

Qualification Title: New Zealand Certificate in Aeronautical Engineering (Pre-Employment Skills) (Level 3)

Qualification number: 2898

Date of review: 18 November 2021

This report refers to graduates awarded this qualification prior to: **31 December 2020**

Final decision on consistency of the qualification: National consistency is confirmed

Threshold:

The threshold to determine sufficiency with the graduate profile was determined as evidence of graduates able to work safely in an aeronautical engineering context, and to carry out engineering tasks under direct supervision.

Graduates are able to:

- select and use appropriate aircraft maintenance documentation, to complete maintenance tasks;
- select and use aeronautical engineering tools and equipment in line with current aeronautical engineering practices;
- apply safe work practices in an aeronautical engineering workplace or training environment which replicates an aeronautical engineering workplace;
- apply knowledge of human behaviour and performance to ensure effective engineering and team dynamics;
- maintain, repair and overhaul aircraft by integrating the fundamental principles of aircraft construction and maintenance, including the application of aeronautical publications and aircraft maintenance documentation in an aeronautical engineering workplace or training environment which replicates an aeronautical engineering workplace; and
- apply the fundamental knowledge and principles of aircraft construction and maintenance, and aircraft systems and system maintenance, to carry out aircraft and system maintenance in a controlled environment.

Education Organisations with sufficient evidence

The following education organisations have been found to have sufficient evidence.

MOE Number	Education Organisation	Final rating
8588	Air NZ T/A Air New Zealand Academy of Learning	Sufficient
6011	Nelson Marlborough Institute of Technology	Sufficient

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Introduction

This level 3 qualification is intended for learners who are planning a career in the aviation industry as an aeronautical engineer. Graduates can progress onto other training in the industry as below:

- New Zealand Certificate in Aeronautical Engineering (Aircraft Manufacture) (Level 4) [Ref: 2908]
- New Zealand Certificate in Aeronautical Engineering (Applied Skills) (Level 4) with strands in Aeronautical Composites, Aeronautical Non Destructive Testing, Aircraft Mechanical, Aircraft Powerplant, Aircraft Structures, Armament, Avionic Electrical Repair, Avionic Instrument Repair, Avionic Radio Repair, Avionic Maintenance, and Rotorcraft [Ref: 2909]
- New Zealand Diploma in Aeronautical Maintenance Certification (Level 6) with strands in Aeroplane, Rotorcraft, Powerplant Piston, Powerplant Turbine, Electrical, Instrument, and Radio [Ref: 2907]
- New Zealand Certificate in Aeronautical Engineering (Gas Turbine Overhaul) (Level 4) [Ref: 2910]

Graduates have the capability to be employed as basic unlicensed aeronautical engineers. They may also be undertaking a career with the Royal Air New Zealand Airforce (RNZAF) as trainee aircraft engineers. This cohort undertook training with one of the organisations presenting during the review.

Two organisations presented at the review. Graduate numbers ranged from 19 to 202 per organisation. One organisation, with only graduate over the scope of the review, did not participate in the Consistency Review.

Ringa Hora Services is the qualification developer and a representative of this WDC attended the review. This qualification is currently under a review process.

Evidence

The education organisations provided a range of evidence to demonstrate that their graduates met the graduate profile outcomes.

The criteria used to judge the evaluation question were:

- The nature, quality and integrity of the evidence presented by the education organisation
- How well the organisation has analysed, interpreted and validated the evidence, and used the understanding gained to achieve actual or improved consistency
- The extent to which the education organisation can reasonably justify and validate claims and statements relating to the consistency of graduate outcomes, including in relation to other providers of programmes leading to the qualification
- Confirmation that the education organisation had a coherent, approved programme of study which ensured that programme components led to the graduate profile outcomes
- Graduate and employer surveys which confirmed that graduates had gained, and were using, the skills and knowledge outlined in the graduate profile
- Confirmation that graduates were achieving employment pathways requiring the application of skills and knowledge described by the graduate profile.

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How well does the self-assessment and supporting evidence provided by the education organisation demonstrate that its graduates match the graduate outcomes at the appropriate threshold?

Education organisations submitted a range of evidence that could be triangulated to demonstrate that graduates match the graduate outcomes at the appropriate threshold. This included assessment and moderation evidence, programme alignment, graduate and employer feedback and destination data.

Overall, the quality of the self-assessment provided by organisations needed development. Programme evidence was generally sound, with evidence of moderation supplied. There was little evidence of the process of moderation being used to inform improvements to improved delivery and assessment of programmes although during the review meeting, these processes were better described.

Feedback evidence from graduates and employers was weak. Data was generally not representative of the cohorts or had produced information that was not aligned to the GPOs. Evidence of connections with industry was supplied after the meeting, but generally much of the information was anecdotal or not clearly represented. Given the highly practical nature of the qualification, organisations needed to focus on where the programme led to good outcomes for graduates but also to evaluate any reasons for gaps in knowledge. Both organisations had been severely impacted by external events i.e. the impact of Covid-19 on the industry and this had played a significant role in how well some of the quality assurance processes had been managed. In future, both organisations need to ensure that the process of gathering feedback from stakeholders is routine, of robust quality, and is used to evaluate and improve the programme to promote better outcomes for graduates.

Destination data was generally sound and showed that there was opportunity for graduates to achieve the aims of the qualification.

Overall, the self-assessment and supporting evidence supplied, by those organisations found sufficient, demonstrates that their graduates meet the graduate outcomes at the determined threshold.

Special Focus

None.

Issues and concerns

None.

Recommendations to Qualification Developer

None.

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