

<b>Title</b>	<b>Demonstrate knowledge of meteorology for private aircraft operations</b>		
<b>Level</b>	<b>3</b>	<b>Credits</b>	<b>5</b>

<b>Purpose</b>	People credited with this unit standard are in accordance with Subject No 8, able to demonstrate knowledge of meteorology for private aircraft operations.
----------------	--

<b>Classification</b>	Aviation > Aircraft Operation
-----------------------	-------------------------------

<b>Available grade</b>	Achieved
------------------------	----------

### Guidance Information

- 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 8, for a private pilot licence. Credit will be awarded on meeting the requirements of the CAA approved assessment or examination.
- 2 Private aircraft operations are those which are not performed for hire or reward.
- 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, standards and Subject No 8.
- 5 All references to the CAA refer specifically to the Civil Aviation Authority of New Zealand.
- 6 Industry standards and recommended practices are those set in place by the CAA.
- 7 Industry texts may include but are not limited to – aircraft flight manuals, CAA Rules, CAA Advisory Circulars, NZCAA Flight Test Standard Guides, operator exposition.
- 8 For the purpose of this unit standard, *knowledge* refers to the knowledge, understanding, and application of the subject matter.
- 9 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.

---

## Outcomes and performance criteria

### Outcome 1

Demonstrate knowledge of meteorology for private aircraft operations.

### Performance criteria

- 1.1 The atmosphere is described.  
Range may include but is not limited to – composition, tropopause.
- 1.2 Atmospheric pressure is defined and described.
- 1.3 Temperature and heat exchange processes are described.
- 1.4 Atmospheric moisture is defined and described.
- 1.5 The wind is defined and described.
- 1.6 Stability of air is described.
- 1.7 Local winds are described.
- 1.8 Inversions are defined and described.
- 1.9 Cloud is described.
- 1.10 Precipitation is defined and described.
- 1.11 Visibility is defined and described.
- 1.12 Fog is defined and described.
- 1.13 Fronts and depressions are defined and described in terms of their effect on safe flying.
- 1.14 Thunderstorms are described.
- 1.15 Icing is explained and described.
- 1.16 Causes of turbulence, and its effects on flying are described.
- 1.17 New Zealand meteorology is described.
- 1.18 Meteorological services for aviation are interpreted and assessed.

---

<b>Planned review date</b>	31 December 2028
----------------------------	------------------

**Status information and last date for assessment for superseded versions**

Process	Version	Date	Last Date for Assessment
Registration	1	26 March 2007	31 December 2018
Review	2	20 October 2016	31 December 2027
Review	3	28 September 2023	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](mailto:qualifications@ringahora.nz) if you wish to suggest changes to the content of this unit standard.