

# **Safety Management System**

# Part A CASR Part 139 - Aerodromes

**Version 2.3 – 14-February 2024** 





#### **Document Control**

Revisions to this manual are dated and a new version number assigned accordingly. In addition to recording the date of change for each section or page of this manual, a summary of the changes made is also recorded.

Version no.	Date of change	Parts and page	Summary of change(s)
1	13 May 2021		
2	20/10/2021	All	Amendments and updates to reflect: - new MOS139 Aerodromes - changes to organisational structure
2.1	31/03/2023	1.3. Key personal, page 18-22	Annual review by Aerodrome Operations Manager
2.2	20/10/2020	Added 1.5.4 Personnel title change	Regular review
2.3	14/02/2024	Added 3.2	Key performance indicators Airside tracker



## **Table of Contents**

ntrodu	ction	5
Scope a	nd Purpose	6
1.1	Management Commitment and Responsibility	
1.2	Safety Accountabilities	
1.3	Appointment of Key Safety Personnel	
1.3		
1.3	, , , ,	
1.3	·	
1.4	SMS Implementation Plan and the CAPL Aerodrome Operations Manual	
1.5	Third Party Interface	19
1.5	.1 PERCOW Process	19
1.5	.2 Inductions	20
1.5	.3 Working Airside	21
1.5	.4 Temporary Height Approvals	21
1.6	Coordination of emergency response planning	22
1.6	.1 Aerodrome Emergency Planning	22
1.7	Documentation	24
1.7	.1 Document Control	24
		,
2.1	Aviation Hazard Identification	
2.1		
2.1	·	
2.2	Safety Risk Assessment and Mitigation	
2.2	· -	
3.1	Safety Performance Monitoring and Measurement	32
3.1.2	Key performace Indicators Airside tracker	32
	late week Cofety layoutise ties	22
	Internal Safety Investigation	



#### Aviation Safety Management System

	3.2.1	Classification and Level of Occurrences	37
	3.2.2	Summary	38
	3.3	The Management of Change	37
	3.3.1	NQA Risk Management Framework	37
	3.4	Continuous Improvement of the SMS	38
4			Safety Promotion
•••			39
	4.1	Fraining and education	39
	4.1.1	Aviation SMS Training	39
	4.2	Safety Communication	40
	Guida	nnce Material – Aviation Risk Analysis Process	41
	Risk A	nalysis	41
	Areas	of Risk Assessment	43
	Risk I	evels after Assessment and Controls	43



#### Introduction

This Part A of the Cairns Airport Safety Management System (SMS) manual documents Cairns Airport's Safety Management System as it relates to, or in direct support of, the safe operation of aircraft.

Safety management seeks to proactively mitigate safety risks before they result in aviation accidents and incidents. Through the implementation of safety management, CAPL can manage their safety activities in a more disciplined, interactive and focused manner. Possessing a clear understanding of its role and contribution to safe operations enables CAPL, and its relevant stakeholder, to prioritize actions to address safety risks and more effectively manage its resources for the optimal benefit of aviation safety.

ICAO Doc 9859 – Safety Management Manual (SMM) Chapter 1, 1.1.7 lists the many benefits to implementing safety management, some of which include:

- a) Strengthened safety culture An organization's safety culture can be strengthened by making visible the commitment of management and actively involving personnel in the management of safety risk. When management actively endorses safety as a priority, it is typically well-received by personnel and becomes part of normal operations.
- b) Documented, process-based approach to assure safety Establishes a clear and documented approach to achieving safe operations that is understandable by personnel and can be readily explained to others. In addition, clearly defining baseline performance allows controlled changes when continuously improving the safety program/system, thereby helping the organization optimize resources required to implement change.
- c) Better understanding of safety-related interfaces and relationships The process of documenting and defining safety management interfaces can benefit the organization's understanding of the inter-process relationships, leading to an enhanced understanding of the end-to-end process and exposing opportunities for increased efficiencies.
- d) Enhanced early detection of safety hazards Improves the State/service provider's ability to detect emerging safety issues, which can prevent accidents and incidents through the proactive identification of hazards and management of safety risks.
- e) Safety data-driven decision-making Improves the State/service provider's ability to gather safety data for the purpose of safety analysis. With some strategic thinking to determine what



questions need to be answered, the resulting safety information can aid decision makers, in near real-time, to make better-informed, valid decisions. An important aspect of this decision-making is the allocation of resources to areas of greater concern or need.

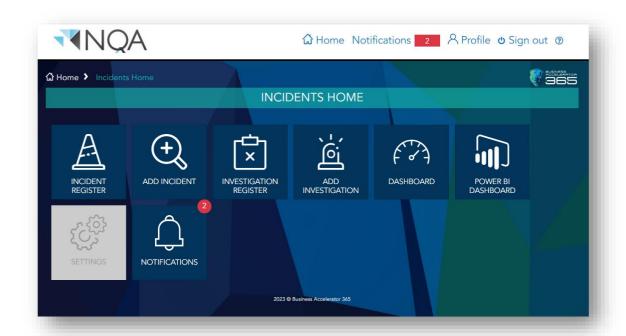
- f) Enhanced communication of safety Provides a common safety language throughout an organization and industry. A common safety language is a key enabler to the development of a common understanding of the organization's safety goals and accomplishments. In particular, it provides an appreciation for the organization's safety objectives and its safety performance indicators (SPIs) and safety performance targets (SPTs), which provide the direction and motivation for safety. Personnel will be more aware of the organization's performance and the progress being made toward achieving the defined safety objectives, as well as how they contribute to the organization's success. The common safety language enables service providers with multiple aviation businesses to aggregate safety information across organizational entities. It is necessary to support the management of interfaces across the aviation system.
- g) Evidence that safety is a priority Demonstrates how management supports and enables safety, how safety risks are identified and managed, and how safety performance is continually improved, resulting in increased confidence by the aviation community, internal and external to the organization. This also results in personnel who are confident about the organization's safety performance, which can lead to the increased attraction and retention of high caliber staff. It also allows for States and regional safety oversight organizations (RSOOs) to develop confidence in the safety performance of service providers.
- h) *Possible financial savings* May allow for some service providers to qualify for a discount on their insurance premiums and/or a reduction to their workers' compensation premiums based on their SMS results.
- i) *Improved efficiencies* Possible reduction in the cost of operations by exposing inefficiencies in existing processes and systems. Integration with other internal or external management systems may also save on additional costs.
- j) Cost avoidance Through the proactive identification of hazards and safety risk management (SRM), the cost incurred due to accidents and incidents can be avoided. In such cases, direct costs may include: injuries; property damage; equipment repairs; and schedule delays. Indirect costs may include: legal action; loss of business and damaged reputation; surplus spares; tools and training; increased insurance premiums; loss of staff productivity; equipment recovery and clean-up; loss of use of equipment leading to short-term replacement equipment; and internal investigations.

## **Scope and Purpose**



The Cairns Airport Aviation Safety Management System is issued pursuant to the Civil Aviation Safety Regulations 1998 (CASR), regulation 139.095 and meets the requirements of the Manual of Standards (MOS) – Part 139 Aerodromes, Chapter 25. Further guidance has been sought from the CASA Advisory Circular (AC) 139.C.26: Safety Management Systems for Aerodromes.

Cairns Airport has developed an integrated approach to Safety Management in as far as systems used for recording, identifying, and reporting can be cross populated and used equally within the organization for Aviation, WHS, Environmental and Security management. Cairns Airport recently introduced an event manager on sharepoint in pursuing its integrated safety management strategy; ", and is utilized by all personnel and safety managers to for the management of safety occurrences and incident investigations.



Picture 1: Business Accelerator 365 - screenshot

However, due to the specific nature of aviation operations, an additional mobile recording and reporting application "Tracker AIRSIDE" is utilized exclusively by the Aerodrome Operations Officers and Aerodrome Operations management for the reporting of aerodrome safety matters.





Picture 2: screenshot of Tracker AIRSIDE application

This part of the manual describes the philosophy, processes and framework of regulations comprising the Cairns Airport Aviation Safety Management System, and applies to all employees and external service providers who are involved in activities related or interface with any aviation activities at Cairns Airport. The Cairns Airport Aviation safety management system is a systematic approach to the management of safety and entails the organization safety structure, accountabilities, policies and procedures.

The SMS involves both technical and operational considerations in relation to aviation support systems. Aviation support systems include the infrastructure and equipment that directly interfaces with aircraft to provide the means and ability for aviation activities to take place and include but not limited to:

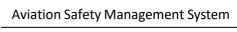
- Movement area: Runways, Taxiways, Aprons
- Airspace
- Lighting systems
- Aerobridges



## 1. Safety Policy and Objectives

#### 1.1 Management Commitment and Responsibility

The NQA Chief Executive Officer (CEO), through his policy statement has provided clear direction and guidance on his commitment to a safe and secure environment with safety being of the highest priority. This Policy statement also outlines expectations and commitment of the most senior managers down to all within the organization.









## **Aviation Safety Policy**

NQA is committed to providing healthy and safe aerodromes for all of our people, visitors, contractors, stakeholders, and all those associated with NQA and our airports. Our vision is to have a safety culture which is risk wary and seeks to continuously learn and improve.

NQA has established an Aviation Safety Management System (SMS), which is designed to support the pursuit of a recognisable and effective aerodome safety culture, which will be reviewed and updated on a regular basis. NQA's goal is to foster a co-operative environment in which everyone is safe, and their health and wellbeing are protected and preserved whilst operating on our aerodromes.

#### We will do this by:

- Encouraging a healthy and active near miss and hazard reporting system, which is used to promote and initiate changes in "the way we do things at NQA".
- Controlling our hazards and risks to the best, reasonably practicable, standard achievable with a focus on critical risk and high potential incidents.
- Building and improving on a fit-for-purpose safety management system, recognising the growing need to support and enhance our systems and processes.
- Consulting and training our people to create the skills and knowledge necessary to understand our risk management processes and manage critical risk.
- Leading from the Executive leadership team, building trust and recognition in the commitment to a safe and healthy workplace by supporting the Strategy and initiatives.
- Collaboratively working together towards a mature safety culture in which all of our people, stakeholders and contractors are engaged and promote the achievement of a safe and healthy workplace.
- Positively contributing to the physical and mental, health and wellbeing of our people.
- Allocate the necessary resources to support safe and compliant use of our aerodromes by all users in accordance with our Safety Management System (SMS).
- Just and fair reporting, monitoring and evaluation of our Safety Performance, including effective two-way engagement and communication with our people, and application of disciplinary processes, as outlined in our SMS.

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- Informing the Board and Executive, ensuring WHS duties and obligation are ably and adequately met.
- Always doing what is right for health and safety, in which there are no barriers, including financial, created or existing, that can be reasonably overcome.
- Never getting comfortable. Continually striving to improve our strategies and systems, for the benefit of those relying on NQA for their health, safety, and wellbeing.

Garry Porter

CASA Accountable Manager

Date: October 23

Operating Cairns & Mackay Airports



#### 1.2 Safety Accountabilities

As communicated and detailed in the NQA CEOs Health, Safety, Security and Environment Policy the CEO and COO will ensure that financial delegations are structured so that human resources and equipment are available and states that each individual employee has a responsibility to the Chief Executive Officer (CEO);

- To follow safe working procedures, instructions and rules,
- To take care of the health and safety of themselves and others, of security and of the environment,
- To participate in training and other activities to ensure they have the knowledge, skills and competency to work safely, securely and environmentally responsibly,
- To report hazards, near misses, incidents and injuries in a timely manner, and
- Actively participating in risk assessments, audits, investigations and other activities to reduce hazards and risk.

#### 1.3 Appointment of Key Safety Personnel

The NQA CEO is the Accountable Manager for CASA MOS Part 139 purposes and has appointed the Aerodrome Operations Manager as his delegate.

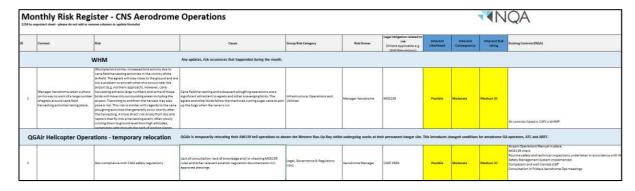
The responsibilities of the Aerodrome Operations Manager include:

- Aviation Hazard identification and risk assessments
- Developing and maintaining the Aerodrome SMS (ASMS) documentation
- Developing risk treatments/controls
- Reviewing and acting on hazard reports
- Investigation of Airside driving incidents and accidents
- Ensuring Cairns Airport Aerodrome Safety Officers understand the SMS
- Regularly review the Aviation Safety Management System (SMS)

#### 1.3.1 The Aerodrome Operations Manager

- Review and advise on all projects and operations associated with aerodrome and airspace activities,
- Advise on matters associated with aviation safety,
- Support and assist with investigations of aviation incidents
- Conduct regular reviews of reported aviation risks, incidents and trending against the SMS.





Picture 3: Example of Monthly Risk Register of aviation risks



#### 1.3.2 Operations Team

The Operational Team consists of experienced individuals who are experts in their field and are responsible for:

- Ensuring Cairns Airport is compliant with relevant regulations.
- Monitor the implementation of all legislation changes to ensure they transition effectively into operation.
- Provide support and input during internal and external audits including Aerodrome
   Technical Inspections and CASA audits.
- Provide input into risk assessments and operational planning relating to works and airside projects.
- Maintenance of the Aerodrome Operations Hazard/Risk Register
- Change management process and controls

#### 1.4 SMS Implementation Plan and the CAPL Aerodrome Operations Manual

Further to the processes and activities as set out in the Safety Management System Manuals Cairns Airport implements a comprehensive list of safety aerodrome activities as set out in the Aerodrome Operations Manual. An example of those activities are depicted in the image below.



AIRSII	DE ACTIVITY	ALLOCATIONS						Cair	nsairpor
					DUTY SHIF	TACTIVITIES		BIRD SH	IFT DUTIES
		AIRSIDE FUNCTION	TIME	CAI	R 16	CAF	R 17	CA	R 18
		ANSIDETONETION	111112	A SHIFT	P SHIFT	E SHIFT	L SHIFT	BE SHIFT	BL/BLA SHIF
	Shift Handover & Tran	sition (Sign on and read any handover notes)	Start of Shift	1	1	1	1	1	1
		d NOTAMS) Update if required	Start of Shift	1	1	1	1	1	1
	Review Previous Shift		Start of Shift	1	1	1	1		
	Firearm, Ammunition	Firearm Register	Start of Shift					1	1
	& Speedgun Register	Ammunition Register	Start of Shift					1	1
	Vehicle Inspection & R		Start of Shift	1	1	1	1	1	1
		INTL - Spill Kits	Daily	1					
Airside	Spill Kits &	DOM - Spill Kits	Daily				1		
Safety	Emergency Showers / Eye Wash Inspections	INTL - Emergency Showers	Sunday			1			
		DOM - Emergency Showers	Sunday				1		
		Use of Seatbelts	Daily	1	1	1	1		
		Use of Mobile Phones	Daily	1	1	1	1		
	Inspections	Pedestrian Safety	Daily	1	1	1	1		
		Vehicle / Equipment Parking	Daily	1	1	1	1		
		GSE Unit Load Device Storage	Daily	1	1	1	1		
		Runway 15/33 HN - Before 1st RPT movement	Daily	1					
		Runway 15/33 HJ - First Light	Daily	1					
	Runway Inspections	Runway 15/33 HN - Last Light	Daily		1				
		Runway FOD Inspection (Mid Morning / Mid Afternoon)	Daily	1	1				
		Old Runway 12/30 (Logbook entry only)	Daily			1			
		Taxiway B, B2, B3, B4, B5	Daily	1+	1+	1+	1+		
		Taxiway G, G2, G3	Daily	1+	1+	1+	1+		
		International Apron & Taxiway D	Daily	1+	1+	1+	1+		
Airside Activities		Domestic Apron & Taxiway C, C1, C2, C3, C4	Daily	1+	1+	1+	1+		
		GA Taxiways & Aprons	Daily	1+	1+	1+	1+		
	Serviceability	GA Terminal	Daily			1	1		
	Inspections	Perimeter Fence (Airside)	Daily	1	1	1	1		
		Perimeter Fence (Landside)	Daily			1	1		
		Perimeter Fence - Before First RPT Movement	Daily					1	
		Perimeter Fence - Late Afternoon	Daily						1
		Drains & Tide Gates	Daily			1			
		Drains & Tide Gates (Additional checks after King Tides & Heavy Rain)	Daily					1+	1+



					DUTY SHIFT	ACTIVITIES		BIRD SH	IFT DUTIES
		AIRSIDE FUNCTION	TIME	CAI	R 16	CAI	R 17	CA	R 18
				A SHIFT	P SHIFT	E SHIFT	L SHIFT	BE SHIFT	BL/BLA SHIF
		Bay Routine Inspection	Daily	1+	1+	1+	1+		
	Bay Inspections	Bay Standards Inspection	Daily	1+	1+	1+	1+		
		Aircraft Turnaround Inspection	Daily	1	1	1	1		
	Airfield Permits &	Airside Behaviour Observations	Daily	1	1	1	1	1	1
	Infringements	Motorised Equipment Inspection	Daily	1	1	1	1	1	1
		Wildlife Patrol	Daily	1	1	1	1		
		Wildlife Patrol (All Zones)	Daily					1+	1+
		Wildlife Harassment & Cull	Daily	1+	1+	1+	1+	1+	1+
		Wildlife Routine Count (If No Bird Shift)	Sunday			1			
	Wildlife Management	Wildlife Routine Count (Either Shift)	Sunday					1	1
		Wildlife Strike (As they Occur)	Daily	1	1	1	1	1	1
Airside Activities		Wildlife Observation: ALL ZONES	Daily					1+	1+
(continued)		Wildlife Observation: Bat Monitoring N&S ends of Airport (before First Light)	Daily					1	
,		Wildlife Observation: Bat Monitoring N&S ends of Airport (Before Dusk)	Daily						1
		Wildlife Observation: ZONE 8 - Adventure Park (If No Bird Shift)	Daily			1	1		
		Wildlife Observation: ZONE 8 - Adventure Park (Either Shift)	Daily					1	1
	Foreign Object Debris & Spill Treatment	Foreign Object Debris	Daily	1+	1+	1+	1+		
	Escorts, Engine Ground Running & Parking	Escorts & Engine Runs	Daily	1+	1+	1+	1+		
		Parking - General Aviation Parking Charges	Daily			1	1		
		Sunset Movement Area Lighting Inspection	Saturday		1				
	Lighting & Visibility Inspections	Permanent Obstacle Area Lighting Inspection	Thu/Sun		1		1		
	,	Lighting Inspection	Wed / Sat	1			1		
	Maintenance & Capital Works	Maintenance Request	Daily	1	1	1	1	1	1
	Administration - Shift	Set Up & Sign Off	Daily				1		
Transition	Vehicle Cleaning		Sunday		1		1	1	1
Activities	Firearm Maintenance	- Equipment Check & Cleaning	Wed / Sun					1	1
	Breaks		Daily	1	1	1	1	1	1
				1+ More than		can or should be 7/8) Adventure Po		omission required	ı.

To support daily implementation of aerodrome safety activities, Cairns Airport has implemented an innovative mobile app called *Tracker AIRSIDE*. *Tracker AIRSIDE* is used to record, track and influence airside compliance, safety, incident management, operational maintenance and overall airside performance efficiently and effectively. The image below depicts the functionality of the system:







#### 1.5 Third Party Interface

Cairns Airport has a responsibility for the safety of any contracted services and products delivered through tendering and service level agreements. Therefore Cairns Airport will prior to awarding any contract or entering into any agreement ensure that the contractor is fully aware of their obligations in relation to Cairns Airport's ASMS.

In determining the suitability of a third party to deliver services, Cairns Airport will consider any past safety history and the ability of the organization to meet expectation through the examination and review of the organization's safety, emergency and hazard plans including qualifications/certificates, licenses and insurances.

Cairns Airport has in place processes, procedures and rules that capture required documentation, review and approval of the engagement of third parties. These procedures include tendering arrangements, a permit to commence work assessment, site rules for working on airport and induction training.

Further, CA chairs a quarterly Safety and Security Forum to aerodrome stakeholders where relevant safety information derived from the SMS is actively conveyed to participants. For any safety-critical information CA aerodrome operations management and staff liaise with the relevant stakeholders with a matter of urgency; this comprises priority meetings, safety bulletins to a wider audience and/or NOTAMs.

#### 1.5.1 PERCOW Process

Cairns Airport has in place a permit to commence works system that is a systematic approach in the assessment and evaluation of third parties claims in their ability to safely conduct proposed works at Cairns airport. The PERCOW is an online document which authorizes certain people/organizations to carry out specific work at certain times and locations. The process also ensures that all stakeholders are aware and have an opportunity to comment on any concerns.

Infrastructure Management is responsible for the administration and issuing of PERCOWs and contractor induction processes. Copies of all issued PERCOW's and induction training is recorded and held on SharePoint.

The PERCOW online application and PERCOW Instructions are accessible on the Cairns Airport Website.



#### 1.5.2 Inductions

It is a requirement that contractors including all their staff, complete a Cairns Airport Induction prior to performing any works landside or airside at Cairns Airport. Those that are required to complete the induction are provided access to "Who's on Location". Once completed the presentation and the assessment, an e-certificate is emailed to Cairns Airport and the contractor and all currency and induction details and requirements are kept on the Who's on Location system. When the relevant currency for a contractor expires, a message is sent to Cairns Airport. In addition, Who's on Location also provides an overview of all contractors that are on site.



Figure 3: Screenshot of Who's on Location

The contractor induction details the following

aspects: NQA vision and values

Contractors duty of care to their workers and others as stipulated in the Work

Health and Safety ACT 2011

NQA key safety policies Guidelines:

- responsibilities under the Cairns Airport ASMS
- DAMP
- Hearing conservation
- High vis clothing
- PPE requirements
- Airside No Smoking policy
- Work harassment policy

Tools of trade and requirements when taking them into security

sensitive areas. Sign in sign out locations for contractor cards

PERCOW and associated permits i.e. fire impairment, hot works, and excavation



Additional requirements for working including:

- Risk assessments, JSA, SWMS are completed
- Construction white cards
- Insurances
- Parking locations
- Vehicle and tool security

Duties as per Environmental Protection Act

- Waste generation and disposal Working airside including:
- FOD
- Bird and wildlife including food scraps and waste
- Vehicle requirements
- Restricted access, the difference between ASIC, VIC passes. Where and how to obtain them
- First aid requirements and evacuation areas.
- Role of the RO/WSO (ASO)

In addition to this mandatory induction and dependent on the nature and location of the works site more specific inductions will be conducted face to face.

#### 1.5.3 Working Airside

Any third party engaged in works airside is further assessed against the Cairns Airport Operations Manual Section 3.10 and further restrictions may be applied including the development of Method of Working Plan (MOWP) dependent of the nature of the work and risk to aircraft movements.

For all works involving MOWPs a Works Safety Officer (WSO) will be appointed and the MOWP will be developed in accordance with MOS 139 Chapter 15 section and approved by the Cairns Airport Aerodrome Operations Manager. All effected aviation stakeholders and regulatory authorities are consulted prior to any works and contractors are briefed on the MOWP contents, restrictions along with the WSOs responsibilities and authority.

A risk assessment workshop is conducted involving all stakeholders for all major airside projects and works that may introduce additional hazards and risks.

#### 1.5.4 Temporary Height Approvals

Cairns Airport Pty Ltd controls on-airport works and development activities and has an ongoing relationship with crane operators. Applications to carry out crane operations are made in writing to CAPL at least 72 hours prior to the commencement of any activity, with note that crane operations that penetrate the OLS could require up to 6 weeks lead time for CASA and Airservices review. Crane operators now complete an electronic application form from the Cairns Airport website. Upon receipt CAPL will review the application at the earliest opportunity and revert to the applicant with an approval or reject notification. If the application is rejected, the reasons will be stated and the crane operation must not go ahead until CAPL is satisfied that the crane operation can be accommodated in full compliance with aviation safety regulations. CAPL Aerodrome staff will



provide guidance to the operator as to the nature of amendments that are necessary to achieve this outcome.

Any approved crane operation must adhere to the conditions stated on the approval notification. On some occasions, this information needs to be reviewed in consultation with the Civil Aviation Safety Authority and Airservices Australia once provided.

#### 1.6 Coordination of emergency response planning

Cairns Airport has developed an incident management framework that details the management structure and systems that will be put into effect in the event of an incident. This framework provides details of the Command, Control and Coordination along with the Cairns Airport and external agencies responsibilities and legislative powers in the event of an incident occurring at Cairns Airport.

The incident management framework forms the bases for management for all levels of incidents at Cairns airport and provides the criteria for each level of incident from 1 through 5 and the activation process. Dependent on the level of incident it will determine the involvement of internal and external agencies.

The Incident Management Framework contains elements such as;

- Incident Management,
- Reporting and classifying incident,
- Activation,
- Cairns Airports incident management structure,
- Police and emergency services,
- Investigations,
- Communications/Media Policy,
- Incident debrief and lessons learnt.

Supporting the incident management framework are a number of plans relevant to the type and location of an incident. These plans may be activated wholly or the sub plans within these plans activated individually in support of other plans. For example the media plan contained within the Aerodrome Emergency Plan may be activated in support of the terminal 2 Fire and Building Evacuation Plan.

As part of the planning and development of Cairns Airport emergency response plans. The Airport Emergency Committee exercise planning and post exercise or incident debriefing. All post exercise and incident reports are reviewed and assessed by the The Airport Emergency Committee .

#### 1.6.1 Aerodrome Emergency Planning

Cairns Airport is required as a certified aerodrome to meet the requirements of the Civil Aviation Safety Regulations 1988 part 139 contained in MOS 139 Chapter 24, to develop and maintain an



Aerodrome Emergency Plan. Details of responsibilities, review and testing of the Aerodrome Emergency Plan (AEP) are listed both in the Cairns Airport AEP

The AEP is password controlled and available on the Cairns Airport web site. The AEP covers off on the following emergency responses:

- Local standby,
- Full emergency,
- Crash on airport,
- Crash off airport,
- Ground emergency fire,
- Medical emergency,
- Pandemic influenza,
- Aviation security,

Hazardous materials,

• Environmental Damage / Natural disaster,

In addition, the AEP contains a number of supporting plans;

- Media management,
- Management of affected passengers,
- Care of relatives / friends,
- Care of the injured and deceased, and
- Disabled aircraft recovery.

In addition to the AEP the Cairns Airport has a separate Cyclone plan which details responsibilities and detailed action plans which cover activation stages, pre, during and post event. The Cairns Cyclone plan is located on the Cairns Airport Web Page.



#### 1.7 Documentation

#### 1.7.1 Document Control

All safety operational records including safety policies, processes and procedures are kept on SharePoint. In addition, all relevant Aerodrome documentation relevant to the day-to-day duties of the Aerodrome Safety Officer are located in the Knowledge Centre on the Tracker AIRSIDE so the officers have the necessary information ready at their fingertips.

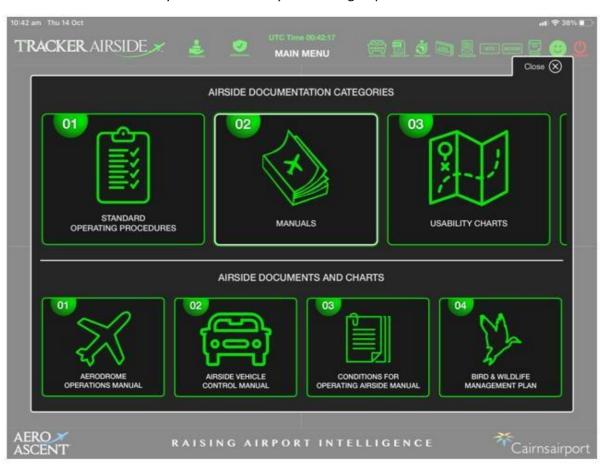


Figure 4: screenshot of the Tracker AIRSIDE knowledge Centre

Cairns Airport has in place a document control procedure which describes the way in which Cairns Airport's documents including this ASMS are issued, received, reviewed, controlled and stored. Cairns Airport's document control procedures are based on ISO 9001:2015 and;

- Ensures the availability of resources and information necessary to support the operation and monitoring of processes,
- Process documented procedures in accordance with the international standards,



• Include documents needed by the organization to ensure the effective planning, operation and control of its processes.

Once a document has been processed it is made available on Cairns Airport SharePoint and dependent on the nature of the document it will be published on the Cairns Airport website.

Controlled documents are monitored and advice sent to the document author and sponsor that the document is due for review, once the document has been reviewed it is signed off and re published, notification is then sent to document holders and effected parties.



Details of the process is found in the Document Control Procedure manual on the SharePoint.

## 2. Safety Risk Management

#### 2.1 Aviation Hazard Identification

#### Introduction

To effectively manage and understand risk we must understand the nature, location and types of hazards within the environment that we live and work.

The hazard identification process is both a proactive and reactive process that occurs either when a hazard is identified in the workplace during inspection or through hazard reporting (proactive), and after an investigation of a safety occurrence (reactive).

Only after fully analyzing such reports and occurrences can we fully realize the extent, potential harm and risks associated with any one single hazard.

Cairns Airport also understands and assesses the hazards and risks associated with the introducing of new equipment, works and procedures.

#### 2.1.1 Aviation Hazard Tracking

The aim of any aviation hazard report is to document hazards to aviation safety, which have been discovered in the workplace or through an occurrence investigation, and to make recommendations for management to assist in controlling or eliminating these identified hazards. The term 'hazard reporting' covers all safety reports used by Cairns Airport, including all reporting through Tracker AIRSIDE and the Sharepoint event register . Additionally hazard reporting may be submitted on stakeholders own forms or email.

Any reported aviation safety incidents identified as a medium or high risks must be reviewed by the Aerodrome Operations Manager, the Aerodrome Emergency and Operations Safety and Compliance manager

Daily serviceability inspection by the ASOs, Bird and wildlife monitoring on and off the airport, technical pavement inspections, airfield lighting inspections, external annual technical inspections



and CASA surveillance inspections all contribute to the identification and monitoring of aviation hazards. Details and responsibilities of these routine inspections and checks are listed in the Cairns Airport AOM and MOS 139 Chapter 10 Section 10.18.

Any identified hazard that cannot be eliminated immediately, must have controls put into place and an action plan established for its treatment.

Hazards identified, are dealt with in a number of ways through a hierarchy of controls from the most desirable and effective means from elimination of the hazard through to administrative controls and placement of barriers.

#### 2.1.2 Manager's Responsibilities

All managers at all levels must proactively manage hazards. To achieve this they must:

- Encourage and support open and honest reporting of hazards and safety occurrences by all staff and external stakeholders throughout the airport.
- Ensure all reported hazards and occurrences are treated in a just and fair manner; that is, personnel are responsible and accountable for their actions but the context within which those actions were made is taken into consideration.
- Ensure that all hazard and safety occurrences reports are coordinated and investigated by an appropriately qualified person.
- Review all action plans to ensure hazards are being addressed in a timely manner.
- The Cairns Airport safety manager has an additional responsibility to establish a closed loop system of review.

Hazards and risk registers can be found on SharePoint under Risk Management and Assurance under the Legal banner.

#### 2.2 Safety Risk Assessment and Mitigation

Cairns Airport core business is the provision of air transport infrastructure and support systems to facilitate the safe movement of aircraft and all other aviation activities. Efficient and responsible management of risk is essential for Cairns Airport to achieve its corporate objectives and to avoid the significant flow on impact that loss of reliability of its vital infrastructure, resources and reputation would have on the business, community, and the region's economy.

It is recognized that the management of risk is a key element of good corporate governance, as well as providing an increased level of safety. NQA's Risk Management Framework describes the manner in which Cairns Airport identifies, assesses, monitors and manages risk. The Framework is supported by a strong system of internal control. Cairns Airport is committed to reducing risks to a level as low as reasonably practicable and Cairns Airport policy on Risk Management is to:



- identify and evaluate the significant risks to the achievement of its objectives, set boundaries for risk taking and apply risk treatment responses including risk mitigation where appropriate;
- incorporate risk management principals into management systems to address opportunities, protect aviation, company assets to facilitate effective and efficient aircraft operations and help to ensure reliable reporting and compliance with applicable laws and regulations while ensuring the Aviation Safety Management System retains its effectiveness, and:
  - monitor the effectiveness of the systems of internal risk controls,
  - comply with relevant NQA and Cairns Airport policies, guidelines, Standard Operating Procedures (SOP) and Standard Work Procedures (S.W.P),
  - requires the NQA Chief Executive Officer and the Leadership Team to report to the board on a six-monthly basis that the risk management and internal control system is operating efficiently and effectively in all material respects.

Cairns Airport has integrated the principles of risk management into its management processes to minimize reasonably foreseeable disruption to aircraft operations, non-compliance, aviation safety, and community profile impact on Cairns Airport.

NQAs Risk Management Framework provides a detailed Risk Management process for use when undertaking risk assessments within the organization.

Generally, risk management is integrated into Cairns Airport management systems including aviation safety, security, workplace health and safety, environment, operations, and major projects. Each one of these management systems includes a requirement to undertake risk management assessment to control the organizations risks. This Risk Management Framework provides the risk management processes which will be used when undertaking risk assessments in the organization.

Risk Management is included in the annual business planning cycle as one of the processes that leads to the approved business plan. This results in risk identification, evaluation and treatment decisions being documented, scheduled, and resourced within the business plans. This process will identify and document all risks including Key Strategic Risks.

#### 2.2.1 Aviation Risk Management

The principals applied to risk management in other areas of the organization are equally relevant and are applied in the management of aviation risks. The risk management methodology and principals contained in the NQA Risk Management Framework Policy should be considered as part of the decision-making process at all levels of the organization.

Ideally, we would like to live and work in an environment free from hazards and the associated risks. The principal of risk management is to eliminate the known hazards however this is not always possible, risk management is the identification of all the risks associated with a hazard and treating them by control measures to a point where the risk is considered As Low As Reasonable Practicable



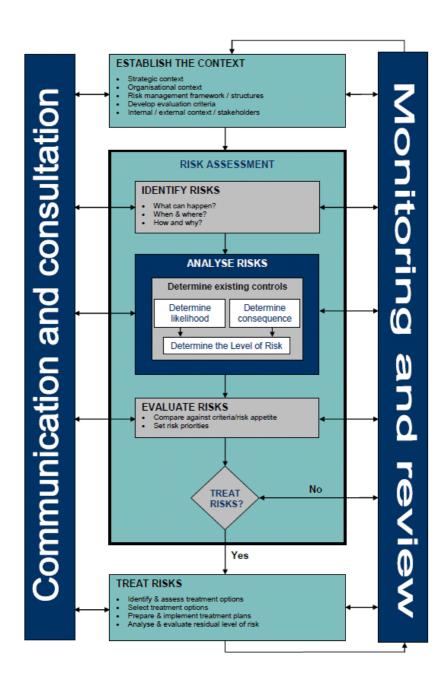
(ALARP). All residual risks after treatment that are assessed as moderate or above must be referred to the Cairns Airport Aerodrome Operations Manager

The first principal of good Risk Management is in determining the scope and the hazards involved in any activity that is conducted or considered to be undertaken within the aviation environment. Not until hazards are identified and their association with activities that the full extent of all the potential risks can be realized.

Steps in the risk management process are:

- Step 1 Establish the context,
- Step 2 Identify the risks,
- Step 3 Analyze the risk,
- Step 4 Evaluate the risks,
- Step 5 Treat the risk,
- Step 6 Communication and consultation,
- Step 6 Review and Monitoring,





It is important to note that stakeholder involvement is essential in the assessment and risks controls. Cairns Airport engages with all relevant stakeholders internal and external. Risks and safety issues are discussed and considered HSSEC meetings such as the quarterly Safety and Security Forum. Sub committees may be formed from time to time to address a specific issue.

These principals are applied to the following situations which have been identified as requiring focus to be applied along with any hazard identified through the hazard tracking process that is in place.



- The introduction of new aircraft types and the assessment of the suitability of the airports support systems to interface with the aircraft type,
- Any new equipment introduced for use airside by the ASOs is risk assessed and recorded on share point and if required documented SOPs or SWPs are developed and introduced through ASO training and awareness,
- Any new equipment introduced that interfaces or is related to any aviation system or process, and
- When any major works or upgrades are in the planning stage risk management workshops are conducted to identify hazards and analyze the risks that are associated with the works. Processes and procedures are developed to eliminate or reduce residual risk to As Low as Reasonably Practical. As part of the process consultation is also conducted with contractors, and airlines.

Additionally, any routine tasks are risk assessed and procedures developed such as SOP and SWP which are to be followed when undertaking any particular task. These documents detail steps and requirements to safely conduct the activities along with the identified hazards, all SOPs and SWPs are reviewed regularly or after any event or safety incident. The introduction of any new SOPs or SWPs are communicated at ASO training days or via a Notice to Officers process, to stakeholders and operators at committee meetings and email via the distribution network.



## 3 Aviation Safety Assurance

#### 3.1 Safety Performance Monitoring and Measurement

In determining the performance of the ASMS, Cairns Airport uses indicators such as an upward trend in reporting, downward trends in incidents and serious reportable incidents. All incident and hazard reports are analyzed monthly to determine the effectiveness of the ASMS process. In determining its effectiveness, trending of incidents and hazard reports is conducted by the Aerodrome Operations Manager and the NQA board.

The review and analysis are conducted by the following:

Performance Monitoring Method	Performance Monitoring Objectives
Monthly CEO Reports	Overview of the occurrences, incident, wildlife strikes and harassment activities, and other operational events
Airside Safety and Security Forum	airside incidents and contributing factors, trends, FOD tracking, audit results, airside stakeholders issues, monthly tracking of bird risks
Major works weekly meetings	During any major Aerodrome works, weekly meetings are conducted to discuss progress, any changes to planned work, effects to aircraft movements, any safety incidents and identified hazards. Risks are discussed and decisions are made on their mitigation or removal.
CASA Aerodrome audits	Annual CASA surveillance event Annual ATI audits



#### 3.1.2 Key Performance indicators Airside tracker

Airside tracker is the primary tool used for measurement and performance of Airside activities this collates and reports all data entered by the Airside Safety officers.

Selected stakeholders are sent automated reports from Airside trackers with data sets that are generated daily and end of month reporting for the following.

Airservices correspondence (NOTAMS)

Ammunition and firearms use and inspections.

Engine running by tenants.

Airside driving incidents and infringements.

Compliance inspections

Airside Spills

Wildlife culls and harassment



Figure 5. Tracker Airside performance cockpit home page.



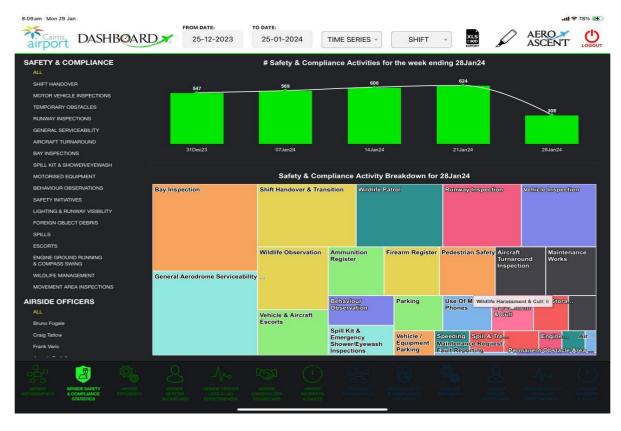


Figure 6. Tracker Airside Safety and compliance performance indicators.

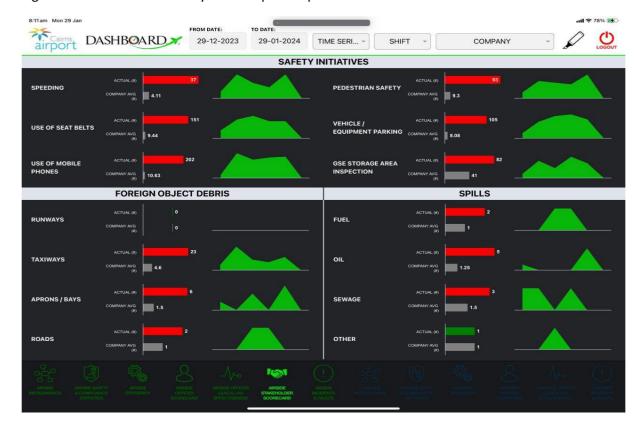


Figure 7. Tracker Airside performance graphs.



#### 3.2 Internal Safety Investigation

Aviation safety investigations are monitored by the Aerodrome Operations Manager who will determine the scope, structure and delegate who will be appointed to conduct an investigation

The primary means by which Cairns Airport tracks reports, details of safety occurrences and the investigation outcomes is through the raising of Sharepoint Event register database reports on SharePoint. All employees and managers have obligations and responsibilities within the system.

In addition, ASOs employ Tracker AIRSIDE for aerodrome reporting matters in the first instance. Information from Tracker AIRSIDE is transferred to Sharepoint Event register where relevant. All ASOs have received training in the use of Tracker AIRSIDE.

All employees that are required to raise Inform database reports must have received training in the use of the Sharepoint Event register system and those employees that are identified as required to complete more complex investigations and close out these reports must have had training in investigation techniques and human factors.

Unless exceptional circumstances exist, all Sharepoint Event register database reporting should be initiated on the day of the occurrence Inform database reporting has two key timelines to consider. Initial notification same day and closed within 72 hours.



final fact-finding and analysis of highly complex investigations. This level of detail is usually only required for serious incidents or accidents.

Accurate human recollection of information significantly degrades over time, beyond the first 24-48 hours. This is why investigations will require immediate prioritization and cannot be delayed; there are time and accuracy efficiencies associated with immediate recording of 'fresh' incident information as;

- Witness statements,
- CCTV footage,
- Photos.

Whilst time limits have been placed on the completing of investigations the completeness and quality of investigations should not be sacrificed to achieve this. If more time is required due to investigation complexities, it can be sought through your supervisor, manager or the Aerodrome Operations Manager.

All investigations must endeavor to establish the root cause of adverse events and outcomes of the investigations are to be communicated throughout the organization.



#### 3.2.1 Classification and Level of Occurrences

#### **Aviation Safety occurrences**

Are any occurrence which adversely affects or could adversely affect the airworthiness of an airframe or aviation support system.

Occurrences are further Classified dependent the severity of the consequence and the defenses which limited the consequential outcome.

Post occurrence, an immediate assessment of the classification event, incident, serious incident or accident that best describes the occurrence is required. Definitions of classifications are as in the following table;

Table 1

able 1	
	Aviation Incident Classification
Event	<ul> <li>An occurrence that had the potential to affect the airworthiness of an aviation system but did not due to:         <ul> <li>System defenses that were adequate to prevent a compromise to airworthiness or</li> <li>Safety tolerance that was sufficient to prevent any degradation to airworthiness</li> </ul> </li> </ul>
Incident	<ul> <li>An occurrence that did affect, or could affect the airworthiness of an aviation system and the system defenses were:         <ul> <li>Adequate to limit the severity of the occurrence such that the consequence to airworthiness was less than major or</li> <li>Inadequate/absent to limit the severity of the occurrence, however system tolerances limited the consequence to airworthiness to less than major.</li> </ul> </li> </ul>
Serious Incident	An occurrence that did affect the airworthiness of the aviation system and system defenses were:  Only just adequate to prevent an accident and the consequence to airworthiness was less than critical/catastrophic or Inadequate/absent and an accident almost occurred and any consequence to airworthiness was limited by the system tolerance to less than critical/catastrophic.
Accident	An occurrence that did effect the airworthiness of an aviation system and system defenses were inadequate/absent to limit the severity of the occurrence resulting in a critical/catastrophic consequence to airworthiness.
	rances: The inherent ability of the aviation system to compensate for absent defences.

The classification is a measure of the seriousness of the occurrence. If the occurrence has aviation safety implications and requires an investigation that will yield a tangible outcome, it should be classified as an incident, serious incident or accident.



For a minor occurrence it must be recorded for statistical purposes, an investigation is not required and should be classified as an event. Multiple events raised for a recurring issue may trigger an investigation, but it is not required for the individual event. If there is any doubt as to the classification, seek immediate guidance from the Aerodrome Operations Manager.

#### 3.2.2 Summary

Raising accurate Inform database reports and producing superior quality investigations efficiently, is an integral part of Cairns Airport aviation safety management system. To do so demands personal investment, prioritization, communication and management. Completing Inform database reports efficiently and accurately improves the quality of investigations, identifies root causes and enhances our effectiveness in identifying hazards, the controls and management of risks within the NQA group.

#### 3.3 The Management of Change

#### **Reference documents**

#### 3.3.1 NQA Risk Management Framework

There are many triggers that will see the need for organizational change such as economics, increase or decrease in aircraft and passenger movements, new equipment, new aircraft types major developments and organizations strategic change.

Any change to embedded processes, procedures, organizational structure, key staff and environment can introduce new hazards and challenges. Cairns Airport recognizes this and has in place a change management process that considers the financial and economic risks and places great emphasis on Human Factors.

Cairns Airport has adopted a six step process:

- Identify change
  - a. Consider the need for the change
  - b. Consider the scale of change
  - c. The outcome hoped to achieve
- 2. Consider who and what will be affected and how
  - a. Determine the areas effected (RWY, TWY, Aprons, Ramp operations etc.)
  - b. Determine the stakeholders that will be effected
- 3. Conduct risk assessment with the inclusion of all stakeholders
  - a. Conduct aviation risk assessment including human factors considerations.
- 4. Develop a plan
  - a. Include timelines and stages of how the plan will be delivered



- b. Include any mitigation actions identified during the risk assessment process
- c. Include a communication plan
- d. Include how the plan will be assessed
- 5. Implement the plan
- 6. Monitor and review
  - a. Dependent on type of change
    - 1. Conduct regular checks such as meetings
    - 2. Conduct regular onsite inspection
    - 3. Reassess plan
    - 4. Gauge acceptance
    - 5. Conduct lessons learnt review

#### 3.4 Continuous Improvement of the SMS

The Aerodrome Operations Manager is responsible to ensure that an annual review process is in place and undertaken, a review of safety performance.

Any serious aviation safety occurrence, increase in safety indicators, trends or post lessons learnt analysis of any major airside projects may trigger a review of the ASMS.

Regularly throughout the year monitoring of the safety areas are conducted by way of monthly management reporting at section level and reporting up through the board for review. This monthly reporting includes and focus on;

- previous accidents or incidents
- internal and external audit results
- Identified patterns of risks and trends
- bird/wildlife numbers and strikes



### **4 Safety Promotion**

#### 4.1Training and education

Cairns Airport has in place individual online induction and refresher training modules that cover Environmental, WH&S and HR.

#### 4.1.1 Aviation SMS Training

At present Cairns Airport has in place initial training modules that target new employees and contractors.

Initial Induction and safety awareness training of all new employees is delivered via online modules which is further followed up with a face-to-face session to verify that individuals have completed the online module and that they have gained the required understanding of the ASMS along with their personal responsibilities and that of Cairns Airport towards them. The areas that are covered include,

- How the ASMS operates
- Awareness of the role they play in the ASMS
- Understand that the aim of the ASMS is to improve safety not to attribute blame
- Understand the Importance of complying with the NQA Health, Safety, Security and Environment policy along with the SOPs and processes that form part of the ASMS
- Understand organization, roles and responsibilities of staff in relation to safety
- Understand corporate safety goals & objectives
- Understand the reporting process of reportable matters, hazardous events and potential hazards.

Contractors also are required to complete a similar online module prior to the issue of a contractor pass, this process is described in Sect 1.5 Third Party Interface.

Any new ASO that starts with Cairns Airport is also required to complete the ASO training package and be assessed prior to conducting any individual shifts. The training addresses CASA MOS139 - Aerodromes skill requirements and modules from the national training framework aviation packages.

Further aviation safety and hazard training is conducted for those that are required to drive and operate airside. This training is conducted through a system of face-to-face presentations, formal exam and the requirement to complete a driving log whilst under supervision. Refresher training and assessment is required every 2 years. Apart from airside hazards, rules and procedures hazards



associated with human performance such as situational awareness, distractions, time pressures and DAMP policies are also addressed.

All training is registered on the NQA training matrix system and maintained by the Aerodrome Operations Supervisor.

In addition, toolboxes are planned on a fortnightly basis; the toolboxes are presented by Aerodrome Operations Manager and Supervisor and ASOs are encouraged to present as well.

#### 4.2 Safety Communication

Cairns Airport promotes positive safety engagement through several communication channels and encourages feedback up, down and sideways. This includes Cairns Airport staff, airport tenants and contractors.

Cairns Airport takes the opportunity to provide information through:

- Monthly operational, and board level reports,
- Scheduled Risk and Safety, Airside Safety and Security Forum meetings
- Formal letters, email, phone and face to face correspondence to individuals and organizations,
- Notice boards, posters, safety bulletins and notices to officers,
- Tool Box talks at ASO training days and onsite airside with contractor during major projects,
- The promotion of safety focused activities during safety week, Safety Alerts and Bulletins
- Cairns Airport has in place a system for the registering and recording on SharePoint of any Safety Alerts/Bulletins that are raised and issued. Prior to release it is also reviewed by the NQA Health and Safety Adviser.

Internal newsletters "On The Radar" and externally through "Terminal and Aerodrome Talks"

Cairns Airport actively participates in the Australian Airports Association (AAA) annual Airport Safety Week program and facilitates a range of aerodrome safety awareness campaigns with both internal and external stakeholders. Activities include presentations and toolboxes on aerodrome safety topic and movement area FOD walks.



#### **Guidance Material – Aviation Risk Analysis Process**

#### **Risk Identification**

It is necessary to identify all of the potential risks that may affect the safety of aircraft movements on and above the airport along with the interface between aircraft and ground vehicles and equipment, whether or not they are under your control or not.

The following points should be used to assist in risk identification and analysis. These points should be used as a general guide or starting point.

#### **Risk Analysis**

The objective of risk analysis is to separate the minor acceptable risks from major risks and to provide data to assist in evaluation and treatment of risks. Risk analysis involves considering the sources of risk the hazard, the likelihood of an event taking place and the consequential outcome.

The level of risk is analysed by combining estimates of degree of the consequence and likelihood taking into account any existing control/treatment measures.

A preliminary analysis can be carried out so that similar or low risks are excluded from further more detailed consideration. The excluded risks should however be listed on the aviation risk assessment worksheet to demonstrate they have been considered and therefore the process has been thorough.

The level of risk (likelihood and consequence) can be assessed quantitatively where the risk level is reasonably expected to be higher and the data is available. For instance, in relation to consequence the potential financial cost of a delay or reduced operational capability can be estimated having regard to existing and forecast revenue/profitability.

In many cases the data will not be available to make a quantitative assessment of the level of risk in such cases qualitative assessments are undertaken. Cairns Airport has developed the following scales to be used for qualitative risk level determination.

Cairns Airport aviation risk assessment worksheet format provides for the description of the likelihood, consequence and risk controls of a hazard to be documented. This description can include a qualitative description and if available, quantified estimates.

Based on the description, the manager and team analysed he risk should use the following categories to determine the likelihood and consequence:

#### **Areas of Risk Assessment**

The Initial aviation risk assessment should be focused on level of aircraft damage and capacity of the airport to support aviation activities if an event was to occur. Once an assessment on the risk level has be determined the Safety Manager should consult other specialists within the company for consideration of the risks associated with other outcomes such as WHS/financial.



#### Risk Levels after Assessment and Controls.

Outcomes that produce a level of risk of medium or greater must be referred to management for further consideration and possible consideration by the Safety Manager.

Any outcomes that produce a level of risk of high or greater must be referred to the Part 139 Accountable manager and board.

#### **Likelihood and Consequence Definitions Risk Matrix Example**

#### Likelihood

Level	Descriptor	Description
5	Almost Certain	Imminent – expected to occur in most circumstances
4	Likely	Once in the next month/will probably occur in most circumstances
3	Possible	Once in the next 12 months/might occur at some time
2	Unlikely	Once in the next 1–5 years/could occur at some time
1	Rare	Once in the next 10 years/may occur only in exceptional circumstances



Level	Descriptor	or Consequence Descriptions										
		People	Safety/WH&S	Financial (% of EBITDA)	Natural Environment	Legal	Operational/Corporate information systems	Community & Reputation				
E	Negligible	Localized employee dissatisfaction resulting in turnover of personnel or absenteeism of <5%	Class 3 <sup>1</sup> Injury:  No or minor injury requiring first aid only. No lost time  Not Notifiable.  Localized employee dissatisfaction resulting in turnover of personnel or absenteeism of <5%	Up to 0.6% (FY2019: up to \$540K)	Nuisance – transient. Limited impact on environment; <\$50 to fix	No legal breach	Negligible impact on airport operations Loss of low risk data/information or systems	No Impact on community; nil complaints				
D	Minor	Localized employee dissatisfaction resulting in turnover of personnel or absenteeism of >5% but < 10%	Class 2 Injury: Injury with lost work time less than 1 week. No residual impairment. Could be notifiable. Localized employee dissatisfaction resulting in turnover of personnel or absenteeism of >5% but < 10%	0.6% - 2.4% (FY2019: \$540K - \$2.2M)	Minor breach of environmental policy; localized short to medium term impact on environment with no off-site damage; <\$1000 to fix	Legal breach with no sanction	Minor impact (temporary disruption) on airport operations Loss of minor risk data, information or systems for a period of <7 days.	Isolated community disruption up to 1 day, Few community complaints or minor adverse minor coverage. Minor impact on reputation				
C	Moderate	Localized employee dissatisfaction resulting in turnover of personnel or absenteeism of >10% but < 15%	Dangerous event; OR Injury with lost time more than 1 week or likely permanent impairment Could be Notifiable	2.4% - 7.3% (FY2019: \$2.2M- \$6.6M)	Localised medium to long term impact on environment, moderate damage to habitat/species.; minor of-site damage; <\$5000 to fix.  Notifiable	Legal breach with sanction including suspension of non-material lease, licence, permit etc.	Moderate impact on airport operations' damage to airport assets.  Loss of minor risk data, information or systems for a period of >7 days.	Isolated community disruption up to 3 days with limited adverse economic impact. Widespread local complaints and local level media coverage which will be overcome within < 3 months				
В	Major	Localized employee dissatisfaction resulting in turnover of personnel or absenteeism of >15% but <25%	Dangerous event with no injury; OR Class 1 Injury –Fatality; serious and/or long term human health impacts/impairment Notifiable	7.3% - 28.8% (FY2019: \$6.6M- \$25.9M)	Widespread, medium to long term (material) impact on environment; recoverable off-site environmental damage to habitat / species; <\$50,000 to fix. Notifiable	(penalties; licence retraction)	fajor impact on airport operations; significant damage to airport assets. oss of high-risk data, information or systems for a period of < 24 hours or authorized access to sensitive/private information for <1 week	Wider community disruption up to 7 days impact with adverse economic impact. Extensive community complaints (local and regional) with state level media coverage which will take longer than 3 months to overcome				
4.	Catestrophic	Increase turnover of personnel or absenteeism of >25%	Multiple Fatalities Notifiable	Over 28.8% (FY2019: over \$25.9M)	Long term (serious) impact on environment; large scale damage to habitat or environment; permanent (widespread and irreversible); complete destruction of habitat/ species; permanent off-site damage; remediation required; >\$50,000 to fix Notifiable	(significant penalties/jail term)	nsive impact on airport operations and damage to airport assets. oss of high risk data, information or systems for a period of > 24 hours, or authorized access to sensitive/private information for > 1 week.	Widespread community disruption with significant adverse economic impact				



Risk R	ating Matrix		Cons	equence/Impa	ct	
Likelihood		Catastrophic A	Major B	Moderate C	Minor D	Negligible E
5	Almost Certain	5A	5B	5C	5D	5E
4	Likely	4A	4B	4C	4D	4E
3	Possible	3A	3B	3C	3D	3E
2	Unlikely	2A	2B	2C	2D	2E
1	Rare	1A	1B	1C	1D	1E

Risk Rating Key				
Rating	Risk Criteria			
5A, 5B, 5C, 4A,	HIGH - Unacceptable under the			
4B, 3A	existing circumstances			
5D, 5E, 4C, 4D,	MEDIUM - Acceptable based on			
4E, 3B, 3C,	risk mitigation "Good or			
3D,2A, 2B, 2C,	Excellent" controls			
1A	It might require management			
	decision			
3E, 2D, 2E, 1B,	LOW - Acceptable			
1C, 1D, 1E				

## Operational Risk Appetite

Residual Risk Rating	Appetite and action
High	High risk; immediate action required. Unacceptable under the existing circumstances
Moderate	Moderate risk; acceptable risk based on risk mitigation – "Good or above controls". Controls below "Good" requires action.
Low	Low risk; manage by routine procedures. Acceptable