

# Response to CASA consultation

*‘Colour vision deficiency testing  
process for pilots’*  
(CD 2404FS)

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**Colour Vision Defective Pilots Association**  
[www.cvdpa.com](http://www.cvdpa.com)



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# Respondent Information

**Personal Information:** Dr Arthur Pape / John O'Brien / Clinton McKenzie (Directors)

**Email:** [john.obrien@cvdpa.com](mailto:john.obrien@cvdpa.com)

**Which of the following best describes the group you represent?**

- ✓ Aircraft owner / operator
- ✓ Pilot
- ✓ Flight examiner
- ✓ Designated aviation medical examiner (DAME)

**Consent to publish submission?**

- ✓ CVDPA gives permission for our submission to be published in full

**Do you have any comments about the proposed instrument?**

- ✓ Yes (see next page)

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## General Feedback

CVDPA overall welcomes the proposal by CASA to re-implement an operational assessment for the purposes of CASR 67.150 (6)(c) and 67.155 (6)(c). The proposed AOCVA simulates an operational situation, as required by those CASR.

Our organisation continues to fundamentally disagree with the proposition that the CAD test simulates an operational situation and so we assert that it cannot be validly determined as a 'third tier' test. Rather, the CAD test would be better suited as a second-tier test (similarly to NZ CAA) in the event of any future legislation changes.

However, we will not challenge this aspect further provided that the AOCVA remains available as an alternative third tier test, the passing of which results in the removal of all CVD restrictions.

The provided specific feedback on the wording draft instrument suggests several improvements and simplifications for CASA's consideration.

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## Detailed Feedback: Proposed Instrument

In the context of the operative provisions of the instrument, the Schedules are supposed merely to describe the circumstances and ways in which an actual individual assessment must be carried out, in order for that assessment to be one for the purposes of the specified provisions of CASR.

In the case of the AOCVA, the test must be “administered in accordance with Schedule 1” (by an approved Flight Examiner): clause 4(1). In the case of the CAD, the test must be “administered in accordance with Schedule 2”: clause 4(2).

However, most of the provisions of the draft Schedules either have nothing to do with the circumstances or ways in which *an actual individual assessment must carried out*, or deal with matters that are already dealt with in the Flight Examiner Handbook (FEH).

The simple test is this: What can or must a person administering one of the determined assessments do or refrain from doing, as a consequence of a piece of text in the schedules. If the answer is “nothing”, the text is redundant.

**Recommendation:** Remove the redundant text

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# Detailed Feedback: Proposed Schedule 1

## Under the heading “Australian Operational Colour Vision Assessment (AOCVA)”:

Paragraph 1 is merely an assertion of the aim of the AOCVA. Whether the AOCVA achieves the stated aim depends on the substance of the test. The substance of the test is dealt with in the FEH.

**Recommendation:** Delete the first paragraph as redundant.

Paragraph 2 is merely a restatement of a fact – the AOCVA is already defined in the instrument – and a purported constraint on amendments to the FEH. Neither is a circumstance or way in which an individual assessment must be carried out.

**Recommendation:** Delete the second paragraph as redundant.

Paragraph 3 is merely an assertion of the regulatory consequences of passing the determined test. It is not a circumstance or way in which an individual assessment must be carried out.

**Recommendation:** Delete the third paragraph as redundant.

Paragraph 4 is merely an assertion of the regulatory consequences of failing the determined test and a statement as to what CASA might do about that in individual cases. Neither is a circumstance or way in which an individual assessment must be carried out.

**Recommendation:** Delete the fourth paragraph as redundant.

Paragraph 5 is merely an assertion as to what might happen in various post-assessment circumstances. None of it is a circumstance or a way in which an individual assessment must be carried out.

**Recommendation:** Delete the fifth paragraph.

**Given all of the above:** Delete the heading and all of the text under the heading “Australian Operational Colour Vision Assessment (AOCVA)”.

## Under the heading “Eligibility”:

Paragraph 1 is a relevant circumstance, up to the first “AOCVA”. The remaining words of encouragement are not a circumstance or way in which an individual assessment must be carried out.

**Recommendation:** Delete all words after the first “AOCVA”.

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Paragraph 2 contains circumstances relevant to carrying out an individual assessment. However, there is no safety justification for the requirement that a candidate already hold a medical certificate before the candidate is eligible to undergo one of the determined assessments.

An applicant either demonstrates compliance with the colour perception criterion in the medical standard in accordance with CASR 67.150(6)/67.155(6), or the candidate does not. Whether the applicant does or does not hold a medical certificate at the point the assessment is carried out has no causal connection with and is irrelevant to demonstration of compliance with the criterion.

Further, the eligibility criterion creates a paradox for new entrants who want to find out whether they comply with the colour perception criterion in the medical standard. The effect of the eligibility requirement is that people who may meet the standard are denied the opportunity to demonstrate compliance with the standard until – apparently - after they’ve first been assessed as not meeting the standard so as to obtain a medical certificate so as to be eligible to undergo the assessment to demonstrate compliance.

In contrast, documented unsuccessful results from the colour vision assessments specified 67.150(6)(a) and (b), or 67.155(6)(a) and (b), of CASR, *is* a circumstance in which an actual individual assessment must be carried out, because that circumstance is relevant to the prescribed way in which compliance with the colour perception criterion in the medical standard must be demonstrated.

For comparison, the NZ CAA does not require candidates to hold a medical certificate prior to undertaking their OCVA. Their [website](#) describes who can take colour vision assessment as being:

- Current pilots holding class 1 and/or 2 medical certificates with colour vision restrictions;
- Trainee pilots applying for a class 1 and/or 2 medical certificate;
- People wanting to become a pilot who are yet to enter expensive pilot training;

**Recommendation:** Reword Paragraph 2 to “Applicants must have documented unsuccessful results from the colour vision assessments specified in 67.150 (6)(a) and (b), or 67.155 (6)(a) and (b)”.

*Under the heading “Test Requirements”:*

The logical underpinnings of this paragraph are not obvious:

*“If the applicant fails the AOCVA twice, they are not eligible for assessment using the CAD. If the applicant is assessed using the CAD and does not meet the required thresholds, they can subsequently undergo AOCVA assessment.”*

How can the outcomes of a CAD test be interpreted differently, depending on what happened before the test was carried out? CASA seems not to have taken into account the fact that *any* operational test can be failed, simply as a consequence of incompetence rather than colour vision deficiency. What if someone fails AOCVA twice but then passes Ishihara?

The instrument deals with demonstration of compliance with just one criterion in the medical standards: the colour perception criterion. Either the CAD is a valid ‘third tier’ test or it isn’t. If it is a valid ‘third tier’ test, passing it results in demonstration with the colour perception criterion.

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**Recommendation:** In any event, and assuming there is some logical underpinning to the content of the paragraph, its substance is evidently an eligibility criterion for undergoing the assessment and, therefore, should be under the heading “Eligibility”.

Under the heading “Examiner requirements”:

The paragraph is redundant. The substantive provisions of the draft instrument already require the assessment to be administered by “a flight examiner who is approved by CASA to administer the test” and there are already rules around their compliance with the FEH.

**Recommendation:** Delete as redundant.

Under the headings “Ground component”, “Flight Component – General” and “Flight Component – PAPI”:

Much of the content is redundant because it is already contained in the FEH.

**Recommendation:** Consider amending draft clause 4(1) of the instrument by adding the underlined text as follows:

The Australian Operational Colour Vision Assessment, administered in accordance with Schedule 1 and Flight Examiner Handbook Appendix X by a flight examiner who is approved by CASA to administer the test, is determined as a test for the purposes of paragraphs 67.150(6)(c) and 67.155(6)(c) of CASR

Amend the rest of the provisions under those headings so that they deal *only* with matters that are not already dealt with in the FEH.

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## Detailed Feedback: Proposed Schedule 2

As stated earlier, CVDPA disagrees with the proposition that the CAD test simulates an operational situation. The inventor of the test, Professor John Barbur, also conceded during a 2014 AAT Hearing (*O'Brien v CASA*)<sup>1</sup> that the CAD did not simulate an operational situation.

Schedule 2 also states that the design of the CAD test was determined using the “PAPI lights at Gatwick International Airport, UK.” In fact, the validation process used a PAPI simulator which was not representative of actual PAPI used in aviation. Rather, the PAPI simulator used was conservative in that it eliminated secondary cues such as brightness cues that are designed into the real PAPI.

Secondly, the pass mark in the CAD test was adjusted so as to be conservative. A significant portion of candidates who were able to read the PAPI simulator without error fall below the prescribed CAD pass mark. As such, the CAD test applies two levels of conservatism which results in a significant proportion of CVD candidates being unnecessarily excluded. Please see attached supplementary submission for consideration which was drafted by our affiliate organisation in New Zealand, Colour Vision Aviators, which discusses the CAD test flaws in greater detail.

In any case, if the CAD test is to remain as an alternative third tier test, the text under the heading “CAD Test” is simply a series of assertions that have no relevance to the circumstances or ways in which an actual CAD test must be carried out in an individual case. Those are matters dealt with in the other provisions of Schedule 2.

**Recommendation:** Delete the heading “CAD Test” and the text as redundant.

Regarding “Eligibility”, we make the same comment and recommendation as for AOCVA: There is no safety justification for requiring a candidate to already hold a medical certificate. An applicant either demonstrates compliance with the colour perception criterion in the medical standard, or they do not. Whether the applicant does or does not hold a medical certificate at the point the assessment is carried out has no causal connection with and is irrelevant to demonstration with the criterion.

**Recommendation:** Reword Paragraph 2 to “Applicants must have documented unsuccessful results from the colour vision assessments specified in 67.150 (6)(a) and (b), or 67.155 (6)(a) and (b)”.

Regarding “Pilots who have failed AOCVA are not eligible for issuance of an aviation medical certificate based on passing the CAD test.”, we make the same comment and recommendation as for AOCVA: How can the outcomes of a CAD test be interpreted differently, depending on what happened before the test was carried out?



**Recommendation:** In any event, and assuming there is some logical underpinning to the content of the paragraph, its substance is evidently an eligibility criterion and, therefore, should be under the heading “Eligibility”.

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<sup>1</sup> *O'Brien v. Civil Aviation Safety Authority* [2015] AATA 93, <http://www6.austlii.edu.au/cgi-bin/viewdoc/au/cases/cth/AATA/2015/93.html>



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