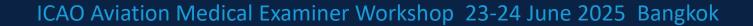


Aviation Medical Examiner Training

The NZ CAA Regulatory Training Experience

Dr Sarita Dara

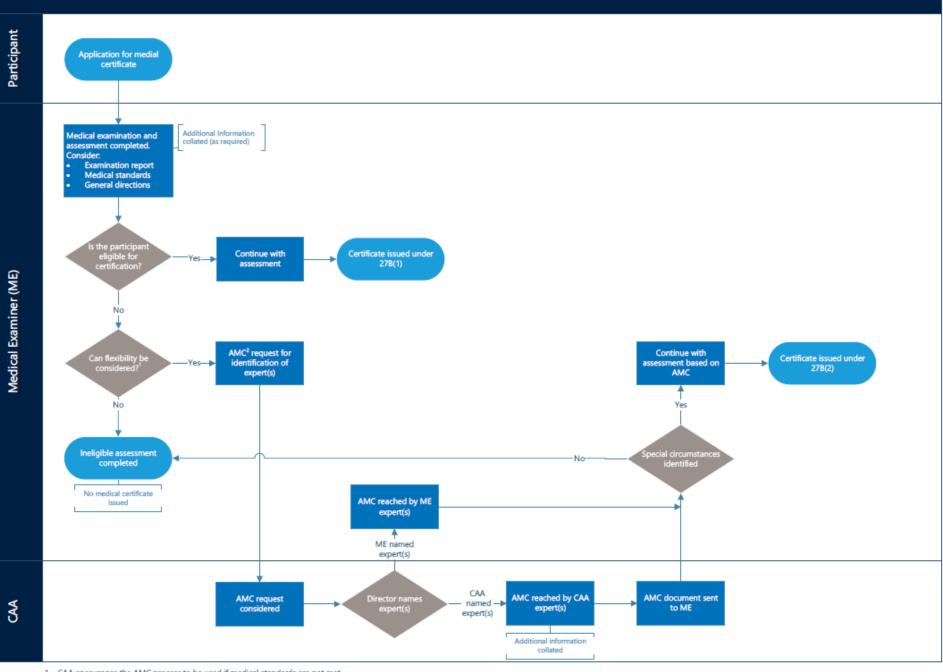
MD (Aerospace Medicine), MSS (ISU), GDOM, PGDipPH, PhD FAsMA (US), FACAsM (Oceania), FRAeS (UK), Academician (IAASM) CNZHFE, MRO Senior Medical Officer (Aviation Medicine)



Objective

Share CAA NZ's approach to Aviation Medical Examiners (AME) training and delegation

Context



Medical Certification

Civil Aviation Authority

^{1 -} CAA encourages the AMC process to be used if medical standards are not met.

^{2 -} Accredited Medical Conclusion

Becoming a medical examiner

To become a medical examiner, you must meet the requirements of Part 67. They include:

- 1. being a medical practitioner; and
- 2. having:
 - a. successfully completed aviation medicine training acceptable to the Director outlined in rule 67.161(2)(i) and being either:
 - post-graduate Diploma of Aviation Medicine from either the University of Otago or the Royal College of Physicians (London)
 - both the aviation physiology and clinical aviation medicine papers offered on a post-graduate basis by the University of Otago
 or
 - an MD Aviation Medicine from the University of Medical Sciences, Bangalore, India
 - or
 - Board Certification in Aviation Medicine (USA) or
 - equivalent post graduate aviation medicine education found acceptable by the Director, on a case by case basis.
 - b. successfully completed aviation regulatory medicine training acceptable to the Director (as in rule 67.161(2)(ii)); and
 - c. demonstrated to the Director that he or she meets the relevant competencies set out in Appendix A; and
- 3. having access to clinical, administrative and communication facilities adequate for the purpose of carrying out medical examinations to the required standard in accordance with the medical manual; and

Designation and Delegation of Medical Examiners

Schedule 2 – clause 29

Director must designate medical examiners to conduct examinations

Medical Examiner = registered medical practitioner to whom the Director has issued an aviation document under clause 29 (1) to conduct examinations under clause 2(3).

Schedule 2 – clause 27 provides for the Director to transfer his powers to Medical Examiners

Clause 27 transfer is <u>discretionary</u> (wide scope relating to any power under Schedule 2 or relevant rules except power to revoke certificates)

Clause 27(2) transfer is mandatory (limited scope and duration relating to power to issue a medical certificate under section 5(2) only)

What this means

Medical Examiners are acting as Director and are issued with instrument of delegation with conditions Decisions must be lawful, reasonable and fair

NZ Scene

Civil Aviation Act 1990 until 4 April 2025

• Civil Aviation Act 2023, effective from 5 April 2025 (schedule 2)

- 2 years to implement
 - Modernisation
 - Allows for drug & alcohol testing obligation on operators
 - Allows for drone and new technology

•

Civil Aviation Rules, General Directions etc

• Part 1: Definitions

• Part 61: Pilot licences (61.35)

• Part 67: Medical standards

• Part 90: General flying rules

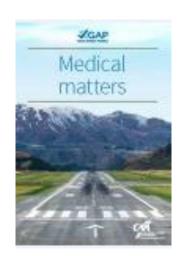
Part 99: Drug and Alcohol(DAMP)

General Directions (GD)

- Examinations Procedures
- Timing of routine examinations GD
- Temporary Medical Conditions GD
- Colour vision GD

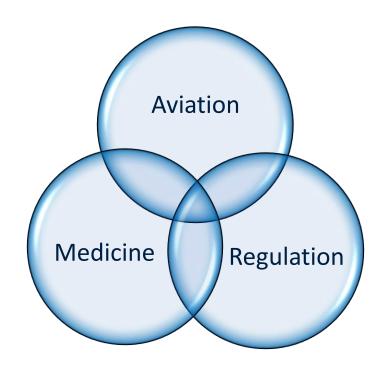
Advisory Circulars AC67 – means of compliance

Medical Manual (Medical Examiner)
Medical Information Sheets and GAP Booklet (Participants)



Why Regulatory Training Matters

- Evolving aviation complexity
- Gaps in traditional medical training
 - Clinical medicine versus regulatory medicine
- Need to keep up with regulatory best practices
- Align with organizational strategic goals: safety, consistency and adaptability
- Integrate with human factors and safety culture





AME Training Architecture

- Development of competency profiles for our Medical Examiners within the Civil Aviation Act
- Regulatory philosophy shift from purely compliance policing to performance partnership
- Benchmarking with the best practices in regulatory training
- Evolution of learning methods: e-learning, scenario based, case studies and simulation
- Integration of local medical practices legal, privacy, consent and communication
- Shared knowledge bank of clinical tools and resources for medical assessment

AME Training Architecture

- Evolved over time
- Self learning and regulatory workshops towards more competency-based model of regulatory aviation medicine
- Core focus areas: regulatory knowledge, decision making, human factors and risk communication
 - Scenarios where AMEs have delegated authority
 - Escalation thresholds
 - Oversight and support systems enabling certification decisions
- Professional and administrative support
 - CMO and SMOs
 - Medical licensing advisors
- Seminars, webinars

2023 format (as an example)

Distance teaching: Reading material, 5 Assignments.

1 February 2023	Virtual meeting - Introduction session (1 hour)
15 February 2023	Virtual meeting - Discussion/Debrief Assessment 1 (1 hour)
1 March 2023	Virtual meeting - Discussion/Debrief Assessment 2 (1 hour)
15 March 2023	Virtual meeting - Discussion/Debrief Assessment 3 (1 hour)
27-28 April 2023	2-day Course at wellington & Discussion/Debrief Assessment 4 (16 hours)
Mid-May 2023	Virtual final session post course, Debrief Final Assessment (1 hour)

Course duration $- \sim 30 - 40$ hours in total (including self learning) running from Feb to May;

21 hours of contact time with course facilitators

4 graded assignments and 1 ungraded for discussion – Total 5 assignments

Revised format 2025

Distance teaching: e learning modules, Reading material, 3 Assignments.

01 Feb 2025	Welcome.	Training	plan, Re	eadina lis	st and Resource	s via email
	,	J	,	J		

03 March 2025 Virtual meeting - Introduction session, Resources and issue Assignment 1 (2 hours)

03 March onwards e- learning modules (CAA Learning Management System) – 9 core modules with videos, quiz

25 March 2025 Virtual meeting - Debrief Assessment 1 and issue Assignment 2 (2 hours)

1-2 May 2025 2-day Course at Wellington, Workshops – 16 hours, issue Final Assignment

21 May 2025 Virtual session post course, Debrief of Final Assessment and Course Completion (1 hour)

Course duration $- \sim 30 - 40$ hours in total (including self learning) running from March to May;

21 hours of contact time with facilitators

2 graded assignments and 1 ungraded for discussion – Total 3 assignments

Training Pathway

- Pre Face to Face course
 - Feb 2025 Admin, Welcome and reading
 - March and April 2025
 - E learning (9 core modules) with Voice over power point slides, quiz
 - 2 Webinars
 - 1 graded assignment + 1 ungraded

- Face to Face Course
- Day 1
 - Introduction
 - Aeromedical Decision Making
 - Legal, MCNZ 3rd party assessment, CAA Act
 - Application process
 - How to do the medical examination
 - Forms and processes
 - Medical application and certification role play
 - Clinical resources for examination
- Day 2
 - Eye Examination Procedures workshop
 - Assignment 2 Debrief (case studies)
 - Flexibility process

 case studies
 - Suspension/ Extension— case studies
 - Conditions, Decline, Convenor process case studies
 - Introduction to Mental health and AOD: Workshop
 - Pre-Audits, CPD and Next steps to becoming Medical Examiner

- Post Face to Face course
 - May 2025
 - 1 Webinar
 - 1 marked assignment
 - Course completion

AME feedback following the 2025 course

CAA Regulatory Training, 1 - 2 May 2025 Wellington		
Number of Responses:	18	
Number of Attendees in person:	18	
Number of Attendees	19	
	Mean Response	SD
How relevant and useful?	4.78	0.43
Material presented in a balanced way?	4.67	0.49
Appropriate balance of knowledge and interactive learning?	4.17	0.79
What was your impression of the presenter's expertise	4.86	0.59
Orientation of presentation to maintain attention?	4.64	0.68
How well did the facilitator manage group dynamics?	4.64	0.54
A good investment of your time?	4.69	0.52

AME feedback following the 2025 course

100%

Facilitators were clear and answered questions

• 74 % response rate 2. Feedback about the online learning component 1. How would you rate the overall course and learning experience? GoodVery goodExcellent Ease of registration and access 4.79 Level 4 Effectiveness of online learning modules Average Rating Level 3 100% Level 2 Level 1 4. How would you rate the clarity and fairness of the examination process? 3. Webinars and Facilitators - Please provide your feedback on the following DisagreeSomewhat Agree AgreeStrongly agree Good Webinars were informative and relevant and of adequate duration Poor

Civil Aviation Authority 22 June 2025

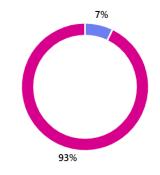
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100%

AME feedback following the 2025 course

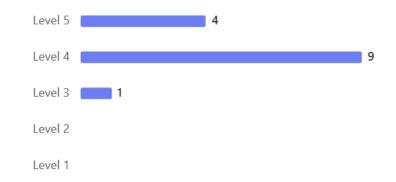
5. Was the overall course duration appropriate for the content covered?





7. How confident do you feel in applying the knowledge and skills gained from this course?





AME Training: Outcomes

- AME confident to conduct assessments
- Empowered accountable practitioners
- High quality work
- Consistency in certification assessment and outcomes
- Delivery of timely medical certification decisions closer to operational front line
- Strong partners in CAA NZ Safety Management System for safe skies

Continuous improvement

- Periodic evaluation and feedback
- Internal audits proactive as well as reactive
- Centralised documentation and decision tracking (within limits)

Challenges and Solutions

- Change to new Act (1990 2023)
- Organizational change
- Cultural shift from knowledge based to performance based
- Managing variability across practitioners
- Building a continuous learning mindset
- Developing training resources
- Peer support for new AME



Thank you



Acknowledgements:

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