

41055**Outline significant milestones in the development of aviation from its inception to current times**

Kaupae Level	2
Whiwhinga Credit	8
Whāinga Purpose	<p>This skill standard is intended for learners pursuing foundational knowledge in aviation.</p> <p>People credited with this skill standard are able to outline the development of aviation from its inception to current times, in New Zealand and overseas.</p> <p>This skill standard is primarily for use in micro-credentials and programmes intended to provide introductory knowledge of the aviation industry.</p>

Hua o te ako me Paearu aromatawai | Learning outcomes and assessment criteria

Hua o te ako Learning outcomes	Paearu aromatawai Assessment criteria
1. Outline significant milestones in the development of aviation from its inception to the conclusion of World War II.	a. Outline significant early attempts at lighter-than-air and heavier-than-air flight pre-World War I that contributed to the development of powered flight.
	b. Outline significant achievements in powered flight pre-World War I in New Zealand and overseas.
	c. Outline significant aviation developments during World War I and up to World War II.
	d. Outline aviation developments brought about by World War II.
2. Outline significant milestones in the development of aviation from the conclusion of World War II to current times.	a. Outline the development of the aircraft into a major transport mode post-World War II.
	b. Outline the development of military and civil jet aircraft.
	c. Outline current developments in the civil aviation industry.

Pārongo aromatawai me te taumata paearu | Assessment information and grade criteria*Assessment specifications:*

The level of knowledge required in this skill standard is that of a broad, general nature which indicates an awareness of significant milestones in the development of aviation rather than in-depth knowledge.

For the purposes of this skill standard, 'significant' means milestones that are described in aviation history textbooks.

Four significant events in the attempts to achieve heavier-than-air flight overseas and three for lighter-than-air must be identified.

Three significant pre-World War I aviation events from around the world must be identified.

Two examples of major aircraft from each of four different countries must be described as part of identifying aviation developments brought about by World War II.

Definition:

Powerplant refers to the aircraft engine.

Ngā momo whiwhinga | Grades available

Achieved

Ihirangi waitohu | Indicative content

Lighter-than and heavier-than-air

- Different types of lighter-than-air and heavier-than-air aircraft, such as balloons, kites, wings, parachutes, and Zeppelins.
- Manned balloon flights.
- Navigation.
- The use of different gases.

Powered pre-World War I flight

- First internationally recognised powered flight.
- First claimed powered flight in New Zealand.
- Crossing the English Channel.
- Crossing the Mediterranean Sea.
- First flight from the deck of a ship.
- First man and first women to fly.

Developments from the beginning of World War I up to World War II

- The uses of aeroplanes during World War 1, such as reconnaissance, air-to-air combat, aerial bombing, and crossing oceans.
- The progression of aviation, such as crossing oceans and mountain ranges, flying over unchartered territory, and dealing with temperature extremes.
- The use of post-War surplus aircraft to create the first airlines and airliners, air racing, and the introduction of air mail.

World War II developments

- The various roles aircraft had in World War II, such as transport of freight and personnel, bombing, air-to-air combat, maritime patrol, and reconnaissance.
- Different types of aircraft.
- Powerplant technology.

Transportation developments

- The use of post-World War II surplus pilots and aircraft for establishing airliners, airlines, and global routes.
- The capabilities and roles of helicopters.
- The opening of air routes using amphibious aircraft.

Military and civil jet aircraft

- Milestones in the development of jet-powered aircraft, such as breaking the sound barrier, passenger capacity, and vertical take-off and landing.
- Milestones in the development of military jet aircraft and their roles, such as air-to-air refuelling and air-to-air combat.
- Developments in European and North American jet aircraft for commercial purposes, such as range, speed, comfort, and passenger capacity.

Current developments

- Advanced airport infrastructures.
- Security.
- Alternative fuels.
- Commercial space flights.
- Sports aviation.
- Unmanned aerial vehicles.

Rauemi | Resources

Where the following resources have been updated, please refer to the latest version:

- Grant, R.G. (2007) *Flight: 100 years of Aviation* (updated edition London: Dorling Kindersly).
- Grant, R.G. (2017) *Flight: The complete history of aviation* (Dorling Kindersly Ltd.).

Pārongo Whakaū Kouna | Quality assurance information

Ngā rōpū whakatau-paerewa Standard Setting Body	Transport Industry Skills Board
Whakaritenga Rārangi Paetae Aromatawai DASS classification	Service Sector > Aviation > Aviation - Core
Ko te tohutoro ki ngā Whakaritenga i te Whakamanatanga me te Whakaōritenga CMR	0112

Hātepe Process	Putanga Version	Rā whakaputa Review Date	Rā whakamutunga mō te aromatawai Last date for assessment
Rēhitatanga Registration	1	26 February 2026	N/A
Kōrero whakakapinga Replacement information	This skill standard replaced unit standard 19585.		
Rā arotake Planned review date	31 December 2030		

Please contact Transport Industry Skills Board at qualifications@transportisb.nz to suggest changes to the content of this skill standard.