

Title	Demonstrate technical knowledge of an aeroplane exceeding 5700kg MCTOW for a type rating		
Level	5	Credits	5

Purpose	People credited with this unit standard are able, for an aeroplane exceeding 5700kg MCTOW for a type rating, to demonstrate: technical knowledge; knowledge of weight and balance; and knowledge of aircraft operation.
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Classification	Aviation > Aircraft Operation
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Available grade	Achieved
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Guidance Information

- 1 The type competency demonstration flight covered by this unit standard must be demonstrated in accordance with the Civil Aviation Rules Part 61 and other relevant rules, published by the Civil Aviation Authority of New Zealand (CAA), PO Box 3555, Wellington 6140, and their subsequent amendments. The standard will be granted only in respect of a type rating for an aeroplane other than that used for the initial flight test.
- 2 This unit standard is aligned with the relevant parts of the prescribed syllabi of the CAA. Credit will be awarded on meeting the requirements of the CAA-approved assessment or examination.
- 3 Definitions, abbreviations, and acronyms used in this unit standard are to be found in:
 - a *Civil Aviation Rules Part 1* on the CAA website at <https://www.caa.govt.nz>, and
 - b *Aeronautical Information Publication (AIP)* published by Aeronautical Information Management (AIM), PO Box 294, Wellington 6140 or on the AIM website at <http://www.aip.net.nz>.
- 4 All references to the CAA refer specifically to the Civil Aviation Authority of New Zealand.
- 5 Industry standards and recommended practices are those set in place by the CAA.
- 6 Industry texts may include but are not limited to – aircraft flight manuals, CAA Rules, CAA Advisory Circulars, CAA Flight Test Standards Guides, operator exposition.
- 7 For the purpose of this unit standard, *knowledge* refers to the knowledge, understanding, and application of the subject matter.
- 8 Evidence presented for assessment against this unit standard must be in accordance with standard industry texts.

- 9 Industry requirements are that the candidate must meet the eligibility requirements of the Civil Aviation Act 1990 and the Civil Aviation Rule Part 61 for a private pilot licence.

Outcomes and performance criteria

Outcome 1

Demonstrate technical knowledge of an aeroplane exceeding 5700kg MCTOW for a type rating.

Range includes but is not limited to – layout and operation, location and purpose, components, functional checks, emergency operation, safety devices, fault finding and remedial action during flight, precautions to be observed during fault finding.

Performance criteria

- 1.1 Primary flight controls and trims are located and described.
- 1.2 Carburettor and/or alternate air are located and described.
- 1.3 Cowl flaps are described.
- 1.4 The mixture is described.
- 1.5 The propeller is described.
- 1.6 The fuel system is described.
- 1.7 The oil system is described.
- 1.8 The hydraulic system is described.
- 1.9 The pneumatic system is described.
- 1.10 The electrical system and associated instruments are described.
- 1.11 Flaps are described.
- 1.12 Speedbrakes are described.
- 1.13 Landing gear is described.
- 1.14 Brakes are described.
- 1.15 Avionics are described.
- 1.16 Auto-pilot is described.

- 1.17 Pitot-static system is described.
- 1.18 Vacuum/pressure system and associated flight instruments are described.
- 1.19 Heating and environmental systems are described.
- 1.20 De-icing and anti-icing systems are described.
- 1.21 Fire extinguisher systems are described.
- 1.22 Pressurisation is described.
- 1.23 Oxygen systems are described.
- 1.24 Engines are described.
- 1.25 Airframe is described.

Outcome 2

Demonstrate knowledge of weight and balance of an aeroplane exceeding 5700kg MCTOW for a type rating.

Performance criteria

- 2.1 Weight and balance are described.

Outcome 3

Demonstrate knowledge of aircraft operation for an aeroplane exceeding 5700kg MCTOW for a type rating.

Performance criteria

- 3.1 Aeroplane operations are described.

Range	take-off and landing performance characteristics; aeroplane operating limitations; procedures for take-off, climb, landing, cruising (in symmetric and asymmetric flight); stalling and safety speeds; interpretation of aeroplane flight manual data; use of radio and navigation equipment (including any ACARS, CPDLC and SATCOM); action in the event of a forced landing on land or water and the use of survival equipment (including any aircraft parachute system).
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This unit standard is expiring. Assessment against the standard must take place by the last date for assessment set out below.

Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	18 June 2010	31 December 2018
Review	2	20 October 2016	31 December 2027
Review	3	28 September 2023	31 December 2027

Consent and Moderation Requirements (CMR) reference

0169

This CMR can be accessed at <http://www.nzqa.govt.nz/framework/search/index.do>.