



AVIATION MEDICINE COLOUR VISION ASAP TECHNICAL WORKING GROUP TASKING INSTRUCTIONS and **FIRST REPORT**

2 May 2024

The Aviation Medicine Technical Working Group is established to operate and report to the Aviation Safety Advisory Panel (ASAP) in accordance with the Terms of Reference of the ASAP dated November 2021 (or as amended).

BACKGROUND/CONTEXT

The role of the TWG is to provide relevant technical expertise and industry sector insight on colour vision deficiency and its assessment against the medical standard set out in CASR Part 67. The TWG will consider and provide advice on implementing CASA's Aviation Safety Committee in-principle decision to provide for an option of two tests to be available for individuals to meet the necessary medical standard for applicants who have not passed the initial colour vision screening and assessment tests.

PURPOSE

- Provide industry sector insight and understanding of current issues relating to colour vision deficiency, meeting the medical standard of CASR Part 67, and medical certification in the presence of colour vision deficiency.
- Provide current, relevant technical expertise for the consideration and analysis of a draft legislative instrument schedule that will describe the required content of the tests, how the tests will be conducted and documented, and the thresholds that will determine when an applicant is considered to have passed the tests.
- Consider the public consultation strategy and offer advice on implementation
- Provide advice on the content of supporting materials such as training for examiners for all CVD tests, guidance materials for Flight Examiners, forms used for the documentation of test conduct and reporting of results.

SPECIFIC OBJECTIVES

Provide guidance to the ASAP on the required content, conduct and documentation to be contained within a Schedule of a legislative instrument for:

- The Aviation Colour Vision Assessment, being the combination of the previous OCVA and the new ACVA
- The CAD for colour vision assessment in aviation medical certification
- Provide draft recommendations to the ASAP on the required content, conduct and documentation of:
- Guidance and supporting material for implementation of these two colour vision assessments

TWG MEETINGS

- 07 March 2024
- 19 March 2024
- 26 April 2024 – First Report to the ASAP

ROLES AND RESPONSIBILITIES

| CASA | TWG Members |
|---|--|
| <ul style="list-style-type: none">• Organise meetings and workshops, and produce agendas, papers and supporting materials• Facilitate meetings and workshops• Record insights and findings• Communicate openly and consistently with TWG members about project status and issues• Respect the time of all TWG members by minimising work required to achieve outcomes | <ul style="list-style-type: none">• Commit to supporting the project objectives and timeline• Engage and collaborate constructively at all times• Prepare for working group activities by reviewing agendas, papers and supporting materials• Provide timely and considered advice in meetings, and between meetings as required• Respond to requests for feedback on draft materials within agreed timeframes |

CONSENSUS

A key aim of the TWG is that a consensus be reached, wherever possible, in the finalisation and preparation of advice for the ASAP.

The TWG will be guided by the ASAP Terms of Reference (Section 6 - attached) with respect to determining and documenting consensus.

MEMBERSHIP

Members of the TWG have been appointed by the ASAP Chair, following ASAP processes.

The Aviation Medicine Colour Vision TWG consists of the following members:

- Dr Jeremy Robertson, Aus ALPA
- John O'Brien, Colour Vision Defective Pilots Association
- Dr Adrian Smith, Defence Medicine
- Matt Handley, Chief Pilot, Aerotec
- Steve Cornell, AIPA
- Lex Garriock, Virgin Australia
- Ray Cronin, AHIA

The TWG CASA Lead, Kate Manderson, was supported by CASA subject matter experts during the meetings.

The ASAP Secretariat was represented by Angela Pearman and Kathryn Scarano.

MEETING SUMMARY – 07 March 2024

- The TWG discussed the possible cases of applicants previously passing a suitable colour vision test and in what circumstances we would look at them requiring undertaking another test. It was discussed that certain eye diseases or conditions could warrant such need (Glaucoma, macular degeneration etc...), these would be further explored in the clinical practice guidelines.
- There was also discussion in regard to somebody failing a test and that this may have been due to specific circumstances that may change in the future, these would also be looked at on a case by case basis and would need the opinion and reasoning from an ophthalmologist and if it is appropriate to undertake re-testing.
- The TWG was in agreement of the use of a legislative instrument schedule that will describe the required content of the tests, how the tests will be conducted and documented, and the thresholds that will determine when an applicant is considered to have passed the tests.

MEETING SUMMARY – 19 March 2024

- The TWG discussed the naming of the operational test. It was a general view to call it the AOCVA (Australian Operational Colour Vision Assessment).
- Referring to paragraph 6a and 6b rather than Tier 1 (Ishihara plates) and Tier 2 (Farnsworth Lantern test)
- Due to flying hours not being an assessable element, this question will not be posed on the form. The group suggested that it would be appropriate for the assessing examiner to ask for flying hours in order to ascertain what level of flight experience the applicant has
- The wording of current restriction “Day VFR only” as per the draft CPG v1.0) to change to Not Valid for night flying:
- There will be 2 components to the test- “Flight component General” and “Flight Component PAPI
- The group discussed the possible cases of applicants previously passing a suitable colour vision test and in what circumstances we would look at them requiring to undertake another test. It was discussed that certain eye diseases or conditions could warrant such need (Glaucoma, macular degeneration etc...), these would be further explored in the clinical practice guidelines.
- There was also discussion in regard to a candidate failing a test and that this may have been due to specific circumstances that may change in the future, these would also be looked at on a case by case basis and would need the opinion and reasoning from an ophthalmologist on if it is appropriate to undertake re-testing.
- The TWG agreed to public consultation on the draft instrument and a further TWG to be convened to discuss what may go into the Handbook/CPG’s in regard to multiple tests being undertaken.

MEETING SUMMARY – 26 April 2024

- The TWG discussed what responses had come through from the public consultation that closed on 14 April 2024.
- 94 responses were received:
 - 58 were from pilots with colour vision deficiency
 - 22 were from pilots who did not indicate that they have a colour vision deficiency
 - 11 were received by medical examiners, including DAMEs and CASA eye examiners
 - 6 were submitted on behalf of an organisation.
 - 90 respondents provided feedback through comments or organisational position statements, each of which was assessed to identify themes for further exploration and discussion
 - 63 responses were positive or supportive of the proposed instrument
 - 26 respondents requested that their submissions remained confidential
 - 3 were negative
 - the remaining responses did not indicate support or dissatisfaction
- The TWG discussed challenges with pilots who have undertaken the previous New Zealand OCVA, and if these affected pilots would need to undergo the AOCVA once it is established. These would be looked at on a case by case basis, depending on how thorough the previous reporting was, some OCVA would be able to be accepted with no need for further testing, the main indicator of this is if there was a focused assessment on the Precision Approach Path Indicator (PAPI). The new AOCVA form will not be adding any new elements, it is just giving a structured and detailed approach to the PAPI.
- The creation of the form will need to include the document control team within CASA, this will cross reference with the flight examiner handbook to ensure content is up to date and accurate.
- A future TWG may be convened to discuss the possibility of webinar and online learning in order for the flight examiners to be confident and capable of what the AOCVA will entail.

TWG SUMMARY OF OUTCOMES – First TWG Report, 2 May 2024

Topic 1 – Does the TWG support the making of the proposed instrument?

FULL CONSENSUS / GENERAL CONSENSUS / DISSENT

Comments:

- Overall, feedback from the aviation and medical community has reassured us the proposed requirements are suitable, the instrument is clear, and it will work as intended.
- Confirmation of the final policy and instrument will be made in early May 2024
- CASA will finalise the Clinical Practice Guidelines and Flight Examiner Handbook incorporating information to support the testing requirements.
- Testing is expected to be available by mid-May 2024
- Every member of the Technical Working Group was in full agreement with the advice.

CASA Lead Summary

Kate Manderson

Comment:

- CASA acknowledges the collaborative approach of this Technical Working Group and the general consensus reached to make and commence the instrument as currently drafted, noting the outstanding issues should be reviewed
- CASA will publish the Summary of Consultation, together with responses where CASA has been given approval, prior to the making of the instrument.

Appendices

1. Extract from ASAP Terms of Reference

Appendix 1

ASAP and TWG Terms of Reference regarding Consensus (Extract)

- 6.1 A key aim of the ASAP is that a consensus be reached, wherever possible, in the finalisation and preparation of advice to the CEO/DAS.
- 6.2 For present purposes, 'consensus' is understood to mean agreement by all parties that a specific course of action is acceptable.
- 6.3 Achieving consensus may require debate and deliberation between divergent segments of the aviation community and individual members of the ASAP or its Technical Working Groups.
- 6.4 Consensus does not mean that the 'majority rules'. Consensus can be unanimous or near unanimous. Consensual outcomes include:
 - 6.4.1 **Full consensus**, where all members agree fully in context and principle and fully support the specific course of action.
 - 6.4.2 **General consensus**, where there may well be disagreement, but the group has heard, recognised, acknowledged and reconciled the concerns or objections to the general acceptance of the group. Although not every member may fully agree in context and principle, all members support the overall position and agree not to object to the proposed recommendation.
 - 6.4.3 **Dissent**, where differing in opinions about the specific course of action are maintained. There may be times when one, some, or all members do not agree with the recommendation or cannot reach agreement on a recommendation.

Determining and Documenting Consensus

- 6.5 The ASAP (and Technical Working Groups) should establish a process by which it determines if consensus has been reached. The way in which the level of consensus is to be measured should be determined before substantive matters are considered. This may be by way of voting or by polling members. Consensus is desirable, but where it is not possible, it is important that information and analysis that supports differing perspectives is presented.
- 6.6 Where there is full consensus, the report, recommendation or advice should expressly state that every member of the ASAP (or Technical Working Group) was in full agreement with the advice.
- 6.7 Where there is general consensus, the nature and reasons for any concern by members that do not fully agree with the majority recommendation should be included with the advice.
- 6.8 Where there is dissent, the advice should explain the issues and concerns and why an agreement was not reached. If a member does not concur with one or more of the recommendations, that person's dissenting position should be clearly reflected.
- 6.9 If there is an opportunity to do so, the ASAP (or Technical Working Group) should reconsider the report or advice, along with any dissenting views, to see if there might be scope for further reconciliation, on which basis some, if not all, disagreements may be resolved by compromise.