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| **1XXXXX** | **Apply aeronautical decision-making in an aviation enterprise** |

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| **Kaupae |** Level | 5 |
| **Whiwhinga |** Credit | 5 |
| **Whāinga |** Purpose | People credited with this skill standard are able to apply aeronautical decision-making processes to an aviation workplace situation. |

**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. Apply aeronautical decision-making in an aviation enterprise. | 1. Outline information processing that leads to effective decision-making. |
| 1. Describe barriers to effective decision-making and how to manage these for a selected aviation workplace. |
| 1. Apply an aeronautical decision-making process to a specific aviation workplace situation. |

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

*Assessment specifications:*

Assessments must be conducted in an active or simulated aviation environment to ensure practical application to reflect the standards of an aviation workplace.

*Definitions:*

*Aeronautical Decision-Making (ADM)* means a rational process of decision making in aviation environments that is systematic and takes into account relevant mental processes and human emotions. The decision maker has clear objectives, considers the environment in which the decision will be made (situation), generates a list of alternatives (options), evaluates and compares the related risks, makes and then implements the decision, but continues to monitor and review the situation and options.

*Aviation enterprise* means any organisation involved in aviation activities or support activities.

*D.E.C.I.D.E* is a model of decision-making that can be applied to an aviation workplace.

*Hazardous attitudes* are risk-taking behaviours that can interfere with decision-making. These include anti-authority, invulnerability, impulsivity, macho, resignation, and the fear of appearing incompetent.

*Naturalistic Decision Making (NDM*) is a style of intuitive decision making. Naturalistic decision making describes how experienced people make decisions in dynamic, naturalistic environments, under conditions of time pressure, shifting goals, unclear information, and high risk.

***Ngā momo whiwhinga |*** *Grades available*

Achieved

**Ihirangi waitohu |** Indicative content

Information processing

* Sensory register.
* Working short-term memory.
* Long-term memory
* Factors that have a negative impact on information processing:
  + Alcohol and drug impairment
  + Poor communication
  + Distraction
  + Fatigue and stress
  + Illness
  + Medication
  + Poor nutrition
  + Cognitive bias
  + Startle response
  + Workload
  + Time pressure.

Barriers to effective decision making

* Confirmation bias.
* Entrapment.
* Heuristics.
* Limitations of attention.
* Cue salience.
* Mindset.
* Satisficing.
* Hazardous attitudes.
* Aviation accident reports.

Aeronautical decision-making processes

* ADM.
* NDM.
* D.E.C.I.D.E
* 3-P model.
* 5-P model.
* PILOT model.

**Rauemi |** Resources

* [www.aviation.govt.nz/safety/safety-education-and-advice/human-factors/non-technical-skills/decision-making/](http://www.aviation.govt.nz/safety/safety-education-and-advice/human-factors/non-technical-skills/decision-making/)
* [www.casa.gov.au/sites/default/files/2024-07/avsafety-aviation-decision-making-card.pdf](http://www.casa.gov.au/sites/default/files/2024-07/avsafety-aviation-decision-making-card.pdf)
* [skybrary.aero/articles/decision-making-oghfa-bn](https://skybrary.aero/articles/decision-making-oghfa-bn).

**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 23551. | | |
| **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.