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| **1XXXXX** | **Identify significant milestones in the development of aviation from its inception to current times** |

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| **Kaupae |** Level | 2 |
| **Whiwhinga |** Credit | 8 |
| **Whāinga |** Purpose | 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.  This skill standard is intended for learners pursuing foundational knowledge in aviation. |

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

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

*Definitions:*

*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.
* 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 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 aircrafts 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 lift-offs 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.

**Rauemi |** Resources

* 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 Kounga |** Quality assurance information

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| **Ngā rōpū whakatau-paerewa |** Standard Setting Body | Ringa Hora Services Workforce Development Council |
| **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 |

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| **Hātepe |** Process | **Putanga |** Version | **Rā whakaputa |** ReviewDate | **Rā whakamutunga mō te aromatawai |** Last date for assessment |
| **Rēhitatanga |** Registration | 1 | [dd mm yyyy] | N/A |
| **Kōrero whakakapinga |** Replacement information | This skill standard replaced unit standard 19585. | | |
| **Rā arotake |** Planned review date | 30 December 2030 | | |

Please contact Ringa Hora Services Workforce Development Council at [qualifications@ringahora.nz](mailto:qualifications@ringahora.nz) to suggest changes to the content of this skill standard.