Title	Demonstrate type rating competency for an aeroplane exceeding 5700kg MCTOW				
Level	5		Credits	5	
Purpose	i		People credited with this unit standard are able, for type rating competence for an aeroplane exceeding 5700kg MCTOW, to demonstrate: pre-flight requirements, flight manoeuvres, instrument flight, emergency procedures, and normal and abnormal procedures.		
Classification		Aviation > Aircraft Operation			
Available grad	de	Achieved		0,1	

Prerequisites	Unit 26180, Demonstrate technical knowledge of an aeroplane exceeding 5700kg MCTOW for a type rating, or demonstrate equivalent knowledge and skills.
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### **Guidance Information**

- The type competency demonstration flight covered by this unit standard must be demonstrated in accordance with the Civil Aviation Rules Part 61and 91, and other relevant rules, published by the Civil Aviation Authority of New Zealand (CAA), PO Box 31441, Lower Hutt 5040, and their subsequent amendments. The standard will be granted only in respect of a rating for a type other than that used for the initial flight test.
- 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.

- A simulator, specifically approved by the Director of Civil Aviation for conversion to type training, may be used for all or part of the demonstration in accordance with Advisory Circular 61-10, *Pilot licences and ratings Type ratings*.
- 8 Emergency procedures may be real or simulated.
- Industry requirements are that the candidate must meet the eligibility requirements of the Civil Aviation Act 1990 and the Civil Aviation Rules Part 61 for type rating.

# Outcomes and performance criteria

### **Outcome 1**

Demonstrate pre-flight requirements for a type rating for an aeroplane exceeding 5700kg MCTOW.

### Performance criteria

1.1 Flight documents are presented in accordance with industry texts and standards.

Range includes but is not limited to – aircraft flight manual, release to service, engine charts, AIP, route guide.

1.2 Aircraft and engine limitations are described in accordance with industry texts and standards.

Range includes but is not limited to – emergency equipment, emergency procedures.

- 1.3 Flight planning is demonstrated in accordance with industry texts and standards.
- 1.4 Aircraft loading is demonstrated in accordance with industry texts and standards.

Range includes but is not limited to – trim sheets, fuel requirements, fuel management.

1.5 External and internal inspections are carried out and explained in accordance with industry texts and standards.

Range includes but is not limited to – location of critical items.

1.6 Start-up procedures are demonstrated in accordance with industry texts and standards.

Range includes but is not limited to – start-up, after start, cockpit checks, selection of navigation and communication frequencies, taxiing, steering, instrument checks, ATS clearances.

- 1.7 Take-off checks are demonstrated in accordance with industry texts and standards.
  - Range checks include but are not limited to engines, instruments, systems, crew briefing, radiotelephone procedures.

### Outcome 2

Demonstrate flight manoeuvres for a type rating for an aeroplane exceeding 5700kg MCTOW.

#### Performance criteria

- 2.1 Take-off and landing are demonstrated in accordance with industry texts and standards.
  - Range normal, crosswind, rejected take-off, take-off with engine failure immediately after decision speed (V<sub>1</sub>).
- 2.2 Normal climb and descent manoeuvres are demonstrated in accordance with industry texts and standards.
- 2.3 Approach is demonstrated in accordance with industry texts and standards.
  - Range circling approach at minimum authorised circling altitude, missed approach from not more than 100 feet agl.
- 2.4 Stall onset in clean take-off and landing configurations is demonstrated in accordance with industry texts and standards.
  - Range at least one stall with aircraft in turning configuration.
- 2.5 Steep turns are demonstrated in accordance with industry texts and standards.
  - Range through 360 degrees in both directions, recommended bank angle of 45 degrees.
- 2.6 Approach to V<sub>MCA</sub> with asymmetric power is demonstrated in accordance with industry texts and standards.
- 2.7 Recovery from unusual attitudes and upset flight is demonstrated in accordance with industry texts and standards.

# Outcome 3

Demonstrate instrument flight for a type rating for an aeroplane exceeding 5700kg MCTOW.

### Performance criteria

- 3.1 Asymmetric climb and descent procedures are demonstrated in accordance with industry texts and standards.
- 3.2 Interception and tracking of bearings is demonstrated in accordance with industry texts and standards.

Range includes but is not limited to – predetermined bearings, airways procedures; entering, maintaining and departing from holding patterns.

3.3 Descent to minimum altitude through intermediate and approach procedures is demonstrated in accordance with industry texts and standards.

Range includes but is not limited to – ILS, VOR, non-precision radio navigation facility.

3.4 Missed approach from minimum altitude with asymmetric thrust is demonstrated in accordance with industry texts and standards.

# **Outcome 4**

Demonstrate emergency procedures for a type rating for an aeroplane exceeding 5700kg MCTOW.

# Performance criteria

4.1 Emergency procedures are demonstrated in accordance with industry texts and standards.

Range includes but is not limited to – engine fire, normal unfeathering,

relight, emergency descent in pressurised aircraft, other

procedures specified in aircraft flight manual.

## **Outcome 5**

Demonstrate normal and abnormal procedures for a type rating for an aeroplane exceeding 5700kg MCTOW.

### Performance criteria

5.1 Normal and abnormal procedures are demonstrated in accordance with industry texts and standards.

Range malfunctions may include but are not limited to – auto-pilot, anti-

ice and de-icing systems, electrical system (including loss of flight

instruments), hydraulics, pneumatics, air-conditioning,

pressurisation, oxygen system, weather radar.

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
Revision	2	9 December 2010	31 December 2018
Review	3	20 October 2016	31 December 2027
Review	4	28 September 2023	31 December 2027

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