

Title	Demonstrate flying skills for an airline transport pilot licence (aeroplane)		
Level	6	Credits	35

Purpose	People credited with this unit standard are able, for an airline transport pilot licence (aeroplane), to demonstrate: on-the-ground preparation; pre-flight procedures; pre take-off and take-off procedures; in-flight procedures; descent, approach and landing procedures; and accuracy in aircraft flying procedures.
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Classification	Aviation > Aircraft Operation
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Available grade	Achieved
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Entry information	
Critical health and safety prerequisites	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 an airline transport pilot licence (aeroplane).

Explanatory notes

- 1 The 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 CPL (A), appropriate evidence of current written examination credits, including any Knowledge Deficiency Reports, a logbook certifying requisite flight experience, proof of identity, a current instrument rating, a Class 1 Medical Certificate and hold a rating for the type of aircraft used in the flight test.
- 2 This unit standard is aligned with the relevant parts of the prescribed syllabi of the CAA for an airline transport pilot licence (aeroplane). Credit will be awarded upon meeting the requirements of the CAA-approved assessment or examination.
- 3 An airline transport pilot licence permits the holder to conduct aircraft operations as pilot-in-command in an aircraft requiring a co-pilot.

- 4 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>.
 - 5 Aircraft, equipment, and facilities required for the flight test must be in accordance with the requirements of CAA Advisory Circular 61-7 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.
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Outcomes and evidence requirements

Outcome 1

Demonstrate on-the-ground preparation for an airline transport pilot licence (aeroplane).

Evidence requirements

- 1.1 Personal factors are demonstrated in accordance with industry texts and standards.

Range includes but is not limited to – fitness to fly, grooming, deportment, punctuality, personal presentation, up-to-date and certified pilot's logbook, current CPL(A), appropriate examination credits, any KDRs, AIP Vol 1 to 3.
- 1.2 Licensing, privileges and currency requirements of an airline transport pilot are described in accordance with industry texts and standards.
- 1.3 Meteorological information is obtained, interpreted and analysed in accordance with industry texts and standards.

Range may include but is not limited – route forecasts, SIGWX, wind and temperature charts, TAFs, METARs and SPECIs, SIGMETs.
- 1.4 Meteorological information is used to make a sound decision about whether or not to proceed with the flight in accordance with industry texts and standards.
- 1.5 Application of the meteorological information in to the flight is demonstrated in accordance with industry texts and standards.

- 1.6 Operational data is obtained, interpreted, and analysed in accordance with industry texts and standards.
- Range may include but is not limited to – NOTAMs, AIP Supplements, AIP Volume 2 to 3, appropriate charts, Jeppesen charts.
- 1.7 A sound decision is demonstrated based on the operational data and the GPS RAIM prediction in accordance with industry texts and standards.
- 1.8 Flight planning is demonstrated in accordance with industry texts and standards.
- Range may include but is not limited to – conditions of nominating an alternate; take-off, enroute, circling and approaching minimums; application of IFR cruising levels with due regard to icing.
- 1.9 Knowledge and application of fuel requirements and management are demonstrated in accordance with the aircraft flight manual and industry texts and standards.
- Range CAR Part 121 or CAR Part 125, IFR.
- 1.10 Aircraft performance and limitations are interpreted and determined in accordance with the aircraft flight manual and industry standards.
- Range includes but is not limited to – calculating take-off and landing distances, calculating maximum weights and appropriate speeds, making a sound decision on whether the required performance is within the aircraft's capability.
- 1.11 Aircraft loading is determined in accordance with industry texts and standards.
- Range aircraft weight limitations, aircraft centre of gravity limitation, distribution of passengers, fuel, distribution and securing of baggage.
- 1.12 Aircraft airworthiness and documentation are explained, and the airworthiness of the aircraft is evaluated in accordance with industry texts and standards.
- Range Airworthiness Certificate, aircraft technical log, aircraft flight manual, associated operations manual documentation, airworthiness state.

Outcome 2

Demonstrate pre-flight procedures for an airline transport pilot licence (aeroplane).

Evidence requirements

- 2.1 External pre-flight inspection is demonstrated in accordance with industry texts and standards.

- 2.2 Cockpit preparation procedures are demonstrated in accordance with the aircraft flight manual and industry standards.
- Range includes but is not limited to – FMS initialisation, data insertion and confirmation.
- 2.3 Crew is briefed in accordance with industry texts and standards.
- Range brief may include but is not limited to – environment of open interactive communication, safety and operational issues, potential problems, duties of crew, cabin crew, operational guides for automated systems.

Outcome 3

Demonstrate pre take-off and take-off procedures for an airline transport pilot licence (aeroplane).

Evidence requirements

- 3.1 Engine start is demonstrated in accordance with the aircraft flight manual and industry texts and standards.
- Range may include but is not limited to – recognition of requirement for supplementary start, actions required for abnormal start or fire.
- 3.2 Taxi is demonstrated in accordance with the aircraft flight manual and industry standards.
- Range may include but is not limited to – brake check, instrument serviceability check, control of taxiing speed, hazard recognition, positioning of controls for wind conditions, parking the aircraft at the holding point.
- 3.3 Pre take-off and pre-departure preparation are demonstrated in accordance with the aircraft flight manual and industry standards.
- Range may include but is not limited to – cabin secure; obtaining clearances; flight crew pre take-off briefing (including go/no go criteria); limitations for crosswind, cloud base, and visibility.
- 3.4 Take-off roll is demonstrated in accordance with the aircraft flight manual and industry standards.
- Range may include but is not limited to – use of correct runway, line up checks completed, take-off path clear, smooth throttle advance to maximum available power, engine instrument checks, rising airspeed, recognition of go/no go decision point, tracking runway centre line, rotating at recommended V_r , pitch attitude for recommended climb established, aircraft trimmed for the recommended climb attitude.

- 3.5 Rejected take-off is demonstrated in accordance with industry texts and standards.

Outcome 4

Demonstrate in-flight procedures for an airline transport pilot licence (aeroplane).

Evidence requirements

- 4.1 Engine failure at or after V_1 is demonstrated in accordance industry texts and standards.
- 4.2 Transition to instrument flight and initial climb are demonstrated in accordance with industry texts and standards.
- 4.3 Instrument departure procedure is demonstrated in accordance with industry texts and standards.
- 4.4 Climb procedures are demonstrated in accordance with industry texts and standards.
- Range may include but is not limited to – IFR enroute climb procedures; maintaining required climb tracks; maintaining applicable altimeter setting; reporting position to ATS; maintaining navigation, fuel, radio log.
- 4.5 Cruise procedures are demonstrated in accordance with industry texts and standards.
- Range may include but is not limited to – complying with IFR enroute cruise procedures; maintaining required cruise tracks; reporting position to ATS; maintaining navigation, fuel and radio log.

Outcome 5

Demonstrate descent, approach and landing procedures for an airline transport pilot licence (aeroplane).

Evidence requirements

- 5.1 Descent, approach and landing preparation are demonstrated in accordance with industry texts and standards.
- Range may include but is not limited to – obtaining weather and operational information relating to the descent, approach and landing; calculating top of descent point; reviewing and briefing on arrival procedures, approach procedures, landing procedures, ground taxi and parking procedures, missed approach procedures, holding and diversion considerations; reviewing and evaluating on endurance, fuel reserves.

- 5.2 Descent procedures are demonstrated in accordance with industry texts and standards.
- Range may include but is not limited to – complying with IFR enroute descent procedures; maintaining required descent tracks; maintaining applicable altimeter settings; reporting position to ATS; maintaining in-flight navigation, fuel and radio log.
- 5.3 Holding is demonstrated in accordance with industry texts and standards.
- 5.4 Initial approach procedures are demonstrated in accordance with industry texts and standards.
- 5.5 Radar vectoring for an approach is demonstrated in accordance with industry texts and standards.
- 5.6 Precision approach is demonstrated in accordance with industry texts and standards.
- 5.7 Non-precision approach is demonstrated in accordance with industry texts and standards.
- 5.8 Instrument approach to circle visually for approach and landing is demonstrated in accordance with industry texts and standards.
- 5.9 Procedures for one engine inoperative performance are demonstrated in accordance with industry texts and standards.
- 5.10 Missed approach procedures are demonstrated in accordance with industry texts and standards.
- 5.11 Diversion procedures are demonstrated in accordance with industry texts and standards.
- 5.12 Landing procedures are demonstrated in accordance with industry texts and standards.
- Range normal, crosswind, one engine inoperative.
- 5.13 Taxi to parking is demonstrated in accordance with industry texts and standards.
- 5.14 Engine shutdown and securing the aircraft is demonstrated in accordance with industry texts and standards.
- 5.15 Crew self evaluation documentation is completed in accordance with industry texts and standards.

Outcome 6

Demonstrate accuracy in aircraft flying procedures for an airline transport licence (aeroplane).

Evidence requirements

- 6.1 Threat and error management is demonstrated in accordance with industry texts and standards.
- 6.2 Communications process and decision making are demonstrated in accordance with industry texts and standards.
- Range may include but is not limited to – inquiry, advocacy, assertion, communications, decisions.
- 6.3 Team building is demonstrated in accordance with industry texts and standards.
- Range may include but is not limited to – leadership, followership, concern for tasks, interpersonal relationships, group climate.
- 6.4 Workload management and situational awareness are demonstrated in accordance with industry texts and standards.
- Range may include but is not limited to – preparation, planning, vigilance, workload distribution, distraction avoidance.
- 6.5 Communication with cabin crew, company, and passengers is demonstrated in accordance with industry texts and standards.
- 6.6 Completion of checks and use of checklists are demonstrated in accordance with industry texts and standards.
- 6.7 ATS procedures and compliance are demonstrated in accordance with industry texts and standards.
- 6.8 RTF procedures are demonstrated in accordance with industry texts and standards.
- 6.9 Loss of communications procedures are demonstrated in accordance with industry texts and standards.
- 6.10 Aircraft handling by reference to instruments is demonstrated in accordance with industry texts and standards.
- 6.11 Use of automation is demonstrated in accordance with industry texts and standards.
- 6.12 Navaid management and tracking is demonstrated in accordance with industry texts and standards.

- 6.13 Systems operation and procedures are demonstrated in accordance with industry texts and standards.
- 6.14 Management of a system malfunction is demonstrated in accordance with industry texts and standards.
- 6.15 The location, purpose and use of emergency equipment are explained in accordance with industry texts and standards.
- 6.16 Unusual attitudes (upset recovery) are demonstrated in accordance with industry texts and standards.
- 6.17 Management of ACAS advisories is demonstrated in accordance with industry texts and standards.
- 6.18 Go-round from a GPWS alert is demonstrated in accordance with industry texts and standards.
- 6.19 Recovery from a wind shear encounter is demonstrated in accordance with industry texts and standards.
- 6.20 Knowledge of flight rules is demonstrated in accordance with industry texts and standards.

 Range may include but is not limited to – CAA rules pertaining to flight crew, IFR flight in Part 125 or Part 121 air operations.
- 6.21 Adherence to the organisation’s SOPs is demonstrated in accordance with industry texts and standards.
- 6.22 Lookout in VMC is demonstrated in accordance with industry texts and standards.

Replacement information	This unit standard replaced unit standard 16320.
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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	21 January 2011	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.