

Title	Demonstrate knowledge of meteorology for an airline transport pilot licence		
Level	6	Credits	10

Purpose	People credited with this unit standard are able to demonstrate knowledge of meteorology for an airline transport pilot licence in accordance with Subject No 42.
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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.

Explanatory notes

- 1 This unit standard is aligned with the relevant parts of the prescribed syllabi of the Civil Aviation Authority of New Zealand (CAA) for Subject No 42, for an airline transport pilot licence. Credit will be awarded upon meeting the requirements of the CAA-approved assessment or examination.
- 2 An airline transport pilot licence permits the holder to conduct aircraft operations as pilot-in-command in an aircraft requiring a co-pilot.
- 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 knowledge, understanding, and application of the subject matter.

Outcomes and evidence requirements

Outcome 1

Demonstrate knowledge of meteorology for an airline transport pilot licence in accordance with Subject No 42.

Evidence requirements

- 1.1 The atmosphere, its composition, and processes are described and explained in accordance with industry texts and standards.
- 1.2 Atmospheric pressure and its characteristics are described and explained in accordance with industry texts and standards.
- 1.3 Temperature and heat exchange processes are described and explained in accordance with industry texts and standards.
- 1.4 Atmospheric moisture, its characteristics, and effects are described and explained in accordance with industry texts and standards.
- 1.5 The wind, its processes, and effects on aircraft operation are described and explained in accordance with industry texts and standards.
- 1.6 The stability of air is described and explained in accordance with industry texts and standards.
- 1.7 Local winds and their characteristics are described and explained in accordance with industry texts and standards.
- 1.8 Inversions are described and explained in accordance with industry texts and standards.
- 1.9 Cloud, its characteristics, and processes are described and explained in accordance with industry texts and standards.
- 1.10 Precipitation, its characteristics, and processes are described and explained in accordance with industry texts and standards.
- 1.11 Visibility, its characteristics, and effects on aircraft operation are described and explained in accordance with industry texts and standards.
- 1.12 Fog, its characteristics, and manifestations are described and explained in accordance with industry texts and standards.
- 1.13 Fronts and depressions, their characteristics, processes, and effects are described and explained in accordance with industry texts and standards.
- 1.14 Thunderstorms, their causes, characteristics, and hazards are described and explained in accordance with industry texts and standards.

- 1.15 Icing, its processes, and effects on aircraft operation are described and explained described in accordance with industry texts and standards.
- 1.16 Turbulence, its causes, processes, and effects on aircraft operation are described and explained in accordance with industry texts and standards.
- 1.17 Upper air meteorology is described and explained in accordance with industry texts and standards.
- 1.18 Tropical meteorology is described and explained in accordance with industry texts and standards.
- 1.19 The general circulation and its processes are described and explained in accordance with industry texts and standards.
- 1.20 Hazardous meteorological conditions and their effects on aircraft operation are described and explained in accordance with industry texts and standards.
- 1.21 New Zealand climatology, its processes, and effects on aircraft operation are described and explained in accordance with industry texts and standards.
- 1.22 Meteorological services, reports, and forecasts are described, explained, and interpreted in accordance with industry texts and standards.

Replacement information	This unit standard replaced unit standard 15351.
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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.