Title	**Demonstrate flying skills for a commercial pilot licence (aeroplane)**		
Level	**5**	**Credits**	**10**

Purpose	People credited with this unit standard are able, for a commercial pilot licence (aeroplane), to demonstrate: on the ground preparation; pre-flight and post-flight checks and procedures; Air Traffic Service procedures; pre take-off, take-off and after-landing procedures; in-flight competence; approach, landing and go-round procedures; and in-flight technical functions.

Classification	Aviation > Aircraft Operation

Available grade	Achieved

Guidance Information

1 The test flight covered by this unit standard must be demonstrated in accordance with the Civil Aviation Rules Part 61 and 91, and other relevant rules, published by the Civil Aviation Authority of New Zealand (CAA), PO Box 3555, Wellington 6140, and their subsequent amendments. To undertake this assessment, the candidate must present a current Private Pilot Licence and appropriate evidence of current written examination credits in accordance with industry texts and standards.

2 This unit standard is aligned with the relevant parts of the prescribed syllabi of the CAA for a commercial pilot licence (aeroplane). 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 Evidence presented for assessment against this unit standard must be in accordance with industry texts and standards.

5 Aircraft, equipment, and facilities required for the flight test must be in accordance with the requirements of CAA Advisory Circular 61-5 Appendix IV.

6 All references to the CAA refer specifically to the Civil Aviation Authority of New Zealand.

7 Industry standards and recommended practices are those set in place by the CAA.

8 Industry texts may include but are not limited to – aircraft flight manuals, CAA Rules, CAA Advisory Circulars, CAA Flight Test Standards Guides, operator exposition, New Zealand Defence Force (NZDF) Policy.

9 Emergency procedures may be real or simulated.

10 Industry requirements are that the candidate must meet the eligibility requirements of the Civil Aviation Act 2023 and the Civil Aviation Rules Part 61 for a commercial pilot licence.

11 In accordance with the provisions of Civil Aviation Rule Part 61 for Pilot Licences and Ratings and the associated Advisory Circulars, the CAA accepts specific NZDF flight crew qualifications and associated flight experience towards a number of the prescribed eligibility requirements for the issue of a New Zealand pilot licence and associated ratings.

Outcomes and performance criteria

Outcome 1

Demonstrate on the ground preparation for a commercial pilot licence (aeroplane).

Performance criteria

1.1 Personal factors are demonstrated.

Range includes but is not limited to – fitness to fly, grooming, deportment, punctuality, personal presentation.

1.2 Logbook is up-to-date, summarised and certified.

1.3 A current AIP Volume 4 and VNC are presented.

1.4 Licensing and currency requirements for a commercial pilot are described.

1.5 Aircraft documents are explained.

Range includes but is not limited to – Certificate of Airworthiness, aircraft technical log, aircraft flight manual, pilot's operating handbook, aircraft's limitations.

1.6 Weather data and NOTAMs are obtained and correctly interpreted.

1.7 AIP Volume 4 and VNC are explained and interpreted.

1.8 A sound go/no-go decision based on all available pre-flight planning data is made.

1.9 Performance calculations are completed and a sound decision in relation to aircraft performance capability and operating limitations is made.

Range includes but is not limited to – density altitude, runway slope.

1.10 The aircraft's capability for the required performance is determined.

1.11 The Group Rating System is explained.

1.12 The effect of seasonal and atmospheric conditions on the aircraft's performance is explained.

1.13 Fuel requirements are calculated.

Range includes but is not limited to – quantity of fuel on board (including reserves).

1.14 Fuel primer pump and/or auxiliary fuel pump are operated for starting as required.

1.15 Correct fuel tank is selected for start, taxiing and take-off, and fuel consumption and tank selection are monitored.

1.16 Aircraft loading is described.

Range includes but is not limited to – aircraft performance calculations, aircraft take-off weight, aircraft landing weight, fuel and oil, centre of gravity, distribution and securing of baggage.

Outcome 2

Demonstrate pre-flight and post-flight checks and procedures for a commercial pilot licence (aeroplane).

Performance criteria

2.1 Pre-flight checks are demonstrated.

Range interior inspection, external inspection, fuel and oil, securing loose articles, location and use of emergency equipment.

2.2 Passengers are supervised and briefed.

Range includes but is not limited to – location and operation of emergency equipment, use and operation of seat belts and/or shoulder harness, operation of all doors and hatches, rules regarding smoking, actions in the event of an emergency landing.

2.3 Engine start and warm-up procedures are demonstrated.

Range includes but is not limited to – actions in the event of an engine fire during or after start.

2.4 Engine is shut down.

2.5 Post-flight documentation is completed.

2.6 Passengers are supervised.

Outcome 3

Demonstrate Air Traffic Service procedures for a commercial pilot licence (aeroplane).

Performance criteria

3.1 Air Traffic Service procedures are carried out.

Outcome 4

Demonstrate pre take-off, take-off, and after-landing procedures for a commercial pilot licence (aeroplane).

Performance criteria

4.1 Taxiing check is performed.

4.2 Brake check is performed.

4.3 Aircraft is parked at the holding point.

4.4 The engine is run-up and checked.

4.5 The throttle is operated.

Range includes but is not limited to – abrupt temperature changes, mixture control, carburettor heat.

4.6 Pre take-off checks are completed.

Range includes but is not limited to – flight controls.

4.7 Pre take-off briefing is delivered.

Range includes but is not limited to – engine failure, abnormal operation, engine failure after take-off, departure procedures.

4.8 Take-off is completed.

Range includes but is not limited to – flap use, correct runway, normal, short field, crosswind (including maximum crosswind component).

4.9 The appropriate emergency procedures for engine failure after take-off are executed.

Range includes but is not limited to – control of aircraft, procedures, nominated site, execute procedure, go-round procedure.

4.10 After-landing checks are carried out.

Range includes but is not limited to – brake check before entering congested area.

4.11 Aircraft is parked.

Outcome 5

Demonstrate in-flight competence for a commercial pilot licence (aeroplane).

Performance criteria

5.1 Climb is demonstrated at the nominated speed.

Range includes but is not limited to – temperatures, pressures, clearing flight path ahead.

5.2 Straight and level flight is demonstrated.

5.3 Full panel instrument flight is demonstrated.

Range includes but is not limited to – straight and level, medium turns, climbing and descending;
recovery from stall onset includes – in level flight, in climbing turn, in spiral dive.

5.4 Limited panel flight is entered and maintained using basic instrumentation as sole reference.

Range includes but is not limited to – straight and level flight, compass turn, climbing and descending, climbing and descending turns, recovery from unusual attitude.

5.5 Turning manoeuvres are entered, maintained, and exited.

Range includes but is not limited to – straight and level flight, climbing turns, steep turns, maximum rate turns.

5.6 Aircraft is controlled during a slow flight at a minimum of 1.2 Vs.

5.7 Stall recognition, entry and recovery in various configurations are demonstrated.

Range includes but is not limited to – HASELL and HELL checks; basic configuration; power-on; wing drop; steep turn; fully developed; onset and recovery.

5.8 Procedures for forced landing are demonstrated.

Range without power, with power.

5.9 Descending manoeuvres are demonstrated.

Range includes but is not limited to – glide, power-on, cruise, descending turns, engine temperatures and pressures, turning, clearing flight path ahead.

5.10 Steep gliding turns are demonstrated.

Range includes but is not limited to – increasing power at bank angles in excess of 30°, situational awareness, orientation, selection of suitable reference point.

5.11 Flaps usage and/or sideslipping are demonstrated.

Range includes but is not limited to – operation of flap, maintenance of airspeed range required for flap operation and use, increasing airspeed appropriate to the sideslip.

5.12 Low flying procedures and practices are demonstrated.

Range includes but is not limited to – cruise, simulated poor visibility.

Outcome 6

Demonstrate approach, landing, and go-round procedures for a commercial pilot licence (aeroplane).

Performance criteria

6.1 Circuit is joined.

Range procedures may include but are not limited to – obtaining and complying with ATS clearance, unattended airfields, situational awareness.

6.2 Approach and landing are demonstrated.

Range includes but is not limited to – normal, flapless, crosswind, glide, short field.

6.3 Approach and go-round are demonstrated.

Outcome 7

Demonstrate in-flight technical functions for a commercial pilot licence (aeroplane).

Performance criteria

7.1 Radiotelephony tuning and procedures are demonstrated.

7.2 Lookout is maintained throughout the flight.

Range includes but is not limited to – avoidance and separation from other aircraft, remaining in VMC to comply with VFR, situational awareness.

7.3 Flight orientation is maintained throughout the flight.

Range includes but is not limited to – airspace boundaries, control zones, VFR lanes, reporting points.

7.4 Pilot judgement and decision-making is demonstrated.

Replacement information	This unit standard replaced unit standard 16437.

Planned review date	31 December 2028

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
Review	4	29 May 2025	N/A

Consent and Moderation Requirements (CMR) reference	0028

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

Comments on this unit standard

Please contact Ringa Hora Services Workforce Development Council qualifications@ringahora.nz if you wish to suggest changes to the content of this unit standard.