



DEFENCE AVIATION SAFETY AUTHORITY

NOTICE OF PROPOSED DASR AMENDMENT NPA 2021/012 Revision 0

DASR.MED.05

AVIATION MEDICINE TRAINING

INTRODUCTION

References:

- A. DASR Query Form 110, *Application of AC SI (OPS) 01–39—Aviation Medical Currency*, of 12 Mar 21 ([BP15710984](#))
- B. DASR Change Proposal (DCP) 2021-12, of 12 Mar 21 ([BP15709714](#))
- C. Email - HQAC A9 DD OPAW and CO IAM, of 12 Mar 21 ([BP15684611](#))
- D. Minute - *ACPA Formal Advice 13/2021 – Application of AC SI (OPS) 01-39*, of 08 Apr 21 ([BP15872076](#))
- E. DASA Newsbreak: [Deliberate Review of Aviation Operations-Related Implementing Regulations – Aug 21 Update](#) of 20 Aug 21

Applicability

1. This proposal is applicable to:
 - a. Air Navigation Service Providers Accountable Managers (ANSP-AM)
 - b. Military Air Operator Accountable Managers (MAO-AM)
 - c. Persons authorising and operators of Uncrewed Aircraft Systems (UAS)
 - d. Single Service Aviation Medicine Advisors (SSAMAs)
 - e. Sponsors of NDRA operations
 - f. the Institute of Aviation Medicine (IAM).

Purpose

2. The purpose of this NPA is to enable community input into the development of MED.05, ahead of its formal release, to incorporate:
 - a. relevant recommendations of Refs A-D
 - b. the principles of the review detailed at Ref E.



Background

3. This NPA addresses Refs A through E, seeking to improve aviation safety, clarify regulation, and providing command flexibility regarding AvMED currency periods. This NPA forms part of the stakeholder consultation processes.

Scope of Proposed Changes

4. The proposed DASR amendment incorporates:
 - a. a derogation clause enabling command to award extensions to AvMED training currency
 - b. improved clarity regarding Supplemental AvMED (SAvMED) training and currency
 - c. requirements on:
 - (1) persons authorising and operators of UAS to meet AvMED training requirements for certain Remote Pilots and UAS Crew
 - (2) ANSP to meet AvMED training requirements for Aircraft Controllers.
5. The proposed amendment incorporates the principles of Ref E, by:
 - a. elevating extant:
 - (1) applicability clauses (ie 'derogation') currently in Guidance Material (GM) to IR level
 - (2) AvMED and SAvMED training Currency requirements currently in Acceptable Means of Compliance (AMC) to IR level
 - (3) Air Force Interoperability Council (AFIC) recognition of AvMED training currently in AMC to IR level
 - (4) SAMLO provided training endorsement requirements currently in AMC to IR level
 - b. where appropriate including additional derogations to IR
 - c. improving the structure and content of the IR, purpose statement, AMC and GM.

Benefits of Proposed Changes

6. The benefits of this proposal include improved:
 - a. visibility of the relief available (through derogation clauses) to MAOs against regulatory requirements
 - b. accountability, command flexibility, and support to oversight activities.

Effects of Proposed Changes

7. The proposed amendments increase regulated community compliance obligations in IR, as follows:
 - a. Where a MAO identifies a requirement for additional AvMED related training to that provided by the IAM LMPs, this training must be designed and developed in consultation with, and conducted under the supervision of, Commanding Officer (CO) IAM, SSAMA or their authorised representative.
 - b. Persons authorising and operators of UAS must meet AvMED training requirements for Remote Pilots and Crew of certain UAS categories within their organisation.



- c. ANSP-AM must meet AvMED training requirements for Aircraft Controllers within their organisation.
8. The proposed amendments do not increase regulated community compliance obligations for remaining the changes incorporated, as follows:
- a. At IR level, the amendment:
- (1) provides command flexibility to award extensions to AvMED currency
 - (2) clarifies SAVMED training and currency requirements
 - (3) elevates extant derogation clauses in AMC and GM to IR level
 - (4) makes explicit the requirement for the SAMLO to seek endorsement prior to conducting SAMLO-provided SAVMED training.
- b. At AMC/GM level, the amendment:
- (1) provides clarity regarding initial AvMED, AvMED refresher, and SAVMED training requirements and currencies
 - (2) provides clarity regarding the requirements to document AvMED and SAVMED training
 - (3) makes numerous minor editorial changes to better express the intent of extant AMC/GM.

Proposed Amendments

9. The revised regulation is at Enclosure 1.

Implementation Strategy

10. DASA will implement the proposal with the Apr 22 DASR release. No additional training obligations apply. The proposed compliance timeframe is three working months from DASR release (ie compliance with proposed NPA changes is required by 01 Aug 22).

HOW TO SUBMIT COMMENTS ON THIS NPA

Format

11. Record responses to this NPA on the Response Sheet included at Annex A. Submit responses by email to [DASA](#). Hardcopies are not required.

Timing

12. Forward comments on this NPA to DASA by **close of business 30 Nov 21**.

Additional Information

13. Additional information concerning this NPA is available from WGCDR Chris Pouncey, ACPA DD REGS, at chris.pouncey@defence.gov.au or (03) 5169 8204.



DISPOSITION OF RESPONSES RECEIVED

14. DASA will publish a Comment Response Document on the [DASA Website](#). DASA will not individually acknowledge or respond to comments or submissions.

D Smith
GPCAPT
DACPA
Defence Aviation Safety Authority
Tel: (02) 5130 7735

Nov 21

Annex:

A. NPA 2021/012 Revision 0 – DASR.MED.05 Response Sheet

Enclosure:

1. NPA 2021/012 Revision 0 – Proposed Changes to DASR.MED.05



NPA 2021/012 Revision 0 Response Sheet

DASR.MED.05 ‘Aviation Medicine Training’

Please forward this sheet as an email attachment to [DASA](#) by 30 Nov 21. A word version of this response sheet can be found via Obj No: [BO3960659](#) or alternatively contact [DASA](#).

Please indicate your acceptance or otherwise of this proposal by ticking the appropriate box below. Additional comments, suggested amendments or alternative action are welcome and may be provided on this response sheet or by separate correspondence.

- The proposal is **acceptable without change**.
- The proposal is **acceptable but would be improved if the following changes were made**:
- The proposal is **not acceptable but would be acceptable if the following changes were made**:

LSN	NPA Reference: (ie Regulation number, NPA paragraph etc)	Comment or suggested change	Explanation
1			
2			
3			
4			
5			

RESOURCE IMPLICATIONS

Please provide specific comment on any significant resource implications that this proposal may have for your organisation, for both its implementation and ongoing compliance. Your comments should address both financial and human resource considerations.

Resource implications – Proposal implementation	
Resource implications – Proposal sustainment	



RESPONDENT DETAILS

Your name:	
Submission date:	
Your organisation:	
Email address:	
Postal address:	
Phone:	
Whose views are represented in your response? (ie is your response the authoritative response from your organisation?)	Responding on behalf of : Individual [<input type="checkbox"/>] Regulated Military entity [<input type="checkbox"/>] Regulated Commercial entity [<input type="checkbox"/>] Wing HQ [<input type="checkbox"/>] Group HQ [<input type="checkbox"/>] ADF Regulatory, Technical or Logistics policy agency [<input type="checkbox"/>] Other commercial entity [<input type="checkbox"/>] Other [<input type="checkbox"/>] Please describe:
Do you consent to your name being published as an NPA respondent within the NPA Summary of Responses:	YES [<input type="checkbox"/>] NO [<input type="checkbox"/>]



NPA 2021/012 REVISION 0
PROPOSED CHANGES TO DASR.MED.05
‘AVIATION MEDICINE TRAINING’

Contents

Section 1: New DASR.MED.05 implementing Regulation (IR) only

Section 2: New DASR.MED.05 IR, Guidance Material (GM) and Acceptable Means of Compliance (AMC)

SECTION 1: NEW DASR.MED.05 IR ONLY

The following replaces the extant DASR.MED.05 IR in toto.

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

▶ GM

- (a) The MAO or Sponsor must ensure Aircrew are trained in AvMED prior to conducting flight operations in a military Configuration Role and Environment (CRE) IAW the requirements of the approved Institute of Aviation Medicine (IAM) Learning Management Packages (LMP). ▶ GM
▶ AMC
- (b) By derogation from DASR MED.05(a):
 - 1. Aircrew who are not performing military CRE flying related duties (for example, when flying under the Aircrew Currency Flying Scheme (ACFS)) are exempt from AvMED training Currency requirements. ▶ GM
 - 2. Aircrew that have completed AvMED training conducted by Air Force Interoperability Council (AFIC) member nations are exempt from the requirement to complete AvMED training. ▶ GM
- (c) Where a MAO or Sponsor identifies a requirement for additional AvMED related training to that provided by the IAM LMPs, this training must be designed and developed in consultation with, and conducted under the supervision of, Commanding Officer (CO) IAM, Single Service AvMED Adviser (SSAMA) or their authorised representative.
- (d) The MAO or Sponsor must ensure Aircrew maintain Currency, as follows: ▶ GM ▶ AMC
 - 1. the maximum AvMED training Currency period, post initial AvMED training or AvMED refresher training, is five years ▶ GM
 - 2. by derogation from DASR MED.05(d)1 in consultation with the CO (IAM), SSAMA or their authorised representative, and risk managed IAW DASR.SMS: ▶ GM
 - (i) the member's Commanding Officer may grant an extension of not more than 30 days
 - (ii) the MAO AM may grant a further extension.
 - 3. Supplemental Aviation Medicine (SAvMED) training Currency is initially set through completion of initial AvMED training, and reset through either AvMED refresher training, or SAvMED training
 - 4. the maximum SAvMED Currency period is three years
 - 5. additionally, SAvMED training must be completed in the period between two and four years following initial AvMED or AvMED refresher training.

- (e) The MAO or Sponsor must obtain endorsement from CO (IAM) or SSAMA or their authorised representative, or Regional SAvMO, prior to the conduct of Squadron Aviation Medical Liaison Officer (SAMLO) provided SAvMED training. ▶ GM ▶ AMC
- (f) Aircrew appointed as a unit SAMLO must meet:
 - 1. initial and ongoing training requirements (defined by CO IAM) before exercising the privilege of conducting SAvMED training
 - 2. additional initial and ongoing training requirements (defined by CO IAM) before exercising the privilege of assisting in the conduct of PERRT by IAM.
- (g) Persons authorising and operators of Uncrewed Aircraft Systems (UAS) must meet the AvMED training requirements defined by CO (IAM), the SSAMA, or their authorised representative, for Remote Pilots and Crew within their organisation operating the following UAS:
 - 1. DASR UAS.20(a) Certified Category UAS
 - 2. DASR UAS.30(a)1 Specific Type A Category UAS, where the Authority has stipulated a requirement to comply with DASR MED.05 in the relevant UASOP.
- (h) Air Navigation Service Providers (ANSP) must meet the AvMED training requirements defined by CO (IAM), the SSAMA, or their authorised representative, for Aircraft Controllers within their organisation. ▶ GM
- (i) CO (IAM), the SSAMA, or their authorised representative, must define UAS Crew (including Remote Pilots) and Aircraft Controller AvMED training requirements:
 - 1. on the basis of a Training Needs Analysis
 - 2. consistent with AFIC Standards.
- (j) DASR MED.05 does not apply to Passengers. ▶ GM



SECTION 2: NEW MED.05 IR, GM and AMC

The following replaces the extant DASR.MED.05 IR, GM and AMC in toto. GM in brown text. AMC in purple text.

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

▼ GM

GM MED.05 – AvMED training (AUS)

- a. **Purpose. (Context)** Crew can be subject to AvMED related effects during Operations. Normally these effects can be controlled using combinations of ground and aircraft systems; Crew and Aircraft Controller knowledge, skills and behaviours, and adherence to approved procedures. **(Hazard)** Suitability For Flight can be compromised when undesired Crew or Aircraft Controller knowledge, skills and behaviours result in a failure of Crew or Aircraft Controllers to either recognise adverse AvMED related effects, or to employ appropriate corrective actions. **(Defence)** This regulation requires Accountable Managers and Sponsors to ensure Crew and Aircraft Controllers have prior awareness of the Hazards that are present when humans operate Aircraft in military roles, and receive training in the knowledge and application of AvMED. This will enhance human performance and contribute effective controls to ensuring Suitability For Flight.
- (a) The MAO or Sponsor must ensure Aircrew are trained in AvMED prior to conducting flight operations in a military Configuration Role and Environment (CRE) IAW the requirements of the approved Institute of Aviation Medicine (IAM) Learning Management Packages (LMP). ▼ GM
▼ AMC

GM MED.05(a) – AvMED training

- a. Aircrew may achieve AvMED training requirements by successfully completing initial AvMED training conducted by the Institute of Aviation Medicine (IAM).

AMC MED.05(a) – AvMED training

- a. The MAO or Sponsor may meet the AvMED training requirements by ensuring that Aircrew complete the appropriate AvMED training to their CRE conducted by the Institute of Aviation Medicine (IAM) or the relevant Single Service Aviation Medicine Advisor (SSAMA).
- b. The SSAMA is responsible for AvMED advice to the relevant Service; and ensuring AvMED training meets COMAUSFLT, COMD AVNCOMD, or ACAUST (as applicable to the relevant Service) requirements. AvMED training should:
- i. address the common Hazards present when Aircrew operate Aircraft in the military CRE
 - ii. be tailored to target specific Aircraft Hazards associated with the relevant Service
 - iii. regardless of Service, ensure that Aircrew are provided an appropriate level of AvMED training for their specific Aircraft Type.

- c. AvMED training should include:
- i. lectures in AvMED appropriate to CRE of Aircraft Type to be operated
 - ii. where appropriate, practical hypoxia awareness training that may include:
 - (a) exposure to a rapid decompression
 - (b) exposure to pressure breathing
 - (c) demonstration of the effect of hypoxia on night vision.
 - iii. where appropriate:
 - (a) demonstrations of spatial disorientation, including simulator-based demonstrations of spatial disorientation in fixed or rotary-wing aircraft
 - (b) centrifuge training including exposure to the high-G environment and instruction in the correct application of the anti-G straining manoeuvre
 - (c) training and demonstration in parachute descent and landing fall
 - (d) training and demonstration of physiologic limitations with use of Night Vision Devices (NVD)
 - (e) training and practical demonstration of the ejection seat
 - (f) other training related to fast jet, fixed wing or rotary wing aircraft specifics
 - (g) Physiological Event Recognition and Recovery Training (PERRT).
 - iv. **Other specific Aircrew training needs.** For example, Aircrew Instructors may require training detailing the AvMED aspects of the instructional flight environment.
- d. **Documentation.** The MAO or Sponsor should ensure all individuals' AvMED training results are recorded.¹ (¹ Sponsor only applicable when required by DASR NDR.05(b) or DASR MED.05(g)) Acceptable means include: certificates, PMKeys reporting, or annotation in flying logbooks.
- (b) By derogation from DASR MED.05(a):
1. Aircrew who are not performing military CRE flying related duties (for example, when flying under the Aircrew Currency Flying Scheme (ACFS)) are exempt from AvMED training Currency requirements. ▼ GM

GM MED.05(b)1 – Military CRE flying related duties

- a. Aircrew are performing military CRE related flying duties when operating Defence Registered Aircraft. Aircrew are not performing military CRE related flying duties when operating a NDRA in a CRE substantially similar to an equivalent civilian Aircraft Type. For example, Aircrew participating in the ACFS, operating entirely in accordance with the DefAA recognised NAA regulations, and with no specific military aspect to the CRE, is a case where the Aircrew are not performing in a military CRE. However, where there is a military aspect to the CRE (such as Aircrew conducting VIP tasking in a NDRA, where the operation may include requirements to operate outside the normal crew duty limits prescribed by the NAA) Aircrew are performing military CRE related flying duties.

2. Aircrew that have completed AvMED training conducted by Air Force Interoperability Council (AFIC) member nations are exempt from the requirement to complete AvMED training. ▼ GM

GM MED.05(b)2 – Recognition of AvMED training

- a. Air Force Interoperability Council (AFIC) Air Standards detail the requirements for AvMED training of each AFIC member nation. AvMED training that meets the AFIC requirements is acceptable to other AFIC member nations—allowing Aircrew to perform flying related duties with any AFIC member nation. MAOs or Sponsors may refer instances of AvMED training conducted by non-AFIC member nations to the relevant Single Service Aviation Medicine Adviser (SSAMA) for advice regarding recognition of prior learning (RPL).
- (c) Where a MAO or Sponsor identifies a requirement for additional AvMED related training to that provided by the IAM LMPs, this training must be designed and developed in consultation with, and conducted under the supervision of, Commanding Officer (CO) IAM, Single Service AvMED Adviser (SSAMA) or their authorised representative.
- (d) The MAO or Sponsor must ensure Aircrew maintain Currency, as follows: ▼ GM ▼ AMC

GM MED.05(d) – AvMED refresher and SAVMED training

- a. **AvMED refresher training.** AvMED refresher training is conducted by CO (IAM) or a SSAMA to renew AvMED Currency
- b. **SAvMED training.**
 - i. The five-year Currency period for Aircrew AvMED training, benchmarked on AFIC standards, presents a Hazard that knowledge and skills may fade throughout the Currency period. SAVMED training provides a control to the Hazard of Aircrew knowledge and skill fade. Additionally, SAVMED training provides a means for MAOs and Sponsors to provide tailored AvMED related training pertinent to contemporary or emergent AvMED issues affecting their operation.
 - ii. SAVMED differs from AvMED training in that it is conducted by a SAMLO and has no defined practical elements. Commanders may schedule SAVMED training pertinent to their capability at any time and any location—providing significant flexibility to ensure Aircrew SAVMED currencies are met.

AMC MED.05(d) – SAVMED training

- a. The MAO or Sponsor should provide annual SAVMED training.
- b. SAVMED training may include:
 - i. topics appropriate to the CRE of Aircraft Type being operated
 - ii. physiological limitations of Aircrew, and how to:
 - (a) mitigate these limitations

- (b) recognise and recover from approaching or exceeding these limitations.
 - iii. AvMED aspects of recent aviation accidents or incidents relevant to the Type being flown.
 - c. **Documentation.** The MAO or Sponsor should ensure all individuals' SAvMED training attendances are recorded.² (² Sponsor only applicable when required by DASR NDR.05(b) or DASR MED.05(g)) Acceptable means include: certificates, PMKeys reporting, annotation in flying logbooks; or an entry in Ultra Flight Pro, PEX or equivalent.
1. the maximum AvMED training Currency period, post initial AvMED training or AvMED refresher training, is five years ▼ GM
- GM MED.05(d)1 - AvMED Currency**
- a. A five year AvMED Currency period is made available to the MAO or Sponsor to set appropriate compliance periods and is harmonised with the AFIC Air Standard. The MAO or Sponsor may impose more stringent Currency requirements.
2. by derogation from DASR MED.05(d)1 in consultation with the CO (IAM), SSAMA or their authorised representative and risk managed IAW DASR.SMS: ▼ GM
- GM MED.05(d)2 - AvMED Currency**
- a. The Currency extensions allowed for in DASR MED.05(d)2 should only be applied in extenuating circumstances (ie after the decision maker has conducted risk management IAW DASR.SMS and consulted with CO (IAM), SSAMA or their authorised representatives, the operational need to apply an extension is warranted when weighed against the residual risk). Extenuating circumstances excludes the routine or casual application of Currency extensions.
 - (i) the member's Commanding Officer may grant an extension of not more than 30 days
 - (ii) the MAO AM may grant a further extension.
3. Supplemental Aviation Medicine (SAvMED) training Currency is initially set through completion of initial AvMED training, and reset through either AvMED refresher training, or SAvMED training
4. the maximum SAvMED Currency period is three years
5. additionally, SAvMED training must be completed in the period between two and four years following initial AvMED or AvMED refresher training.
- (e) The MAO or Sponsor must obtain endorsement from CO (IAM) or SSAMA or their authorised representative, or Regional SAvMO prior to the conduct of Squadron Aviation Medical Liaison Officer (SAMLO) provided SAvMED training. ▼ GM ▼ AMC

GM MED.05(e) – Squadron Aviation Medical Liaison Officer (SAMLO)

- a. A SAMLO 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 SAvMO or Squadron AvMOs. SAMLOs are a link between units and IAM on all AvMED related matters. SAMLO is a secondary duty for Aircrew assigned by their unit
 - b. A SAMLO may also assist in the conduct of decentralised Physiological Event Recognition and Recovery Training (PERRT), conducted by IAM, subject to meeting the additional pre-requisite requirements.³ (³ DASR MED.05(f) refers)
- (f) Aircrew appointed as a unit SAMLO must meet:
- 1. initial and ongoing training requirements (defined by CO IAM) before exercising the privilege of conducting SAvMED training
 - 2. additional initial and ongoing training requirements (defined by CO IAM) before exercising the privilege of assisting in the conduct of PERRT by IAM.
- (g) Persons authorising and operators of Uncrewed Aircraft Systems (UAS) must meet the AvMED training requirements defined by CO (IAM), the SSAMA, or their authorised representative, for Remote Pilots and Crew within their organisation operating the following UAS: ▼ GM

GM MED.05(g) – Remote Pilots

- a. Although Remote Pilots and UAS Crew are normally employed in ground roles, there may be a requirement for tailored AvMED training (for Crew, only where there is a Non-Technical Skills (NTS) relationship with the Remote Pilot critical to flight safety) relevant to their CRE.
 - 1. DASR UAS.20(a) Certified Category UAS
 - 2. DASR UAS.30(a)1 Specific Type A Category UAS, where the Authority has stipulated a requirement to comply with DASR MED.05 in the relevant UASOP.
- (h) Air Navigation Service Providers (ANSP) must meet the AvMED training requirements defined by CO (IAM), the SSAMA, or their authorised representative, for Aircraft Controllers within their organisation. ▼ GM

GM MED.05(h) – Aircraft Controllers

- a. Although Aircraft Controllers are normally employed in ground roles, there may be a requirement for tailored AvMED training relevant to their CRE. AvMED subjects of relevance to Aircraft Controllers may include (but are not necessarily limited to):
 - i. information to enable Aircraft Controllers to support Crew suffering the effects of AvMED related issues
 - ii. information regarding the maintenance of Aircraft Controllers health and fitness to perform Aircraft Controller duties (such as information regarding temporarily medically unfit to control periods associated with certain activities or medications).
- (i) CO (IAM), the SSAMA, or their authorised representative, must define UAS Crew (including Remote Pilots) and Aircraft Controller AvMED training requirements:

1. on the basis of a Training Needs Analysis
2. consistent with AFIC Standards.

(j) DASR.MED.05 does not apply to Passengers. ▼ GM

GM MED.05(j) – AvMED related Hazards to Passengers

- a. The control for AvMED related Hazards to Passengers is captured in DASR AMC ORO.70(a), *Pre-Flight Briefings*.