Internal Loads Airdrop Loads External Loads Airland Loads May include ADE May include ADE May include ADE General Non Passengers<sup>^</sup> (standard) standard Cargo Cargo\*

Figure GM2 ACD.20(a)-1 - Defence ACD environment

1. issue of an ACDSPC or attached Service Provision Conditions (SPC) ▼ GM

#### GM ACD.20(a)1 – ACDSPC content (AUS)

- a. The issue of an ACDSPC supplies the basis for the judgement of suitability of an ACD service, in that it will be provided and maintained to approved standards and limitations, by competent and authorised individuals, who are acting as members of an approved organisation.
- b. DASA will issue an ACDSPC when satisfied that the applicant organisation can satisfy the requirements of DASR ACD.20. The ACDSPC authorises the provision of the ACD service. The ACDSPC contains:
  - i. ACDSP name
  - ii. ACDSP permanent locations
  - iii. reference to the Service Provision Conditions (SPC), including the words 'ACD operations will be conducted in accordance with the attached Service Provision Conditions'
  - iv. period of validity or expiry date.
- c. ACDSP SPC. Each ACDSPC has an attached SPC that details the:
  - i. Accountable Manager (AM)
  - ii. Hazard Tracking Authority appointments within the ACDSP
  - iii. ACD services provided (including ACD service capacity, which baselines the service, capacity, and usage of the ACDSP)
  - iv. contracts, agreements or other arrangements for ACD service provision between the ACDSP and supporting third parties



- v. operational limitations as prescribed by DASA (typically an operational limitation will include reference to a plan and timeline to remove the limitation upon DASA review).
- vi. DASA signature, endorsing the SPC.
- d. **Initial issue of an ACDSPC and attached SPC.** DASA will issue an ACDSPC and SPC when satisfied all requirements have been met.
- 2. reissue of, or variation to, an ACDSPC or attached SPC. ▼ GM

#### GM ACD.20(a)2 - Variation to an ACDSPC or attached SPC

- Application for reissue or variation to an ACDSPC or SPC. DASA will
  issue a new ACDSPC or SPC as required when satisfied all requirements
  have been met.
- b. Addition of a service to ACDSPC SPC. The Compliance Statement (CS) for the addition of a service to an ACDSPC SPC addresses whether the ACDSP can safely operate and maintain their systems and services, as applicable. The statement does not address, but may reference, any acquisition documentation to demonstrate how new capabilities will be transitioned safely into service. Refer to the *Defence Aviation Safety Program Manual Volume 3* for further guidance.
- (b) As an exception from DASR ACD.10(a) and DASR ACD.20(a), a MAO that conducts ACD does not require a separate ACDSPC or SPC. However, the MAO Operational Specification (OPSPEC) and CS must reflect the scope of ACD services provided IAW DASR ACD. ▼ GM ▼ AMC

#### AMC ACD.20(b) – OPSPEC and CS requirements for MAOs conducting ACD (AUS)

- The MAO's QMS and SMS must incorporate the requirements of DASR ACD.40 and DASR ACD.50.
- b. The MAO must comply with DASR ACD.60 and DASR ACD.70.

#### GM ACD.20(b) - MAOs conducting ACD (AUS)

A MAO conducting ACD using resources within their flying units does not require a separate ACDSP Certificate (ACDSPC) or Compliance Statement (CS). However, a unit that has the primary purpose to provide ACD functions must operate under an ACDSPC with a supporting CS. For example, AMG does not require an ACDSP and CS to govern the circumstance where a 35 SQN Loadmaster is preparing, composing, configuring, loading, placing, restraining or unloading loads without the support of an air load team. However, AMTDU must operate under an ACDSPC and supporting CS—where CDR AMG may be the AM. Similarly, Air Movements Sections within CSG must operate under CSG's ACDSP certificate and supporting CS.

#### ACD.30 - Organisational structure (AUS)

(a) An ACDSP must define its organisational structure to include: ▼ GM1 ▼ GM2 ▼ AMC

#### AMC ACD.30(a) - Organisational structure (AUS)

a. ACDSPs should ensure their organisational structure includes:

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- i. an AM, usually a FEGCDR or equivalent
- ii. an appropriate chain of command or management
- iii. appropriately qualified personnel
- iv. Key Staff with appropriate experience
- ٧. facilities that are sufficient and suitable for the type of ACD services provided
- suitable, documented processes and procedures vi.
- a Safety Management System (SMS) IAW DASR ACD.40 vii.
- viii. a Quality Management System (QMS) IAW DASR ACD.50.

#### GM1 ACD.30(a) – Organisational structure (AUS)

- Purpose. (Context) Defence Aircraft are required to carry and deliver a. Passengers; and General Cargo and Non-Standard Cargo either internally or externally. (Hazard) Suitability For Flight can be compromised by ineffective management of the preparation, composition, configuration, loading, placement and restraint of Passengers, General Cargo and Non-Standard Cargo. (Defence) This regulation requires MAOs conducting ACD and ACD Service Providers (ACDSPs) to ensure ACD operations are conducted as an approved organisation and managed to ensure Suitability For Flight.
- b. An ACDSP 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 ACD services to a defined scope.

## GM2 ACD.30(a) - Key Staff (AUS)

- An ACDSP should list Key Staff (including engineering and maintenance a. appointments that contribute to the safe operation of an aviation system) in their organisational structure. Where those Key Staff are employed in organisations external to the military unit, or contractor/tasked organisation, which form the core of the ACDSP, then the ACDSP must also define the formal relationships with those organisations in which the Key Staff are employed (other contributors to the service provision that may directly influence the safety of ACD services).
- ACD.30(a)3 requires ACDSP organisations to define all formal relationships b. with all contributors to the service provision. This is to define the external inputs to their ACD service provision that can influence the quality of the services provided. The ACDSP CS should refer to MOUs or other formal agreements in place
- the authority, duties and responsibilities of all personnel performing ACDSP functions, 1. including the management personnel responsible for safety and quality management functions
- 2. the relationship and reporting lines between these personnel and other parts of the

#### organisation

3. formal relationships with all other contributors to the service provision that may directly influence the safety of ACD services.

#### ACD.40 – Safety Management System (SMS) (AUS)

(a) An ACDSP must utilise an SMS in accordance with DASR SMS. ▼ GM

#### GM ACD.40(a) - Safety Management System (AUS)

Purpose. (Context) Defence Aircraft are required to carry and deliver Passengers; and General Cargo and Non-Standard Cargo either internally or externally. (Hazard) Suitability For Flight can be compromised by ineffective management of the preparation, composition, configuration, loading, placement and restraint of Passengers, General Cargo and Non-Standard Cargo. (Defence) This regulation requires MAOs conducting ACD and ACD Service Providers (ACDSPs) to ensure ACD operations are conducted as an approved organisation and managed to ensure Suitability For Flight

#### ACD.50 - Quality Management System (QMS) (AUS)

(a) An ACDSP must utilise a QMS to achieve consistency, continuity and compliance of safe service provision through quality planning, assurance, control and improvement. ▼GM1 ▼GM2 ▼AMC1 ▼AMC2

#### AMC1 ACD.50(a) - Quality Management System (QMS) (AUS)

- a. ACDSPs should have a QMS that achieves the following purposes:
  - Quality planning. Quality planning defines the quality policy and approach so as to meet the safety needs of different users of the ACD service.
  - 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 is managed by appointed representatives to monitor conformance 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.

## AMC2 ACD.50(a) ACD services Contracted/tasked to an external organisation supporting an ACDSP (AUS)

a. AMC2 ACD.20(a) contains provisions to contract/task an organisation to perform ACD services on behalf of the ACDSP. The contracted/tasked organisation is considered to perform the contracted/tasked service as an integral part of the ACDSP's system hence is required to work under the quality system of the ACDSP. The contracting/tasking ACDSP retains the responsibility for all contracted/tasked services irrespective of who is undertaking them. The ACDSP-AM is ultimately responsible and therefore accountable for ensuring ACD operations are conducted as an approved organisation and managed to ensure Suitability For Flight. To exercise this

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responsibility the ACDSP-AM should be satisfied that the actions taken by contracted/tasked organisations meet the standards required by DASR ACD. The ACDSP should therefore manage such activities by:

- i. active control through direct involvement
- ii. endorsing the recommendations made by the contracted/tasked organisation
- iii. ensuring the contract/task documentation includes an obligation on the external organisation to upon request, make all documentation supporting the contracted/tasked organisation's provision of contracted/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 NAA or MAA, operations manuals, maintenance records, individual competency and currency records, safety occurrence reports and investigation reports.

## GM1 ACD.50(a) - Quality Management System (QMS) (AUS)

- a. **Purpose**. **(Context)** Defence Aircraft are required to carry and deliver Passengers; and General Cargo and Non-Standard Cargo either internally or externally. **(Hazard)** Suitability For Flight can be compromised by ineffective management of the preparation, composition, configuration, loading, placement and restraint of Passengers, General Cargo and Non-Standard Cargo. **(Defence)** This regulation requires MAOs conducting ACD and ACD Service Providers (ACDSPs) to ensure ACD operations are conducted as an approved organisation and managed to ensure Suitability For Flight
- b. The ACDSP may use ISO9001 or any other internationally-accepted quality management standard.

# GM2 ACD.50(a) – Quality improvement (AUS)

- a. Quality improvement in ACD service provision will involve consultation and standardisation of services, including the review of:
  - i. Aviation Safety Reports
  - ii. Aviation Safety Investigation Reports
  - iii. relevant Aviation Hazard Review Board Minutes
  - iv. other Occurrence Reporting
  - v. DG incident reports
  - vi. feedback collected between ACD service providers and MAOs.

## ACD.60 - ACD operations manuals (AUS)

**→** GM

# **GM ACD.60 – ACD operations manuals (AUS)**

**Purpose**. **(Context)** Defence Aircraft are required to carry and deliver Passengers; and General Cargo and Non-Standard Cargo either internally or externally. **(Hazard)** Suitability For Flight can be compromised by ineffective management of the preparation, composition, configuration, loading, placement and restraint of Passengers, General Cargo and Non-Standard Cargo. **(Defence)** This regulation requires MAOs conducting ACD and ACD Service Providers (ACDSPs) to ensure ACD operations are conducted as an approved organisation and managed to ensure Suitability For Flight.

(a) MAOs conducting ACD and ACDSPs must utilise authorised ACD operations manuals. ACD operations manuals must contain the instructions, procedures and information required for safe payload preparation, composition, configuration, loading, placement, restraint and unloading of the following ACD load types on Defence Aircraft: ▼GM1 ▼GM2 ▼GM3 ▼AMC1 ▼AMC2

# AMC1 ACD.60(a) – ACD operations manuals (AUS)

- MAOs conducting ACD and ACDSPs should maintain ACD operations manuals:
  - ensuring the following documents are the basis for the instructions, procedures and information for payload preparation, composition, configuration, loading, placement and restraint of Passengers, General Cargo and Non-Standard Cargo:
    - (a) the Air Force Air Movements Manual (AFAMMAN)
    - (b) the Air Force Air Movements Dangerous Good Manual (AFAMDGMAN).
  - ii. ensuring that any load clearances contained in the ACD operations manual are issued by an ACDSP approved to issue load clearances
  - iii. updated as a result of changes to:
    - (a) load clearances issued by an ACDSP approved to issue load clearances
    - (b) the AFAMMAN or AFAMDGMAN, or policy called out by the AFAMMAN or AFAMDGMAN
  - iv. containing the instructions, procedures and information required by personnel to perform their ACD service provision duties
  - v. ensuring personnel are expeditiously informed of amendments
  - vi. ensuring personnel perform their duties in accordance with those manuals
  - vii. harmonised with AFIC practices as far as practicable, or with ICAO and national civil practice as far as practicable where harmonisation with AFIC practices is not possible.
- b. Where the ACDSP is approved to issue load clearances, that ACDSP must inform those ACDSPs and MAOs conducting ACD (applicable to the relevant load clearance) of any changes or updates to load clearances.
- c. ACD operations manuals should detail, as a minimum:

- i. the identification of appointments and responsibilities for the payload preparation, composition, configuration, loading, placement and restraint of Passengers, General Cargo and Non-Standard Cargo
- ii. Passenger, General Cargo and Non-Standard Cargo:
  - (a) loading supervision requirements
  - (b) loading independent inspection requirements
  - (c) documentation and approval requirements
- iii. hand over requirements between Aircrew and ACDSPs, including the conduct of Suitability For Flight (as relevant to the ACD load) assessments
- iv. on-board carriage of records and record retention requirements
- v. loading (including preparation, composition, configuration, placement and restraint) and unloading procedures
- vi. procedures to determine the weight and balance of Passengers, General Cargo and Non-Standard Cargo
- vii. limitations
- viii. permitted configurations of Passengers, General Cargo and Non-Standard Cargo that eliminates and otherwise minimises crash protection risk SFARP when carrying Passengers and General Cargo or Non-Standard Cargo in the same Aircraft
- ix. the management of ACD Equipment, including:
  - (a) instructions for compliance with OEM design specifications, unless more restrictive limits and specifications are provided out of the activity defined in AMC ACD.70(a).b
  - (b) operating and installation instructions
  - (c) ongoing maintenance requirements and instructions
  - (d) obligations and instructions for seeking the relevant Aircraft Type MTC Holder advice before first use of each ACD Equipment item type that interfaces with an Aircraft Type IAW AMC ACD.70(a)b
  - (e) defect and unserviceability reporting.
- x. contingency plans to allow timely and effective response to those emergencies and abnormal events that may detract from Suitability For Flight. (Note: The Aircraft Captain retains responsibility for Suitability For Flight for their Aircraft. So, there is a requirement for ACDSP personnel to ensure the Aircraft Captain is informed of any abnormal or emergency situation to enable the Aircraft Captain to make sound Suitability For Flight decisions. ACDSP and MAOs conducting ACD must explicitly include this obligation (in ACD operations manuals) on all

personnel to inform the Aircraft Captain of abnormal and emergency situations.)

# AMC2 ACD.60(a) - Contemporary crash protection requirements for cargo when carried in the same Aircraft as Passengers (AUS)

When determining 'permitted configurations', ACDSPs and MAOs conducting ACD (cognisant of contemporary crash protection requirements), must eliminate or otherwise minimise risk SFARP when carrying Passengers and Cargo in the same Aircraft. When determining permitted configurations, ACDSPs and MAOs must consider the operational context. ACDSPs and MAOs conducting ACD must document risk assessments associated with the carriage of Passengers and Cargo in the same Aircraft.

# GM1 ACD.60(a) - ACD operations manuals (AUS)

Operations manuals is a generic term for the collection of ACDSP Orders, Instructions and Publications, that covers all aspects of the ACD services provided, including operations, engineering, maintenance, supply and support, and logistics.

# GM2 ACD.60(a) – Contemporary crash protection requirements for cargo when carried in the same Aircraft compartment as Passengers (AUS)

Defence OIP pertaining to cargo restraint might only consider load restraint to prevent load-shifting in flight due to normal aerodynamic forces. Contemporary crash protection requirements will often exceed restraint requirements to prevent load-shifting.

# GM3 ACD.60(a) - MAO and ACDSP Accountabilities (AUS)

Figure GM3 ACD.60(a) - 1 describes MAO and ACDSP individual and mutual ACD service provision accountabilities. (Note 'O&E' refers to 'Oversight and Enforcement')

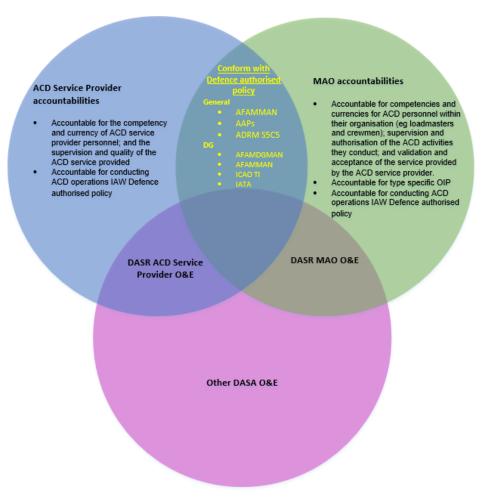


Figure GM3 ACD.60(a) - 1 - MAO and ACDSP accountabilities

1. Passengers **▼** GM

**GM ACD.60(a)1 – Passenger restraint (AUS)** 

**DASR ORO.70** defines passenger restraint requirements on MAOs.

- 2. General (standard) Cargo
- 3. Non-Standard Cargo. ▼ GM ▼ AMC1 ▼ AMC2

AMC1 ACD.60(a)3 - Dangerous Goods (DG) (AUS)

- a. The MAO conducting ACD and ACDSPs should ensure that:
  - DG is only carried if it has been inspected IAW AFAMDGMAN.
     However, this does not apply to ALSE for the Crew of the Aircraft and for Aircraft Stores fitted to the Aircraft
  - ii. DG anomalies and incidents are reported via an aviation safety report

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- iii. a DG inspection system is utilised to ensure Passengers and consigners of DG comply with the requirements of the AFAMDGMAN
- iv. consignors of Non-Standard Cargo are provided with information to support the identification and correct packing and labelling of DG
- v. Passengers are informed of DG that is restricted from being taken on board the Aircraft
- vi. Passengers make a declaration that they have no restricted DG on their person and that they will not take any on board the Aircraft.

# AMC2 ACD.60(a)3 - Non-Standard Cargo with no approved procedures (AUS)

- a. Where no specifically approved OIP exists for Non-Standard Cargo payload preparation, composition, configuration, placement and restraint, MAOs conducting ACD and ACDSPs should ensure that such items have approved payload preparation, composition, configuration, placement (including loading and unloading instructions) and restraint solutions developed:
  - i. under an assurance system that:
    - (a) utilises qualified, competent and authorised personnel
    - (b) complies with the *Airworthiness Design Requirements Manual* (ADRM)
    - (c) includes control and supervision of solution design development and changes to existing solutions
    - (d) includes independent verification by a person not involved in creating the solution
    - (e) includes independent monitoring of the compliance with, and adequacy of, the documented procedures of the system this monitoring must include a feed-back system to a person or a group of persons having the responsibility to ensure corrective actions
    - (f) requires the relevant design supervisor, or an authorised representative, to sign an attestation of compliance (with the ADRM, relevant equipment specification requirements, and any relevant standards), conformance (with the operations manual), and Suitability For Flight.
  - ii. using load clearances issued by an ACDSP acting within an approved scope, that:
    - (a) uses approved procedures, data, standards and limitations
    - (b) that consider Aircraft stability margins for external lift load clearances so far as reasonably practicable, such that they remain within acceptable margins of safety for the applicable Flight envelope
  - iii. in consultation with the Type Certificate holder as required.

# GM ACD.60(a)3 - Relevant design supervisor

The 'relevant design supervisor' is the senior technically qualified person with competency in design sufficient to ensure the design is conformant and

supports Suitability For Flight. The 'relevant design supervisor' in AMTDU is typically the Chief Engineer.

(b) ACD operations manuals must be easily accessible by relevant personnel and must detail procedures to ensure Suitability For Flight (as relevant to the ACD load) for Defence Aircraft. **→** AMC

> AMC ACD.60(b) – Procedures to ensure Suitability For Flight (as relevant to the ACD load) (AUS).

- Procedures to ensure Suitability For Flight (as relevant to the ACD load) a. include:
  - i. confirming:
    - Aircraft weight and balance is within limits defined in approved OIP (a)
    - (b) the weight and balance limits will remain acceptable throughout the Flight
    - (c) General Cargo and Non-Standard Cargo is configured, placed, restrained and rigged in accordance with approved OIP
    - Aircraft equipment is stowed in approved positions and secured (d)
    - (e) Passengers are seated in approved seating and configuration
    - (f) any consignment of Non-Standard Cargo classed as DG has been managed in accordance with approved OIP
    - independent checks of payload preparation, composition, (g) configuration, loading, placement and restraint have been conducted against the requirements of DASR ACD
  - a Suitability For Flight assessment, confirming that the procedures ii. detailed at AMC ACD.60(b)a.i have been completed, prior to acceptance of the ACD load by the Aircrew.
- An ACDSP must utilise a personnel fatigue management strategy. ▼ AMC (c)

# AMC ACD.60(c) – Personnel fatigue management strategy (AUS)

- a. The ACDSP fatigue management strategy should consider:
  - i. personnel duty limitations
  - maximum allowable hours worked over specified periods and minimum ii. rest time between duty periods
  - iii. Navy, Army or Air Force WHS fatigue management policy requirements as applicable.
- (d) MAOs or Sponsors must utilise on board emergency procedures when carrying the ACD load types listed at ACD 60(a). ▼ GM

GM ACD.60(d) - On-board emergency procedures





The regulation requires MAOs and Sponsors to access and utilise on-board emergency procedures applicable to the ACD load types defined at ACD.60(a).

#### ACD.70 – ACD Equipment, systems and installations (AUS)

MAOs conducting ACD and ACDSPs must ensure that ACD Equipment, systems and installations (a) meet, and are maintained to, authorised standards; and support the safe provision of services. **▼** GM **▼** AMC

# AMC ACD.70(a) - ACD Equipment, systems and installations

- MAOs conducting ACD and ACDSPs should manage ACD Equipment, systems and installations in compliance with:
  - i. the OEMs' design specifications, unless more restrictive limits and specifications are provided out of the activity defined in AMC ACD.70(a)b
  - ii. operating and installation instructions
  - iii. ongoing maintenance requirements and instructions.
- MAOs conducting ACD and ACDSPs should ensure (in consultation with the b. relevant Aircraft Type MTC Holder) that new items of ACD Equipment meet the applicable standards prescribed in the ADRM before first use of each ACD Equipment item type that interfaces with an Aircraft Type.
- MAOs conducting ACD and ACDSPs should perform defect and C. unserviceability reporting of equipment, systems and installations.

# **GM ACD.70 – ACD Equipment, systems and installations (AUS)**

- **Purpose.** (Context) Defence Aircraft are required to carry and deliver Passengers: a. and General Cargo and Non-Standard Cargo either internally or externally. (Hazard) Suitability For Flight can be compromised by ineffective management of the preparation, composition, configuration, loading, placement and restraint of Passengers, General Cargo and Non-Standard Cargo. (Defence) This regulation requires MAOs conducting ACD and ACD Service Providers (ACDSPs) to ensure ACD operations are conducted as an approved organisation and managed to ensure Suitability For Flight
- b. Applicability. This regulation applies to equipment and systems not permanently fitted to the Aircraft. DASR 21 requirements apply to any equipment or system permanently fitted to the Aircraft.
- ACD Equipment consist of more than just Aerial Delivery Equipment (ADE). ACD C. Equipment includes materiel used anywhere in the ACD process. ACD Equipment could therefore include items of GSE that support the provision of ACD services (eg PFA 50).

# ACD.80 – ACD Competency management (AUS)

(a) The ACDSP must ensure personnel are competent and authorised to undertake their ACD duties. **→** GM **→** AMC

# AMC ACD.80(a) - ACD Competency management system (AUS)

- a. To ensure effective personnel Competency, the ACDSP should:
  - i. ensure tasks are undertaken by suitably competent and authorised personnel, including contractors
  - ii. maintain adequate numbers of personnel to provide the service, consistent with a defined and reasonable level of overall demand
  - iii. maintain training, Competency assessment and checking programs for personnel.
- b. ACD service provision and instructor Competency management must be defined for all ACD load types defined at DASR ACD.60(a), in:
  - i. a Learning Management Package (LMP) that considers:
    - (a) education and training needs
    - (b) education and training Competency and proficiency standards
    - (c) education and training instructor standards.
  - ii. approved OIP including:
    - (a) categorisation of skills or Competencies
    - (b) Currency requirements.
- c. ACDSPs should ensure a method of recording Competency and Currency. The recording system should include:
  - i. secure and accessible record storage by users
  - ii. recording methods and formats which are enduring
  - iii. provision for no unauthorised record modifications
  - iv. validation of Competency and Currency criteria listed in the recording system against requirements
  - v. record preservation IAW the Records Management Policy Manual.

# GM ACD.80(a) – ACD Competency management system (AUS)

- a. Purpose. (Context) Defence Aircraft are required to carry and deliver Passengers; and General Cargo and Non-Standard Cargo either internally or externally. (Hazard) Suitability For Flight can be compromised by ineffective management of the preparation, composition, configuration, loading, placement and restraint of Passengers, General Cargo and Non-Standard Cargo. (Defence) This regulation requires MAOs conducting ACD and ACD Service Providers (ACDSPs) to ensure ACD operations are conducted as an approved organisation and managed to ensure Suitability For Flight.
- b. ACDSPs are responsible for ensuring personnel hold appropriate Competencies for the different types of ACD roles and functions, and for

- assessing Competencies of personnel involved in the provision of ACD services.
- Different Competencies will apply to ACDSP personnel, depending on what C. role they fulfil in ensuring the safety of the overall service. DASA does not prescribe any single Competency or framework. The ACDSP has flexibility to select Competencies which are appropriate for the different ACD roles and functions.
- Managing ACD personnel Competencies may include using relevant AFIC, d. CASA, EASA and ICAO standards.
- **Recency**. Recency describes the period of time from the present, back to e. when the individual last performed a certain activity or skill. If the individual's Recency is outside a Currency requirement (ie an individual has not performed task 'A' for 14 months, and task 'A' has a Currency requirement of 12 months) then the Currency management system must impose an additional control, such as a re-Currency activity, before allowing that individual to perform that task without extraordinary supervision. However, a supervisor should consider an individual's Recency, even if the Currency requirement has been met. In the previous example, if the individual had performed Task 'A' 11 months ago instead, the supervisor may impose additional hazard controls (in comparison to the controls imposed on a more recent individual) to eliminate or otherwise minimise risk SFARP. Additional controls could include additional briefing requirements, environmental limitations, or composing the air load team with more recent individuals to offset the lack of Recency of the individual in question.
- f. Note, all of these aspects of AMC ACD.80(a)b are not required to be captured in a single LMP. The requirement is that each of the aspects is captured in an LMP. The distribution of aspects may be across a number of LMP.

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**Defence Aviation Safety Authority** 

# DASR AMENDMENT RECORD DCP 2022 - 012

DASR CLAUSE: AMC AIRCREW.10.A(3) 1.d

#### **RATIONALE FOR CHANGE**

DASR currently uses both 'Maintenance Check Flight Pilot' and 'Unit Maintenance Test Pilot' to refer to the same qualification. This has the potential to cause confusion and has resulted in multiple DCP and RFI (including DCP 2021-054 and DAVNOPS Informal Advice 2022-012). DASA intends to standardise use of the term Unit Maintenance Test Pilot (UMTP) when referring to aircrew qualifications and key personnel as UMTP is a long standing and widely used term in Defence Aviation. When referring to the post maintenance flight itself, DASR Pt M consistently refers to 'Maintenance Check Flight'.

#### **CURRENT REGULATION TEXT**

Maintenance Check Flight Pilot

#### **REVISED REGULATION TEXT**

Unit Maintenance Test Pilot

# **DASR CLAUSE: DASR Glossary (Maintenance Check Flight)**

#### **RATIONALE FOR CHANGE**

DASR currently uses both 'Maintenance Check Flight Pilot' and 'Unit Maintenance Test Pilot' to refer to the same qualification. This has the potential to cause confusion and has resulted in multiple DCP and RFI (including DCP 2021-054 and DAVNOPS Informal Advice 2022-012). DASA intends to standardise use of the term Unit Maintenance Test Pilot (UMTP) when referring to aircrew qualifications and key personnel as UMTP is a long standing and widely used term in Defence Aviation. When referring to the post maintenance flight itself, DASR Pt M consistently refers to 'Maintenance Check Flight'.

#### **CURRENT REGULATION TEXT**

Maintenance Check Flight \* - Flying activity conducted after aircraft maintenance when required by Instructions for Continuing Airworthiness.

#### **REVISED REGULATION TEXT**

Maintenance Check Flight \* - Flying activity conducted after aircraft maintenance when required by Instructions for Continuing Airworthiness (ICA). However, ICA may use different terminology. Note, there may be other check flights conducted in service that are not required by ICA; these flights are not a regulatory requirement. Maintenance check flight is not to be confused with flight test which is covered under DASR 21. (Refer to glossary entry for `Unit Maintenance Test Pilot'.)

## DASR CLAUSE: DASR Glossary (Maintenance Check Flight Pilot)

#### **RATIONALE FOR CHANGE**

DASR currently uses both 'Maintenance Check Flight Pilot' and 'Unit Maintenance Test Pilot' to refer to the same qualification. This has the potential to cause confusion and has resulted in multiple DCP and RFI (including DCP 2021-054 and DAVNOPS Informal Advice 2022-012). DASA intends to standardise use of the term Unit Maintenance Test Pilot (UMTP) when referring to aircrew qualifications and key personnel as UMTP is a long standing and widely used term in Defence Aviation. When referring to the post maintenance flight itself, DASR Pt M consistently refers to 'Maintenance Check Flight'.

#### **CURRENT REGULATION TEXT**

Maintenance Check Flight Pilot \* - A pilot authorised to fly an aircraft after aircraft maintenance has been conducted as required by Instructions for Continuing Airworthiness (ICA) to check aircraft serviceability.

#### **REVISED REGULATION TEXT**

**Unit Maintenance Test Pilot (UMTP)** \* - A pilot authorised to fly an aircraft after aircraft maintenance has been conducted as required by Instructions for Continuing Airworthiness (ICA) to check aircraft serviceability. (Refer to glossary entry for `Maintenance Check Flight'.)

#### DASR CLAUSE: GM ORO.15.A.4.f

#### **RATIONALE FOR CHANGE**

DASR currently uses both 'Maintenance Check Flight Pilot' and 'Unit Maintenance Test Pilot' to refer to the same qualification. This has the potential to cause confusion and has resulted in multiple DCP and RFI (including DCP 2021-054 and DAVNOPS Informal Advice 2022-012). DASA intends to standardise use of the term Unit Maintenance Test Pilot (UMTP) when referring to aircrew qualifications and key personnel as UMTP is a long standing and widely used term in Defence Aviation. When referring to the post maintenance flight itself, DASR Pt M consistently refers to 'Maintenance Check Flight'.

#### **CURRENT REGULATION TEXT**

Unit Maintenance Test Pilot (UMTP). A UMTP is a pilot specifically trained and endorsed to carry out post-maintenance flight testing of an aircraft.

#### **REVISED REGULATION TEXT**

Unit Maintenance Test Pilot (UMTP). A UMTP is a pilot specifically trained and endorsed to carry out post maintenance check flights of an aircraft.



**Defence Aviation Safety Authority** 

# DASR AMENDMENT RECORD DCP 2022 - 016

DASR CLAUSE: MED.05.g.GM.a

#### **RATIONALE FOR CHANGE**

Editorial change - wrong terminology or incorrect expansion of acronym.

#### **CURRENT REGULATION TEXT**

A SAMLO (as defined IAW IAM SI (PERS) 03-04 Aviation Medicine Instructor Standardisation) is an Aircrew member who has received additional AvMed training to assist in the ongoing provision of SAvMed training in conjunction with IAM, the Regional Squadron Aviation Medicine Officer (RSAvMO) (As defined IAW Defence Health Manual Vol 2 Part 17 Chap 3) or Squadron Aviation Medicine Officer (SAvMO).

#### **REVISED REGULATION TEXT**

A SAMLO (as defined IAW IAM SI (PERS) 03-04 Aviation Medicine Instructor Standardisation) is an Aircrew member who has received additional AvMed training to assist in the ongoing provision of SAvMed training in conjunction with IAM, the Regional Senior Aviation Medicine Officer (RSAvMO) (As defined IAW Defence Health Manual Vol 2 Part 17 Chap 3) or Senior Aviation Medicine Officer (SAvMO).