

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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Entry information	
Recommended skills and knowledge	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.

Explanatory notes

- 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.

Outcomes and evidence requirements

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.

Evidence requirements

- 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.

Evidence requirements

- 2.1 Weight and balance are described.

Outcome 3

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

Evidence requirements

- 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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Planned review date	31 December 2021
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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	N/A

Consent and Moderation Requirements (CMR) reference	0169
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This CMR can be accessed at <http://www.nzqa.govt.nz/framework/search/index.do>.

Please note

Providers must be granted consent to assess against standards (accredited) by NZQA, before they can report credits from assessment against unit standards or deliver courses of study leading to that assessment.

Industry Training Organisations must be granted consent to assess against standards by NZQA before they can register credits from assessment against unit standards.

Providers and Industry Training Organisations, which have been granted consent and which are assessing against unit standards must engage with the moderation system that applies to those standards.

Requirements for consent to assess and an outline of the moderation system that applies to this standard are outlined in the Consent and Moderation Requirements (CMR). The CMR also includes useful information about special requirements for organisations wishing to develop education and training programmes, such as minimum qualifications for tutors and assessors, and special resource requirements.

Comments on this unit standard

Please contact ServiceIQ qualifications@serviceiq.org.nz if you wish to suggest changes to the content of this unit standard.