

The background of the slide is a photograph of an airport tarmac. In the center, there is a long, low hangar with a corrugated metal roof. Two small, high-wing aircraft are parked on the tarmac in front of the hangar. The sky is clear and blue. The text is overlaid on this image.

WELCOME TO THE AEROBATIC SEMINAR 2026

David Pilkington & Stjepan Nikolic

Flight Deck Bar & Grill

Starting Aerobatics and Getting into Contests

- Shaun Holmes, a CASA Aviation Safety Advisor, apologies due unwell
- DJP - regulatory update on matters related to aerobatics
- Louis Delacratez on Aerobatic Data Loggers - how flight data can sharpen your aerobatic flying
- Nathan Hassall from Tristar - Cessna 152s: Why and Why Not
- Lawrie Byrnes from Base Aviation on learning aerobatics, apologies due unwell
- Dr Gail Iles - Parabolic flights: Going Zero-G in the 'Vomit Comet'
- Ed Ross - Navigating entry level Aerobatics - My personal journey
- Stjepan Nikolic on how new aerobatic pilots can enjoy the sport of competition aerobatics
- David Pilkington on how to break an aeroplane and the flight mechanics of aerobatics
- David Prossor – Flight Instructor of the Year with some thought-provoking comments!

- As Shaun Holmes was unable to attend, he sent me this document from Ken Alonso as a regulatory update for aerobatic pilots:

“Here’s an advance copy of the draft of Part 61 Manual of Standards amendment Schedule 1 errata corrections regarding aerobatic flight activity endorsements. The unit numbering of the FAE units is now correct, as are the units to be covered for each FAE.

I’ve included Subpart 61.S—Flight activity endorsements for reference which shows the prerequisites for easier reference, so you can see what has had to be covered before dropping to the next lower level.

I’ve also included an excerpt from CASA 62/20 — Conditions on Flight Crew Authorisations which has tripped up a few instructors stepping down through the levels – some instructors/examiners aren’t testing or being tested correctly.”

- The document is 4 pages and I have cut it back to about half that here. If anyone else wants a copy – email me. (It is on the website now.)
- Much of it is for aerobatic flight instructors.

Regulatory Update for Aerobatics

Draft copy of Part 61 Manual of Standards amendment Schedule 1 errata corrections regarding Aerobatic flight activity endorsements – to be read in concert with CASR Subpart 61.S—Flight activity endorsements (also provided below).

Section S Flight activity endorsements

Appendix S.1 Aerobatics flight activity endorsement

Practical flight standards

Unit code	Unit of competency
FAE-1	Aerobatics — 3,000 ft AGL
FAE-8	Spinning

Appendix S.2 Aerobatics (1,500) flight activity endorsement

Practical flight standards

Unit code	Unit of competency
FAE-1	Aerobatics — 3,000 ft AGL
FAE-2	Aerobatics — 1,500 ft AGL
FAE-8	Spinning

- The basic aerobatic endorsement and the A150 here.
- Similar text for the lower level endorsements.
- A reminder for the basic aerobatics endorsement that the trainee must demonstrate competency for spinning even if a spin endorsement is held.
- A reminder for the A150 that the trainee must demonstrate competency for the basic endorsement also, including the underpinning knowledge.

- FAE-3 is identical to FAE-2 apart from 1,000 ft instead of 1,500 ft.
- What is the practical difference in these Practical Flight Standards?
- Do you just do the same but come down lower?
 - Flying lower is not a standard of competency.
 - What are the real practical standards for a 1500 ft endorsement? I have my own.

- FAE-4 for 500 ft adds “demonstrate safe behaviour.” How is that assessed?

- I look forward to the AC on Aerobatics which should explain it all.
 - The first draft of that was 25 years ago.

Regulatory Update for Aerobatics

61.1155 Limitations on exercise of privileges of flight activity endorsements—medical certificates

- (1) This regulation applies to the holder of any of the following endorsements:
 - (a) an aerobatics flight activity endorsement;
 - (b) an aerobatics (1 500) flight activity endorsement;
 - ~~(ba)~~ an aerobatics (1 000) flight activity endorsement;
 - (c) an aerobatics (500) flight activity endorsement;
 - (d) an aerobatics (unlimited) flight activity endorsement;
 - (e) a formation aerobatics flight activity endorsement;
 - (f) a spinning flight activity endorsement.
- (2) The holder is authorised to conduct an aerobatic or spinning manoeuvre only if the holder:
 - (a) holds a current class 1 or 2 medical certificate; or
 - (b) is accompanied by another pilot who:
 - (i) holds a current class 1 or 2 medical certificate; and
 - (ii) occupies a flight control seat in the aircraft; and
 - (iii) is authorised, under this Part, to conduct the manoeuvre.

“Restrictions on aerobatics and formation flying have been recommended for removal, with current limitations on these operations considered sufficient safety mitigators. However, aerobatics will be permitted solo only, and formation flights can carry only one other person in the aircraft. Neither will be permitted in air shows, and competition aerobatics banned. Formation aerobatics is also banned.”

- The text at the bottom of the slide is from Australian Flying magazine.
- This is relevant in the context of proposed changes to the limitations of the class 5 medical. Aerobatics would be approved with some limitations:
 - Solo only – hopefully an instructor can provide dual training?
 - No competition aerobatics which is disappointing. The Graduate and Sportsman categories are not hard on the body. Perhaps a bit of mental stress due to it being a contest but offset by the available coaching at the contest and the discipline of the contest organisers. In my opinion, less risk than a recreational pilot flying similar aerobatic manoeuvres solo.
- By comparison, the rules would allow someone with a class 5 medical to fly an advanced aeroplane like an Extra 330 and conduct aerobatics up to 10G down to ground level with a passenger.
 - 10G and the high rotational rates would be the particular issues for the class of medical
 - Flying at extremely low altitude with another pilot adds to the risk
- I would like to see the risk assessment for this proposal.
 - Mark Newton noted “that Class 2 holders are never assessed for G tolerance, so nobody in CASA has the faintest idea about whether they're medically qualified to do aerobatics”

Regulatory Update for Aerobatics

And to cover something that's coming up a bit, but is not immediately obvious when providing TEs for the lower levels (not in the CASR).

CASA 62/20 — Conditions on Flight Crew Authorisations (Edition 3) Instrument 2020

7 Condition on an instructor rating

It is a condition on an instructor rating that the holder of an instructor rating with a training endorsement may only conduct training for a flight activity endorsement if:

- (a) the holder has demonstrated competency in doing so to a person authorised to conduct a flight test for the relevant training endorsement; and
- (b) the person authorised to conduct the flight test mentioned in paragraph (a) holds the flight activity endorsement.

- A reminder for flight instructors – most are probably unaware
- Let's consider an example.

Ed becomes an aerobatic instructor and later gets an A150 FAE.

- Scenario: Ed gets his AERO T.E. and subsequently obtains an A150.
- He will need to demonstrate competency in instructing for an A150.
- Ed may not be able to easily get a flight examiner who has the qualification and who also satisfies the same condition on their own instructor rating.
- He could get me to assess him for that competency however I am not a Flight Examiner so cannot do an FIR PC. An additional expense for him.
- Same again for the A100 and A050. Any Flight Examiners?
- I am unaware of any requirement to advise this to CASA so it is not in their database for anyone to check it?
- This is why I stopped teaching formation flying!
 - The expense of being assessed by an examiner and paying for a second aeroplane and pilot plus some prior practice.
 - Work out how I might recoup that expense.

- My opinion is that it only matters if Ed finds himself in the hot seat at a Coroner's enquiry.
 - Like one of my friends a few years ago – it may not be pleasant - he was unfairly treated.
- Whenever I conduct a test, I show the applicant my own credentials.
 - I recommend that you ask your Flight Examiner to show you.
- So, Ed, keep a record of that assessment when you do it.
- The person who assessed me – yes, I recorded the evidence that he did it.
 - But I don't know whether he complied himself as I didn't ask.
 - Records are required to be kept for 7 years. I don't keep paper records for any longer than necessary, especially with house moves and downsizing etc.

- As for checking back to see if your Flight Examiner complies with that instrument, it can become a long chain of checking records.
- CASA demonstrated this to me some years ago when I sought to have records of my logbook endorsements added to their database.
- I was in the local CASA office to discuss my inverted spin endorsement as they had omitted this.
 - This particular FAE was introduced in about 1990 and I did mine immediately. I had been performing and teaching inverted spins since the late '70s.
 - When I showed CASA my logbook with the original stamp and signature they said that they didn't know if it was valid. They said that they didn't know if that instructor had a valid approval to do inverted spin training!
 - How did the first instructor get the approval to grant inverted spin endorsements?
- Fortunately, the inverted spin endorsement was eliminated with Part 61 and the argument disappeared.