FACTSHEET –INFORMATION GUIDE ON INTERPRETATION OF CASA PART 139 MOS

AIM

This factsheet aims to provide clarification on the interpretation of Civil Aviation Safety Authority (CASA) Manual of Standards Part 139 (MOS 139) in the context of DASR 139. This factsheet addresses MOS 139 where the unique context of Defence's aerodrome operations require further consideration.

INTRODUCTION

The Defence Aviation Safety Authority (DASA) prescribes the Defence Aviation Safety Regulations DASR 139 – Aerodromes, and design standards (Section 6 of the Defence Aviation Safety Design Requirements Manual (DASDRM)) to establish a framework for design, construction, maintenance and operation of Defence Aerodromes (including shipborne heliports).

To maximise the benefits of civilian contemporary practice and standards, DASR 139 Guidance Material (GM), Acceptable Means of Compliance (AMC) and Section 6 of the DASDRM refer to contents of CASA MOS 139 as a source of reputable requirements that represent civilian contemporary practice and standards[1].

CASA developed the MOS 139 specifically for the civilian aviation safety framework; as such, content is not always directly applicable to Defence aerodromes. Due to Defence's unique military context, some interpretation of the CASA MOS 139 may be required when it comes to Aerodrome Operator (AD OPR) approval and aerodrome certification.

This factsheet provides a DASA 'reading companion' for the MOS 139, clarifying application of MOS 139 to the Defence context. This is in relation to both the AD OPR roles and responsibilities, and aerodrome certification. The clarification provided in this document is to assist AD OPRs in the provision of 'ensure' functions for safe flight operations of aircraft at Defence aerodromes.

CASA and DASA Roles

A key responsibility of a regulator is to conduct oversight and enforcement activities to assure regulatory compliance and continued validity of authorisations issued by the Authority. Both CASA and DASA conduct independent assurance of AD OPRs, to assure safe flight operations at aerodromes. The difference however, is that CASA's regulatory powers under the legislative framework include the ability to enable or restrict operations to an aerodrome. DASA does not provide a similar function for Defence aviation operations, as the decision to operate or cease operations to an aerodrome is a Command decision based on risk assessment and balanced with the requirement to deliver a capability. For further detail on safety responsibilities at Defence Aerodromes – refer to *Factsheet - Responsibility for the Design and Construction of Safe Aerodromes*.

DASA relies on subject matter experts external to DASA as part of its safety assurance network—particularly in some aerodrome technology areas (eg pavement or OLS design). Where necessary, DASA may refer the AD OPR to the appropriate SME within Defence.

DASA's Guide for Interpretation of CASA MOS 139

The following table provides DASA's interpretation of CASA MOS 139 for Defence aerodrome operations.

MOS 139 does not explicitly consider land based or shipborne heliports. When determining applicability of MOS 139 for Land Based or Shipborne Heliport operations, consultation with DASA may be required to determine applicability IAW DASR 139.50.
For CASA MOS 139 sections invoked by the DASDRM, the DASDRM is the primary source of advice on applicability.

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[1] In Section 6 of the DASDRM, only Chapter 2 (intended for land based aerodromes primarily used by fixed wing aircraft) uses CASA Part 139 MOS as the primary standard, supplemented with additional design requirements for the military context. Chapter 3 and Chapter 4 draw upon alternative sources as primary standards. See *Factsheet – Aerodrome Design Requirements and Certification Basis* for details.

Readers of this factsheet are encouraged to forward questions to the DASA aerodromes team at dasa.aerodromes@defence.gov.au.

Table 1 – CASA MOS 139 Summary

CASA MOS 139 Wording	DASA's Interpretation	Supporting Comment
CASA approval or authorisation	In general, where MOS 139 enables CASA to give an approval/authorisation, DASA may give an equivalent approval/ authorisation. Some exceptions may apply; For example, it is outside the scope of DASA to provide an authorisation for an individual to provide meteorological observation or assessment of weather phenomena for runway visibility.	Most CASA approvals are issued under part 11 of CASR 1998, unless specifically stated otherwise. Any DASA issued approval or authorisation is completed within the scope of Defence Aviation Safety Program (DASP). An example of a DASA issued approval is the approval of an AD OPR organisation. DASA will not approve/authorise personnel for specific aerodrome roles based on qualifications or competency, but may approve the system through which the AD OPR authorises personnel for specific AD roles.
Grandfathering	Grandfathering of aerodromes design is not applicable to Defence.	In instances where it is impractical to change the aerodrome design, or where the Applicant cannot provide evidence to demonstrate compliance with the Certification Basis (CB), the Applicant can pursue approval via the Military Aerodrome Certification Review Item (MACRI) and the Aerodrome Issue Paper (ADIP). See *Factsheet – Military Aerodrome Certification Review Items* and *Factsheet – Aerodrome Issue Paper* for details.
Qualified Flight Checker - aerodrome lighting systems	Where an aerodrome light system requires flight checking by a person approved by CASA, Defence AD OPR should seek the same qualification for such tasks ie a person approved by CASA. DASA does not provide a different or equivalent approval.	Various MOS 139 clauses (in particular Chapter 9 Division 2) refer to flight checking of Aerodrome Ground Lighting (AGL) by a pilot approved by CASA. This approval is an endorsement on a pilot's license, and is recognised by DASA. Flight checking AGL at a Defence aerodrome would likely be completed as contracted work, not by military pilots or aircraft.
Obstacle Control, Obstacle marking and lighting	In general, obstacle control around Defence aerodromes are considered under Part 11A of Defence Regulations 2016. Defence can make similar determinations as CASA that an obstacle is a hazard to aviation, and subsequently, draw on mitigation measures from MOS139 Ch. 8 and 9. Note, DASA's *Factsheet – Aerodrome Obstacle Management* (in draft) will provide additional details, including DASA's requirements on AD OPRs.	Civilian AD OPR must report obstructions to CASA to seek direction for remediation. Defence AD OPR must resolve any obstacle issues, as supported by the Defence Regulation 2016 made under the Defence Act 1903. SEG's Directorate of Land Planning and Regulation (DLPR), Airspace Protection Section may provide advice and assistance to the AD OPR.

CASA MOS 139 Wording	DASA's Interpretation	Supporting Comment
Obstacle reporting	In general, 'obstacle reporting' applies to any MOS requirement for AD OPRs to report obstacles, obstacle lighting serviceability, or other OLS matters to CASA. Defence AD OPR are not required to report all obstacles to DASA. The AD OPR must notify DASA if the obstacle will affect the certification basis. Note, DASA's *Factsheet – Aerodrome Obstacle Management* (in draft) will provide additional details, including DASA's requirements on AD ORPs.	This reflects the risk of undocumented obstacles infringing the OLS. The AD OPR should report OLS issues to SEG's Directorate of Land Planning and Regulation for assessment and advice. In case of joint Military-Civilian use aerodromes, reporting to CASA may also be appropriate. AD OPR must also report obstacles[2] to the designers of published Instrument Flight Procedures (IFPs)[3] to ensure validation against PANSOPS surfaces. Note, DASA's *Factsheet – Aerodrome Obstacle Management* (in draft) will provide additional details, including DASA's requirements on AD ORPs.
CASA ACs	Where MOS139 references a CASA Advisory Circular, Defence AD OPRs should consider the content of the AC as advisory only, along with relevant Defence advisory material. Where there is any direct conflict, the Defence Guidance material takes precedence.	Where required, AD OPRs should consult DASA regarding applicability of specific CASA AC to Defence Aerodromes.
CASA recommendations	Where MOS139 states 'CASA recommends …', AD OPRs should read this as 'DASA recommends …'. Such recommendation provides advisory guidance. Defence AD OPRs should consider the recommendation, along with relevant Defence advisory material. Where there is any direct conflict, the Defence Guidance material takes precedence.	There may be instances within the DASDRM where a CASA recommendation is specifically excluded, or tailored for the Defence context. If unclear, AD OPRs should consult with DASA.

[2] The OLS is generally the lowest surface designed to protect aircraft. However, there may be instances where the PANSOPS surface is lower.
[3] IAW Air Command SI(OPS) 1-20 Aeronautical Information Management

DASA's Interpretation of CASA MOS 139 Overall Chapter Summary

The following table captures the DASA commentary for interpretation of CASA MOS 139 and MOS 139H Overall Chapter Summary, in the Defence context.

CASA MOS 139 Chapter	CASA MOS 139 Chapter Definition	Supporting Comment
Chapters 1 - 3	Preliminary Application of Standards Definitions	MOS 139 chap 1-3 are informative chapters; they do not impose requirements and should be referred to as information only. Chapter 1A – Transitional Provisions is not applicable to Defence Aerodromes. Chapter 2 – Grandfathering is not applicable to Defence Aerodromes
Chapter 4	Aerodrome Reference Code Aerodrome Standards	Refer to the DASDRM Section 6, supported with requirements from MOS 139 chap 4.
Chapter 5	Aerodrome Information for AIP and Aerodrome Manual	Refer to DASR 139.50 for AIP and Aerodrome Manual information, supported with requirements from MOS 139 chap 5.
Chapters 6 – 9	Aerodrome Planning, Design, Maintenance Obstacle Limitation Surfaces Visual Aids provided by Aerodrome Markings, Markers, Signals, Signs, WDIs and Lighting	Refer to the DASDRM Section 6 for design requirements applicable to Defence Aerodromes. Refer to the applicable MOS 139 chapters for maintenance and ongoing management requirements. Refer to DASR 139.80.(4) for aerodrome facilities or equipment reporting requirements.
Chapters 10 – 11	Aerodrome Manual Information Included in Aerodrome Manual	Refer to DASR 139.50 AMC for details on Aerodrome Manual minimum content requirements. MOS 139 chap 10-11 provides additional Aerodrome Manual context and content.
Chapter 12	Inspecting and Reporting Aerodrome Condition and Compliance	Refer to DASR 139.50 AMC for Aerodrome inspection and reporting requirements, supported with requirements from MOS 139 chap 12.
Chapter 13 - 17	Aerodrome Personnel Functions Control of Airside Access Aerodrome Works Method of Working Plans Wildlife Hazard Management	Refer to DASR 139.40 and 139.50 for requirements applicable to Defence Aerodromes, supported with requirements from MOS 139 chap 13-17.
Chapter 18	Pavement Maintenance	Refer to the DASDRM Section 6 and DASR 139.90, supported with requirements from MOS 139 chap 18.
Chapter 19	CNS and MET Facilities	DASR 139.90 provides general maintenance requirements for these facilities. MOS 139 chap 19 provides additional requirements for maintenance, protection and siting of facilities.
Chapters 20 – 21	Earthing Points Light Aircraft Tie Down Facilities	Refer to the DASDRM Section 6 for requirements applicable to Defence Aerodromes.
Chapter 22	Radio Communication Facilities	Refer to the DASDRM Section 6 for design requirements, supported with requirements from MOS 139 chap 22.
Chapter 23	Low-Visibility Procedures (LVP)	Refer to DASR 139.50 and 139.60 for LVP requirements applicable to Defence Aerodromes, supported with requirements from MOS 139 chap 23.

CASA MOS 139 Chapter	CASA MOS 139 Chapter Definition	Supporting Comment
Chapters 24	Aerodrome Emergency Planning (AEP)	Refer to DASR 139.50 AMC and DASM Chapter 5 for the Defence AEP framework, supported with requirements from MOS 139 chap 24.
Chapters 25 - 26	Safety Management Systems Risk Management Plans	Refer to DASR 139.60 and DASR SMS for requirements applicable to Defence aerodromes.
CASA MOS 139 H Chapter	**CASA MOS 139 Chapter Definition**	**Supporting Comment**
All Chapters	Standards Applicable to the Provision of Aerodrome Rescue and Fire Fighting (ARFF) Services	Refer to DASR 139.50 for applicability of MOS 139H and relevant requirements to be captured in the Aerodrome Manual. Refer to the DASDRM for ARFF design requirements applicable to Defence Aerodromes.

REFERENCES

- Joint Directive 21/2021
  http://drnet.defence.gov.au/AssociateSecretary/CDF/DirectivesSpeeches/Pages/Joint-Directives.aspx
- DASR 139 Regulations:
  DASP Policy and Guidance Portal (defence.gov.au)
- Defence Aviation Safety Design Requirements Manual (DASDRM)
  DASP Policy and Guidance Portal (defence.gov.au)
- Civil Aviation Authority Part 139 Manual of Standards https://www.casa.gov.au/part-139-manual-standards
- Civil Aviation Authority Part 139H Manual of Standards https://www.casa.gov.au/part-139h-manual-standards
- Defence Aviation Safety Authority, Factsheet – DASR 139 Aerodrome Certification Process
- Defence Aviation Safety Authority, DASA Website – Aerodromes and Heliports Regulation