Title	Demonstrate knowledge of the fundamentals of safety management systems for an aviation environment		
Level	4	Credits	5

monitoring; and the principles and methods for conducting safety audits.	Purpose Peo env mai and pro mor safe	ople credited with this unit standard are, for an aviation ironment, able to: outline the fundamentals of safety nagement system; outline the relationship between hazards I risk; and demonstrate knowledge of risk management cedures; hazard and incident reporting; safety performance nitoring; and the principles and methods for conducting ety audits.
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Classification	Aeronautical Engineering > Aeronautical Engineering - Core

Available grade	Achieved

#### **Guidance Information**

- 1 Resources may include but are not limited to International Civil Aviation Organization. 2013. Doc 9859, Safety Management Manual. 3<sup>rd</sup> ed. ICAO, available at <u>https://skybrary.aero/articles/icao-safety-management-manual-doc-9859</u>. AS/NZS ISO 31000:2009 Risk management - Principles and guidelines; or SA/SNZ HB 436:2013 Risk management guidelines - Companion to AS/NZS ISO 31000:2009 which is available at <u>http://www.standards.co.nz</u>.
- 2 All references to the CAA refer specifically to the Civil Aviation Authority of New Zealand.
- 3 Industry standards and recommended practices are those set in place by the CAA.
- 4 Industry texts may include but are not limited to ICAO Safety Management Manual, AS/NZS ISO 31000:2009 Risk management – Principles and guidelines, CAA Rule Part 100 and other Rules, CAA Advisory Circulars, operator expositions.
- 5 The term *safety health* is an indication of an organisation's resilience to unexpected conditions or acts by individuals. It reflects the systemic measures put in place by the organisation to defend against the unknown and is an indication of the organisation's ability to adapt to the unknown, effectively reflecting the safety culture of the organisation.

# Outcomes and performance criteria

#### Outcome 1

Outline the fundamentals of a safety management system within an aviation environment.

# Performance criteria

1.1 A safety management system in an aviation context is described in accordance with industry texts and standards.

Range may include but is not limited to – core business function, systems approach, system safety.

- 1.2 The benefits of a safety management system are explained.
  - Range may include but is not limited to safety, operational, financial.
- 1.3 Safety management concepts are described in accordance with industry texts and standards.
  - Range may include but is not limited to cornerstones of safety management, strategies for safety management, key safety management activities, safety management process.

# Outcome 2

Outline the relationship between hazards and risk.

## Performance criteria

2.1	A hazard in the aviation industry is defined.		
	Range	may include but is not limited to – visual, hidden, emerging hazards.	
2.2	The purpose texts and sta	e of hazard identification is described in accordance with industry andards.	
2.3	Likelihood and consequence of hazards are assessed and ranked against established risk assessment criteria.		
2.4	Risk in the a	viation industry is defined.	
2.5	Risk manage	ement is described in accordance with industry texts and standards	
	Range m	ay include but is not limited to – elimination, isolation, minimisation	
2.6	A risk matrix	used to manage hazards and risk is described.	
	Range	consequences, likelihood, risk acceptability.	

#### Outcome 3

Demonstrate knowledge of risk management procedures.

## Performance criteria

3.1 Risk management process is described in accordance with industry texts and standards.

Range context, identification, analysis, evaluation, treatment.

3.2 Principles of risk mitigation are described in accordance with industry texts and standards.

Range defence analysis, risk mitigation strategies, brainstorming, evaluating risk mitigation options.

3.3 Risk communication procedures are described in accordance with industry texts and standards.

#### Outcome 4

Demonstrate knowledge of hazard and incident reporting for an aviation environment.

#### Performance criteria

4.1 Types of incident reporting systems used within aviation environments are described in accordance with industry texts and standards.

Range mandatory, voluntary, confidential.

- 4.2 Principles for effective incident reporting systems are described in accordance with industry texts and standards.
  - Range may include but is not limited to trust, non-punitive, inclusive reporting base, independence, ease of reporting, acknowledgement, promotion.

#### Outcome 5

Demonstrate knowledge of safety performance monitoring.

#### Performance criteria

- 5.1 The requirements for feedback on safety performance to complete the safety management cycle are described in accordance with industry texts and standards.
- 5.2 Systems to identify the safety health of an organisation are described in accordance with industry texts and standards.
- 5.3 Safety oversight monitoring is described in accordance with industry texts and standards.

Range international level, state level, organisational level, inspections, surveys, quality assurance, safety audits.

# Outcome 6

Demonstrate knowledge of the principles and methods for conducting safety audits.

# Performance criteria

- 6.1 The purpose of safety audits is described in accordance with industry texts and standards.
- 6.2 Safety audit information sources are described in accordance with industry texts and standards.
- 6.3 The requirements of a safety audit are outlined in accordance with industry texts and standards.

Range may include but is not limited to – pre-audit, audit, post-audit.

Planned review date	31 December 2027
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## Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	26 March 2020	N/A
Rollover and Revision	2	26 April 2024	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 <u>qualifications@ringahora.nz</u> if you wish to suggest changes to the content of this unit standard.