

ROTORUA REGIONAL AIRPORT LIMITED

Safety Management Manual

Rotorua Airport

Revision 1 Version 0

May 2020

Document History and Version Control

DOCUMENT HISTORY

Revision No	Date	Document Owner	Document Reviewer
0	28 November 19	Paul Tench	Mark Gibb
1	21 May 2020	Jayne Marsh	Mark Gibb

VERSION CONTROL

The Exposition documents are under constant review and all amendments shall be registered. Details of the version history of this document is shown below.

Version serial	Reviewer	Date	Details of amendment
0.0	Paul Tench	5 June 2019	Initial draft of Safety Management Manual (SMM)
0.1	Paul Tench	28 November 2019	Draft SMM issued
0.2	Paul Tench	3 December 2019	Amendments following external review
0.3	Paul Tench	12 December 2019	Amendments following external review
0.4	Paul Tench	6 January 2020	Addition of Section on Training Effectiveness and Performance Targets
0.5	Paul Tench	18 February 2020	Amendments following recommendations at CAA Pre-Audit
0.6	Paul Tench	7 April 2020	Amendments following recommendations at CAA Audit
1.0	Jayne Marsh	21 May 2020	Released to Revision 1 following CAA approval. Names updated section 1.4

NOTE: Drafts amendments shall be labelled as a decimal increase, for example 0.0 to 0.1. Once the draft amendments have been approved by the Chief Executive and the Director, the version serial should start with the next whole number, for example 0.4 to 1.0.

Introduction

The CAA’s requirement for aviation organisations to introduce Safety Management Systems (SMS) is in response to the growing operational complexity that comes from the increasingly rapid pace of technological change in the global aviation industry and the higher expectations for safety performance from aviation stakeholders.

In general terms, a SMS is designed to:

- Manage risks within an organisation, with a particular focus on risks which impact safety;
- Provide for ongoing monitoring and assessment of safety performance;
- Make continuous improvements to the level of safety in operations; and
- Develop and improve the safety culture within an organisation.

PURPOSE

The purpose of a Safety Management System (SMS) is to provide a systemic approach to managing safety. This manual describes Rotorua Airport’s SMS which was developed to ensure that the Airport Company and the wider Airport Community understand the Airport’s approach to Safety, and the processes which are employed to that effect.

SCOPE

This manual is aligned to the CAA’s 13 elements of SMS to highlight how the Airport complies with CAA Rule Part 100. The manual therefore describes the Airport’s:

- Safety policy and accountability;
- Emergency response planning;
- Development, control and maintenance of Safety Management (SM) documentation;
- Hazard identification processes;
- Risk management processes;
- Safety Investigation processes;
- Monitoring and measuring of Safety Performance;
- Management of change process;
- Continuous improvement processes;
- Internal Audit Programme;
- Management review processes;
- Safety training and competency requirements; and
- Communication of Safety-critical information processes.

The CAA’s focus is naturally on Aviation Safety, however RRAL consider that it is more practical to have one safety system for the entire airport. This has operational efficiencies, but it also allows the Airport to identify hazards that may impact aviation safety through second-order effects.

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Our Health and Safety Policy Statement by Chief Executive Officer

At Rotorua Airport, Safety is not just a matter of compliance; it is considered to be an integral part of everything we do and is vital for the commercial success of the Airport.

Rotorua Airport's vision is to generate a positive Safety Culture that enhances all aspects of operations at the Airport by proactively managing identified hazards. Through Safety Management, the Airport will continuously improve its standards of operations.

As CE, I will ensure that Rotorua Airport:

- Engages in a proactive approach to safety management (SM) to ensure that all operations are undertaken in a manner that is as safe as reasonably practicable.
- Encourage all staff, tenants and visitors to report all accidents, incidents, near misses, hazardous situations or health issues to ensure we learn and improve together. To that end, the Airport will operate under an open reporting culture (Just Culture) where individuals submitting reports are not afraid of disciplinary action due to occurrences that result from errors or mistakes.
- Identifies and manages all significant risks in a proactive manner.
- Has adequate resource for SM activities to be undertaken effectively.
- Monitors, measures and continuously improves its safety performance.



Mark Gibb

Chief Executive

Dated 7th April 2020.

Distribution List

This is a living document and is subject to constant review. As a result, copies of this document must be strictly controlled. Any printed or unauthorised copies should be considered as uncontrolled.

Copies of the Safety Management Manual shall be issued to:

Copy No.	Organisation	Designation	Name	Email address
1	Civil Aviation Authority (CAA)			library@caa.govt.nz
2	Rotorua Regional Airport Ltd (RRAL)	Chief Executive	Mark Gibb	Mark@rotorua-airport.co.nz
3	RRAL	Airport Operations Manager	Logan Charters-Leahy	logan@rotorua-airport.co.nz
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5	RRAL	Operations Room	N/A	N/A
6	Air New Zealand	Regional Manager	Kate Fitzgerald	kate.fitzgerald1@airnz.co.nz
7	Air New Zealand	Airport Manager	Karen Rossi	karen.rossi@airnz.co.nz
8	Airways Corporation of New Zealand Ltd	Chief Controller	Lorraine Vincent	Lorraine.vincent@airways.co.nz
9	JNP	Airport Manager	Lee Sedgewick	lee@jnpaviation.com
10	Volcanic Air	Director	Tim Barrow	tim@volcanicair.co.nz
11	Super Air	Pilot	Lindsey Cameron	Lindsey.cameron@superair.co.nz
12	Action Aviation	Owner	Pat Worsley	Patthepilot65@gmail.com
13	Rotorua Aero Club	President	Wayne Puddle	waynepuddle@hotmail.com
14	JAK Air	Manager	Matt Miller	mattathm@gmail.com
15	Brian Stanley Ltd	Owner	Brian Stanley	bdstanley@outlook.com
16	Spannair	Chief Engineer	Craig Iddles	iddlesfamily@xtra.co.nz
17	Air BP (Hamilton Aero)	Safety and Quality Assistant	Fiona Scott	QA@hamiltonaero.co.nz
18	Aqua Ag	Owner	Geoff Angell	geoff@aquaag.co.nz

Copy No.	Organisation	Designation	Name	Email address
19	Read Lougher Ltd (Grass Maintenance)	Owner	Read Lougher	Read.lougher@gmail.com
20	Airfuels			
21	Rotorua Gliding Club	Owner	Don Grigg	Don.grigg@xtra.co.nz
22	Z Fuels			

Table 1 – Distribution list for Full exposition suite

METHOD OF DISTRIBUTION

The SMM is available on the Rotorua Airport website.

Abbreviations

Abbreviation	Meaning
ALARP	As low as reasonably practicable
ANZ	Air New Zealand
AO	Airport Operations
AOM	Airport Operations Manual
CAA	Civil Aviation Authority
CAR	Civil Aviation Rule
CCTV	Closed Circuit Television
CE	Chief Executive
FAIR	Flowchart Analysis of Investigation Results
FOD	Foreign Object Debris/Damage
MOC	Management of Change
MPI	Ministry of Primary Industries
NZAA	New Zealand Airports Association
RAM	Risk Assessment Matrix
RLC	Rotorua Lakes Council
RRAL	Rotorua Regional Airport Ltd
SA	Safety Assurance
SI	Safety Investigation
SM	Safety Management
SMM	Safety Management Manual
SMS	Safety Management System

Table 2 - Table of Abbreviations

1 Safety Policy and Accountability

1.1 INTRODUCTION

Rotorua Airport’s Safety Policy provides the CE’s statement describing how all those who operate at the Airport should approach Safety.

1.2 SAFETY POLICY AND GOALS

The Airport’s Safety Management Policy and the associated Goals can be found [here](#).

1.3 SAFETY CULTURE

RRAL’s Safety Culture is defined as:

“Shared values, actions and behaviours that demonstrate a commitment to safety over competing goals, demands and commercial gain.”

Our safety culture stems from a combination of principles as shown in Figure 1 below and described in the following sections.



Figure 1 - Elements of our safety culture

1.3.1 Informed Culture

An informed culture is one in which the management team have current knowledge about the human, technical, organisational and environmental factors that determine the safety of the system as a whole. An informed culture is achieved through a rigorous hazard identification process and from learning lessons through occurrence reporting.

1.3.2 Reporting Culture

A reporting culture is one in which people are proactive in the writing of occurrence reports for situations they have observed or been involved in.

1.3.3 Learning Culture

A learning culture is one in which an organisation possesses the competence and processes to draw appropriate conclusions from its safety information system and is, if necessary, prepared to make major changes to systems as a result of those conclusions.

1.3.4 Flexible Culture

A flexible culture is one in which an organisation is capable of adapting its operations and processes in the face of a changing operational environment or an increased level of risk. A flexible culture empowers an organisation’s staff, allowing decision making processes to vary, depending on the urgency of the decision and the expertise of the people involved.

1.3.5 Just Culture

The most important element of our safety culture, a just culture, is one that fosters an atmosphere of trust in which people are encouraged to provide essential safety related information without fear of punishment. Just Culture is underpinned by one of the Airport’s key principles which aims for all members of staff to:

“Do the right thing even when no one is watching”

RRAL does not, however, operate within a “no-blame” culture and there must be a clear distinction drawn between acceptable and unacceptable behaviour. RRAL acknowledges that mistakes are a part of everyday life and before anyone is considered to be culpable for their actions a thorough understanding of the circumstances must be made. RRAL have chosen to adopt the Flowchart Analysis of Investigation Results (FAIR) concept to determine culpability with respect to any substandard actions. The FAIR system is shown in Annex A – FAIR System.

1.4 ORGANISATIONAL STRUCTURE

RRAL’s organisational structure is shown in Figure 2 below:



Figure 2 - RRAL's organisational structure

RRAL has a dedicated Safety Management System Manager (SMS Mgr) who reports directly to the CE. It is vital that the SMS Mgr maintains a level of independence from the

formal chain of command to allow them to be completely objective with respect to safety. Accordingly, the SMS Mgr also has the ability to report directly to the Board on SM related issues.

RRAL has two Senior Persons. The CE is the Airport's Senior Person, and the Airport Safety Management System Manager is an Other Senior Persons.

1.5 SAFETY ACCOUNTABILITY

The CE holds:

- Corporate authority for ensuring all activities can be financed and carried out to the required standard;
- Final authority over operational matters; and
- Final accountability for all safety issues.

RRAL's Safety accountability is the obligation of the Airport to demonstrate task achievement and safety performance in accordance with agreed expectations, and to be answerable for the safety performance within its scope. Safety accountability **cannot** be delegated.

1.6 SAFETY RESPONSIBILITIES

1.6.1 Chief Executive's Responsibilities

As Rotorua Airport's Senior Person, the CE is responsible for:

- Writing the Airport's [Safety Management Policy](#) and reviewing the Safety Management Manual (this document);
- Championing the implementation of the SMS;
- Setting the Airport's Safety Objectives; and
- Ensuring that the Airport has adequate resource to implement the SMS.

1.6.2 Safety Management System Manager's Responsibilities

The SMS Mgr is responsible for:

- Drafting the SM Manual (this document);
- Implementing, maintaining, reviewing and continuously improving the SMS;
- Providing safety advice to management and staff;
- Promoting safety awareness and a positive safety culture;
- Investigating accidents, incidents and occurrences;
- Maintaining an appropriate reporting system to identify and manage hazards;
- Identifying ongoing safety training requirements to support RRAL's SMS objectives; and
- Overseeing Safety Assurance audit processes.

1.6.3 Airport Operations Manager's (AO Mgr) Responsibilities

The AO Mgr's is responsible for:

- Promoting Occurrence Reporting amongst the Airport Operations (AO) Team and wider Airport community;
- Ensuring that all Airport Operations Team members are familiar with the requirements of the SMS;
- Ensuring the Airport Emergency Plan is maintained; and
- Ensuring that a Safety Moment is carried out at the Daily Briefing.

1.6.4 Everyone's Responsibilities

All staff (including contracting staff) who work for, or on behalf of, the Airport have safety responsibilities to themselves, their co-workers and airport users; including:

- Taking personal responsibility for their own actions;
- Compliance with company policies and procedures at all times;
- Using the Occurrence Reporting system to notify the Airport of any activities they witness that they consider to be unsafe or potentially unsafe;
- Fully engaging with the safety training programmes and development exercises; and
- Being empowered by the Airport's *Flexible* Safety Culture to take the actions they consider necessary in the interests of safety.

2 Coordinated Emergency Response Planning

2.1 SUMMARY

Rotorua Airport’s AO Mgr maintains the [Airport Emergency Plan](#) (AEP) which defines the procedures, roles, responsibilities and actions of Airport staff, Emergency Response and additional support organisations in the event of an emergency.

The AO Mgr distributes the AEP annually, after review or when amendments are made. Distribution will be via email to key personnel as detailed in the AEP.

The AEP is periodically tested to ensure the adequacy of the plan. The schedule of tests is detailed in the AEP.

3 Development, Control and Maintenance of Safety Management Documentation

3.1 INTRODUCTION

Rotorua Airport considers that there is no *end state* for Safety Management and the Safety Management Manual and the associated processes are subject to constant review and continuous improvement. It is therefore vital that a robust document control process is followed.

3.2 DEVELOPMENT AND CONTROL

The SMM conforms to the Airport's Information Management and Document Control Policy detailed here.

In addition, all Safety Registers have an associated Change Log that allows any procedural updates to be logged, and any follow up actions to be noted and marked as complete as required.

3.3 SMS INFORMATION MANAGEMENT MAP

All SMS information is stored in the Safety Management System folder on the Management Server, and can be found [here](#).

SMS Information is stored under in the following subfolders:

- Hazard Identification and Risk Management;
- Management of Change;
- Management Review;
- Occurrence Reporting and Investigations;
- Safety Assurance;
- Safety Communication;
- Safety Policy;
- Safety Training;
- Safety Management Meetings; and
- Safety Management Research.

4 Hazard Identification

4.1 INTRODUCTION

A hazard is a condition or an object with the potential to cause or contribute to an incident or accident and the first step in safety risk management is the identification of hazards.

4.2 HAZARD IDENTIFICATION

At Rotorua Airport, new hazards are primarily identified through the Occurrence Reporting process described in Section 6 below. However in order to capture the Airport hazards as completely as possible hazards are identified through:

- Occurrence Reporting;
- Safety Assurance Audits;
- Hazard and Risk Register Review;
- Communication with Airport Operators;
- Observation of procedures (Gemba walk); and
- Review of Safety Critical Information

4.2.1 Occurrence Reporting

On receipt of an Occurrence Report (see Section 6 below), the SMS Mgr will immediately review the report to determine whether it justifies further investigation. If an investigation is deemed necessary, then hazards will be identified through the Safety Investigation process. New hazards are added to the [Hazard and Risk Register](#) (described in Section 5 below). The Airport aims to complete all Safety Investigations within 90 days of starting the investigation.

If the Occurrence Report does not warrant an investigation the SMS Mgr will review the report to identify any new hazards to be added to the Hazard and Risk Register.

4.2.2 Safety Assurance Audits

Safety Assurance allows Rotorua Airport to review its processes to ensure they are being undertaken to a high standard of safety and security, and in accordance with published procedures. In reviewing the processes, the auditor has the opportunity to identify new hazards and review existing hazards to ensure they are still relevant, and the controls in place maintain an acceptable level of risk. The requirement to complete this element of hazard identification is articulated in the [Safety Assurance Audit Report](#). Further details can be found in Section 10 below.

4.2.3 Hazard and Risk Register Review

At the Airport's Monthly SMS Meeting the Hazard and Risk Register is reviewed. The review focusses on any newly identified Hazards and Risk, identified in the processes described in this Section, and any Risks that are due to be reviewed. During the process of review previously unidentified Hazards may be discovered. If this occurs, they are immediately added to the register and assessed.

4.2.4 Communication with Airport Operators

Rotorua Airport operates a series of Safety-focussed meetings with Airport Operators as shown in Section 13.3 below which provide a forum for operators to engage directly with the Airport Management team on safety critical matters such as the identification of new Hazards. In addition, Airport Operators are encouraged to engage directly with the SMS Mgr on any safety-related matter at any time.

4.2.5 Review of Safety Critical Information

Rotorua Airport aims to be as proactive as possible with regard to Safety Management, therefore the Airport will review any hazards:

- That the Airport Management team have been made aware of, that are affecting other Airports.
- Identified through external Safety Investigations (where available); and
- Identified through forums such as the New Zealand Airports Association (NZAA) Forums.

4.3 HAZARD REVIEW

The SMS Mgr is responsible for ensuring that all Hazard and Risk data is captured in the Hazard and Risk Register. The SMS Mgr is to utilise the expertise of Airport Operators, when required, to fully understand the nature of Airport Hazards.

4.3.1 Shared Risks

Rotorua Airport recognises that when organisations share a place, such as an airport, they need the opportunity to meet to discuss both potential hazards, and opportunities to advance safety, because even though organisations are interdependent, safety issues in one organisation often have implications for others.

A shared risk is defined as any risk that has direct impact outside an organisational boundary. For example any risk that is of concern to one organisation, but that organisation has limited ability to instigate controls for. For example, the risks associated with birds in the vicinity of the runway may be a significant risk to an aircraft operator, however the majority of controls would be actioned by Airport Operations.

In many cases a risk to an organisation is mitigated by controls generated by another. It is critical for Airport Operators to have an overview of all risks at the Airport and to share these risks amongst the organisations that operate from the Airport. To achieve this, Hazards and Risks are discussed at the Airport Users SMS Meeting. Further details of this meeting can be found in Section 13.3.

It is important for all Airport Operators to be able to utilise the same methodology for assessing risk so all organisations have the same understanding of a resulting Risk Score, therefore shared risks are assessed using the Airport’s Risk Management Process detailed in Section 5.3 below. The Airport will record shared risks in its Hazard and Risk Register, however this should not limit Airport Operators from recording shared risks using their own processes.

5 Risk Management

5.1 INTRODUCTION

A risk, in the context of SMS, refers to the potential impact a hazard may have on an activity.

An example of this can be found by considering Foreign Object Debris (FOD). FOD could be any item that is found in the airside environment that could cause damage to an aircraft. Examples of FOD include bolts, bottles, coins, loose rubbish or wire scraps.

FOD is a hazard, however, outside the airside environment FOD is not inherently dangerous, it is mostly just rubbish. There is *risk* that FOD could be drawn into an aircraft engine intake, leading to damage or an aircraft crash.

Risk is assessed in terms of the severity and likelihood of the consequences of a hazard occurring. When assessing risk, RRAL consider risk in terms of the most credible outcome of a hazard.

5.2 ACCOUNTABILITY AND RESPONSIBILITY

The CE holds ultimate accountability and responsibility for safety at the Airport. This accountability cannot be delegated and therefore it is vital that the Airport's Risk Management process provides the CE with a full understanding of all risks that may have a negative impact on Airport operations.

Responsibility for managing a risk can be transferred and that responsibility should be transferred to individuals who are best placed to mitigate the risks most effectively. Accordingly all risks at the Airport are assigned at least one Risk Owner who is responsible for managing a risk.

5.3 RISK MANAGEMENT PROCESS

As soon as one of the processes described in Section 4.2 above identifies a hazard, the SMS Mgr will undertake a risk assessment to determine the potential for harm or damage. The risk assessment process is undertaken by completing the [Hazard and Risk Register](#). It is recognised that the SMS Mgr may not be a Subject Matter Expert (SME) on the aspect of Airport Operations being reviewed, therefore the SMS Mgr shall utilise the expertise of the Airport Community to gain a full understanding of the risk being assessed. If necessary, the SMS Mgr shall seek expert opinion from the wider aviation community.

If the assessment process determines there to be an immediate hazard to the safety of operations at the Airport, the SMS Mgr will publish a Safety Warning as described in Section 13.2.2.

The first step of the risk assessment is to determine what risks result from the hazard(s) identified using a Risk Statement. When reviewing risk, RRAL determine risks from hazards in the form of a risk statement as shown below:

There is a risk that "HAZARD" will "IMPACT" on "ACTIVITY or ACTION"

For example, a hazard at the Airport is the presence of dogs, therefore the risk statement would read:

"There is a risk that dogs on the airfield will get loose and could be hit by an aircraft causing damage to aircraft and seriously injuring the dog"

The identified risks are categorised depending on the aspect of the Airport that the hazard is most likely to affect. The categories are:

- Aviation;
- Health and Safety;
- Non-aviation Emergency;
- Legal and Compliance;
- Financial;
- Business Continuity;
- Governance;
- Staff;
- Reputation; and
- Political.

The assessment then considers the two main elements of risk which are:

- **Severity:** How bad will it be if the unwanted safety event occurs?
- **Likelihood:** How likely is the unwanted safety event to occur, *or occur again?*

5.3.1 Severity

Severity is determined with respect to the category of the hazard and is given a score of 1 to 5 dependent on the level of severity from **Negligible** to **Catastrophic** as shown in Table 3 below.

Severity Category	Aviation	Health and Safety	Non-aviation emergency	Legal and Compliance	Financial	Business Continuity	Governance	Staff	Reputation	Political	Severity Score
Negligible	Little consequence	Little consequence	Little consequence	Little consequence	Little consequence	Little consequence	Little consequence	Little consequence	Little consequence	Little consequence	1
Minor	Nuisance. Operating limitations. Use of emergency procedures. Minor incident	Infrequent moderate injuries with 1 month or less off work	Few minor injuries. Airport closed <4hrs for removal/investigation	Minor legal, non-compliance or regulatory issues. Seek external legal/compliance advice	Cash loss of <\$35k not resulting in a financial loss	Continue to operate but RLC has a lack of confidence in RRAL and reviews operations and budgets; cannot operate for <1 day	Strained relationship with RLC; One board member departs and is replaced	A staff member ceases to work and a replacement is appointed within 4 weeks	Negative local media coverage for days	Contained adverse political comment to RRAL or RLC	2
Major	A significant reduction in safety margins, a reduction in the ability of organisations to cope with adverse operating conditions impairing their efficiency. Serious incident. Injury to persons	Disability and or serious injury with >1 month off work	Multiple injuries. Airport closed during day of incident for removal/investigation	Serious breach of regulation; prosecution and/or moderate fine possible	Cash loss of \$35-200k not resulting in a financial loss	RRAL operating on a day-to-day basis and struggling to remain financially viable; RRAL is unable to operate for <3 days	Deterioration in relationship with RLC which impacts airport operations; Sudden departure of Chairman	A staff member ceases to work and a replacement is difficult to find	Negative local media coverage for days and loss of confidence amongst sections of community	Contained adverse political comment publicly	3
Hazardous	A large reduction in safety margins, physical distress or a workload such that organisations cannot be relied upon to perform their tasks accurately or completely. Serious injury or death to a number of people. Major equipment damage	Multiple severe illnesses and or loss of limb	Severe injuries or single fatality. Airport closed <36 hours for investigation/removal	CAA Operating Certificate is suspended for a short period; Significant prosecution and fines	Cash loss of \$200-600k resulting in a financial loss of <\$100k	RRAL financially unviable and placed within temporary management; RRAL is unable to operate for 3-7 days	Severe deterioration in RLC relationship resulting in partial replacement of board; RLC significantly reduces funding	A staff member ceases to work which causes significant business interruption	Sustained negative local media coverage and loss in confidence by community that will take significant time to remedy	Ongoing adverse political comment to RRAL or RLC	4
Catastrophic	Aircraft/Equipment destroyed. Multiple deaths	Single fatality or widespread illness	Multiple fatalities and airport unable to operate for several days during removal/investigation	CAA Operating Certificate is withdrawn for an extended period; multiple litigation or substantial fines	Cash loss of >\$800k resulting in a financial loss >\$100k	RRAL financially unviable and RLC removes RRAL from its control; RRAL is unable to operate for 7 days or more	Total breakdown in relationship with RLC resulting in full replacement of Board; RLC discontinues funding	Multiple, or key, staff cease to work which results in RRAL failing to deliver upon regulations and expectations	Loss of community confidence, very poor perception of RRAL and sustained negative national media coverage	Ongoing adverse political comment publicly	5

Table 3 - Risk Severity Assessment

5.3.2 Likelihood

Likelihood is also given a score of 1 to 5 dependent on the hazard’s likelihood between **Extremely Improbable** and **Frequent** shown in Table 4 below.

Likelihood	Definition	Likelihood Score
Extremely Improbable	Almost inconceivable that event will occur	1
Improbable	Very unlikely to occur (Not known to have occurred)	2
Remote	Unlikely, but may occur (Has occurred rarely)	3
Occasional	Likely to occur sometimes (Has occurred infrequently)	4
Frequent	Likely to occur many times (Has occurred frequently)	5

Table 4 - Risk Likelihood Assessment

5.3.3 Risk Score

Deciding whether a risk is acceptable is based on its Risk Score. The Risk Score is the found by multiplying the risk’s **Severity Score** and the risk’s **Likelihood Score** and is shown in a Risk Assessment Matrix (RAM) in Figure 3 below.

		Likelihood				
		1	2	3	4	5
Severity	1	1 Acceptable	2 Acceptable	3 Acceptable	4 Acceptable	5 Attention
	2	2 Acceptable	4 Acceptable	6 Attention	8 Attention	10 Unacceptable
	3	3 Acceptable	6 Attention	9 Attention	12 Unacceptable	15 Unacceptable
	4	4 Acceptable	8 Attention	12 Unacceptable	16 Unacceptable	20 Unacceptable
	5	5 Attention	10 Unacceptable	15 Unacceptable	20 Unacceptable	25 Unacceptable

Figure 3 - Risk Assessment Matrix

5.3.4 Unmitigated and Mitigated Risk Assessment

When initially assessing the risk, the assessment will consider the risk on the premise that there are no controls in place to mitigate the risk. This is referred to as the **Unmitigated Risk**. Once a Risk Score has been determined for the unmitigated risk, the existing controls are reviewed and detailed in the Hazard and Risk Register. The risk is then reassessed based on the existing controls to consider the **Mitigated Risk Score**.

5.3.5 Risk Mitigation

When considering the methods by which a Risk can be mitigated the Airport response is categorised by one of four main actions; Tolerate, Treat, Transfer, Terminate. The definitions of these actions can be found on the Hazard and Risk Register.

5.3.6 Risk Categories

Risks are categorised based on their Risk Score as shown in Table 5 below.

Risk Score	Categorised	Requirement
4 or less	Acceptable	This risk is acceptable.
5 to 9	Attention required	This risk may be acceptable. Before this risk is accepted the Airport should ensure that sufficient controls are in place to ensure that this risk is As Low As Reasonably Practicable (ALARP).
10 or higher	Unacceptable	This risk is unacceptable. The activity associated with the Hazard must be terminated until adequate controls have been put in place to lower the Risk Score and the risk is determined to be ALARP.

Table 5 - Risk Categories

As the CE is accountable for Safety at the Airport, they have determined what scores are categorised as Acceptable and Unacceptable.

5.3.7 ALARP Concept

It is broadly acknowledged that it is not possible to eliminate all risk, particularly in aviation. In many cases the ability to introduce additional controls will come down to cost, and there are practical limits to how far an Airport, and the air transport industry, can go by paying to reduce risks.

The “As Low As Reasonably Practicable” (ALARP) concept considers that all efforts should be made to reduce risk to lowest possible level until a point is reached when the cost of introducing further safety measures significantly outweighs the safety benefit.

5.3.8 Risk Review and ALARP assessment

Once a Mitigated Risk Score has been determined, the risk assessment is reviewed by the SM Team at the Monthly SM Meeting. The review will provide an opportunity for the SM Team to scrutinise the Risk Assessment undertaken and confirm whether the Risk is ALARP. Once the risk assessment has been accepted, the mitigated risk score automatically generates a Risk Review Date as shown in Table 6 below.

Mitigated Risk Score	Review Date
1-4	12 months
5-6	6 months
7-9	3 months

Table 6 - Risk Review Dates

If it is identified that the Risk is not ALARP, an Action Plan will be agreed upon at the SM Meeting to reduce the risk. The Action Plan is recorded in the Hazard and Risk Register and will include an assigned owner and an action by date and is to be managed through an MOC process.

If a risk is determined to be Unacceptable or poses an immediate risk to Airport Operations, the health and safety of anyone at the Airport or Airport property, the SMS Mgr will notify the Airport Management team immediately, to confirm the validity of the risk assessment and to develop an Action Plan to mitigate the risk.

5.3.9 Communicate

The Airports Hazard and Risk Register is available to all Airport staff and relevant third parties on request from the SMS Mgr.

5.4 TOP HAZARDS

5.4.1 Determination of a Top Hazard

Rotorua Airport’s Top Hazards are defined as the hazards that result in risks that have the most significant potential impact on Airport Operations. Rotorua Airport’s Top Hazards are those that result in risks with an Unmitigated Risk Score of 10 or higher.

It is critical that the Airport ensures that these risks are robustly controlled and monitored to ensure that the controls ensure these risks are ALARP.

Rotorua Airport’s Top Hazards are:

1. Airspace Hazards
2. Birds
3. Fire in the Terminal
4. Foreign Object Debris
5. Runway Surface Condition
6. Unauthorised Airside Access
7. Unmanned Aeronautical Vehicles

5.4.2 Communication of Top Hazards

It is vital that all Airport users are aware of and understand Rotorua Airport’s Top Hazards, therefore it is vital that this Safety Critical information is communicated effectively.

Rotorua Airport’s Top Hazards are prominently displayed in the CE’s office, the Board Room, the SMS Mgr’s office and the Emergency Operations Centre. The Top Hazard information is available to all Airport Operators, on request, to give them the opportunity to display them on their noticeboards.

5.5 HUMAN PERFORMANCE HAZARDS

5.5.1 Fatigue

Fatigue is a state of mental, or physical exhaustion which reduces a person’s ability to perform work safely and effectively. Airport Operations staff are critical in the delivery of the Airport’s Emergency Response and accordingly it is critical that human performance hazards such as fatigue are controlled.

In order to quantify fatigue, the Airport utilises a Fatigue Index Calculator tool developed by QinetiQ on behalf of the Health and Safety Executive (UK¹). The index was designed to provide an assessment of changes in work patterns for safety critical workers and to determine whether any particular aspect of the work pattern was likely to increase levels of fatigue.

The Fatigue Index Calculator generates a fatigue index score, from 0 – 100, which is equivalent to a percentage probability of scoring an 8 or 9 on the Karolinska Sleepiness Scale shown in Table 7 below.

¹ <https://www.hse.gov.uk/research/rrpdf/rr446.pdf>

Rating	Description
1	Extremely alert
2	Very alert
3	Alert
4	Fairly alert
5	Neither alert nor sleepy
6	Some signs of sleepiness
7	Sleepy, but no effort to keep alert
8	Sleepy, some effort to keep alert
9	Very sleepy, great effort to keep alert, fighting sleep

Table 7 - Karolinska Sleepiness Scale

An idealised shift roster, based on the shift timings shown in Table 8 below, gives a maximum Fatigue Index Score of **10.3**.

Shift Name	Start Time	End Time
Early	05:15 am	15:45 pm
Full	06:30 am	21:00 pm
Late	12:00 pm	22:30 pm

Table 8 - Airport Operations shift roster

When reviewing potential shift changes or safety investigations that include human performance factors, the Fatigue Index Calculator can be used to allow the proposed shifts or events described to be compared to the idealised Fatigue Index Score.

6 Safety Investigation

6.1 INTRODUCTION

The driving force behind Safety Management is the intent to reduce the risk of accidents and incidents. Rotorua Airport's Safety Culture is one that aims to be proactive in order to avoid serious accidents from taking place.

Historically, airports and aircraft operators have been reactive in the undertaking of safety investigations, responding to an accident and ensuring that the situation that led to the accident is not repeatable. Rotorua Airport operate a proactive occurrence reporting and safety investigation process that actively seeks the identification of hazardous conditions through the analysis of a broader and less severe range of occurrences.

In order to achieve this, Rotorua Airport operates an open occurrence reporting system in which airport staff, operators, tenants and visitors are encouraged to report all occurrences from serious accidents and incidents that are mandatorily reported to situations where "business as usual" is not being carried out or the reporter is uncomfortable with the situation that is occurring (for example – car parking ticket machine malfunctions or theft from an airport construction site). These seemingly minor occurrences may have no obvious safety impact, particularly with regard to aviation, however the second-order effects of these occurrences may be significant. If due consideration for these events is not taken, it is possible that hazardous conditions may be overlooked.

6.2 OCCURRENCE REPORT WRITING

The foundation of the Occurrence Reporting and Safety Investigation system is the accurate and timely reporting of all occurrences.

An occurrence is defined as any situation that is considered to be unsafe, potentially unsafe or does not conform to "business as usual" processes and procedures. An occurrence report should only be completed when safe to do so.

Rotorua Airport aims to make reporting occurrences as simple as possible to encourage as much reporting as possible. Occurrences can be reported on an [Occurrence Report form](#), or a summary of the occurrence can be sent directly to a dedicated email address: reports@rotorua-airport.co.nz.

Additionally, Rotorua Airport uses the Spotlight incident reporting app. This app allows for real-time incident reporting.

Rotorua Airport recognises that a number of Airport Operators and Tenants operate their own occurrence reporting system. Rather than duplicate effort the Airport will accept a copy of any other organisation's occurrence report form.

Occurrence reports are to be returned to the SMS Mgr, or in their absence, the AO Mgr. If required, occurrence reports can be returned anonymously or should a report writer consider it necessary, can ask to remain anonymous following the submission of a report.

Report writers are encouraged to provide as much information as possible about the occurrences and to provide details on the remedial action they have undertaken to mitigate the risks or resolve the situation. Airport staff are also responsible for gathering as much evidence as possible. Where CCTV footage will provide context to the occurrence, Airport staff should store relevant footage as soon as practicable. CCTV footage is only normally recorded for one month, therefore Airport staff shall ensure that CCTV footage is stored before this deadline.

6.3 OCCURRENCE REPORTING PROCESS

Occurrence reporting should be undertaken as soon after the event as possible so that as much detail can be provided however it is important that all necessary emergency actions are taken first. The priorities for dealing with an occurrence are shown in Figure 4 below.



Figure 4 - Occurrence Response Priorities

On receipt of an Occurrence Report, the SMS Mgr will populate the details of the Occurrence Report into the [Occurrence Report Register](#) which provides the Airport with the capability to view key elements of all occurrence reports in one place, keep a log of the actions undertaken and ongoing as a result of the report submission, and to identify trends that may lead to further investigation.

Rotorua Airport recognises the benefit of providing feedback to individuals who submit Occurrence Reports to the ongoing success of an Occurrence Reporting System, and accordingly the SMS Mgr aims to provide initial feedback from the submission of an Occurrence Report **within 1 week** of the report’s submission. Feedback on Occurrence Reports shall be provided to the report writer, where possible, by email using the dedicated reports@rotorua-airport.co.nz email address to provide assurance that the Airport has provided feedback.

6.4 SAFETY INVESTIGATION TRIGGERS

Rotorua Airport acknowledges that ideally all occurrence reports would prompt a Safety Investigation (SI) to determine any underlying hazardous conditions and to ensure the Airport’s processes are safe and effective, however this is unfortunately not possible in practical terms. Consequently, Rotorua Airport have determined a number of triggers that determine which occurrences must be investigated further. An investigation will be instigated by any occurrence report that:

- Requires the Airport to submit a mandatory report to the CAA;
- Describes an occurrence that is assessed to have a Risk Severity of Major or higher;

- Describes an occurrence that has a credible escalation which is assessed to have a Risk Severity of Major or higher;
- Identifies a lack of suitable controls or the controls lack integrity; or
- Identifies a trend of lower Risk Severity events.

A credible escalation of an occurrence is considered to be the potential outcome of the occurrence if the final safety barrier or control had not been in place.

In addition to the investigations triggered by the above criteria, the Airport management team may decide to undertake additional SIs. The requirement for additional safety investigations will be discussed at the weekly SM meeting.

6.5 SAFETY INVESTIGATION PROCESS

There are three types of SI as described in the following sections.

6.5.1 Basic

A Basic SI is the most common form of investigation and is completed using the [Basic Safety Investigation Template](#). To complete a Basic SI the nominated investigator will gather sufficient evidence to gain an accurate understanding of the sequence of events that took place during the occurrence to enable them to accurately identify any new hazards and provide recommendations to ensure this occurrence does not take place again and the underlying systemic contributory factors are addressed. The Airport utilises the 5 why's process to determine where possible the root-cause of an occurrence.

6.5.2 Bird Strike

The risks associated with birds are some of the most significant risks at the Airport, and it is vital that bird strikes and near misses are investigated, however it is recognised that the amount of information that can be gathered from an investigation is varied and can be very limited. In order to capture as much relevant information as possible following a bird strike or near miss, Airport Operations staff are responsible for completing a [Bird Strike Investigation Report](#) as soon as possible following the report of a bird strike or a near miss.

6.5.3 Full

A Full SI takes a more in-depth analysis of the occurrence and the underlying causes and influential factors. A Full SI will also involve a more thorough risk assessment process and provide sufficient evidence to implement significant change to policy, procedures or controls as required. By its nature, a full investigation is likely to have a more unique investigation report, however the report is to be started on the [Full Safety Investigation Template](#).

6.5.4 External

An External SI will be commissioned when there has been a serious breach of Airport policy that, in the interests of fairness and transparency, should be investigated by an external 3rd party.

6.6 SAFETY INVESTIGATION RECOMMENDATIONS

Following the completion of a SI, the draft report is sent to the occurrence report writer, to allow them to provide feedback and additional recommendations. Following this feedback the report is sent to the SM Team who will review the report and its recommendations prior to the next weekly SM meeting. More information regarding the SM Meeting schedule is available in Section 11.2.

At the SM meeting, the recommendations will be reviewed and then:

- Accepted;
- Amended and then accepted; or
- Rejected.

When a recommendation is accepted the recommendation is allocated an owner and a completion date. If a recommendation is rejected, the rationale behind the rejection should be clearly articulated. All recommendations are recorded on the [SI Recommendation Tracker](#).

Following acceptance of Safety Investigation Recommendations the SMS Mgr will review the recommendations with the Airport Users SMS Meeting. Accordingly, Safety Investigation Recommendation review is a standing agenda item for these meetings.

7 Monitoring and Measuring Safety Performance

7.1 INTRODUCTION

One of the key principles of Safety Management is the continuous improvement of Safety Performance. In order to ensure that the Airport is continuously improving its Safety Performance, it is important that Safety Goals are set that provide a context for what the SMS is trying to achieve. Each Goal must have SMART Safety Objectives which ensure that our performance can be measured.

7.2 SAFETY GOALS

Rotorua Airport's Safety Goals are derived directly from the Airport's SM Implementation Policy [here](#). Each Safety Goal generates a series of time-bound Safety Objectives which ensures that the improvement of safety performance is recorded.

7.3 SAFETY GOAL KEY PERFORMANCE INDICATORS

RRAL's Safety Key Performance Indicators (KPIs) are recorded in the [Safety Goals and Objective Register](#) which logs all current and achieved Safety Objective KPIs. The Safety Objective Register utilises key performance indicators to ensure that Safety Objectives are being met and ensures that progress towards Safety Goal is recorded, reviewed and appropriate mitigation actions are undertaken if the Airport is not progressing towards its Safety Goal.

7.4 SAFETY PERFORMANCE INDICATORS

In order to appropriately baseline Safety Performance Indicators, the Airport has undertaken a period of data aggregation until 31 December 2019. As of 1 January 2020 the CE has endorsed a series of monthly Safety Performance Indicators. These targets can be seen [here](#). Adherence to the Safety Performance Indicators will be reviewed at the Monthly Internal SMS Meetings, and the introduction of corrective actions will be discussed and agreed upon.

8 Management of Change

8.1 INTRODUCTION

It is important that all significant changes to an organisation are managed in a structured way to make sure that the impact of the change has been appropriately assessed and the change process is effectively managed. Rotorua Airport manages significant changes through the Management of Change (MOC) process.

8.2 MANAGEMENT OF CHANGE PROCESS

The process by which Management of Change should take place is shown in Figure 5 below.

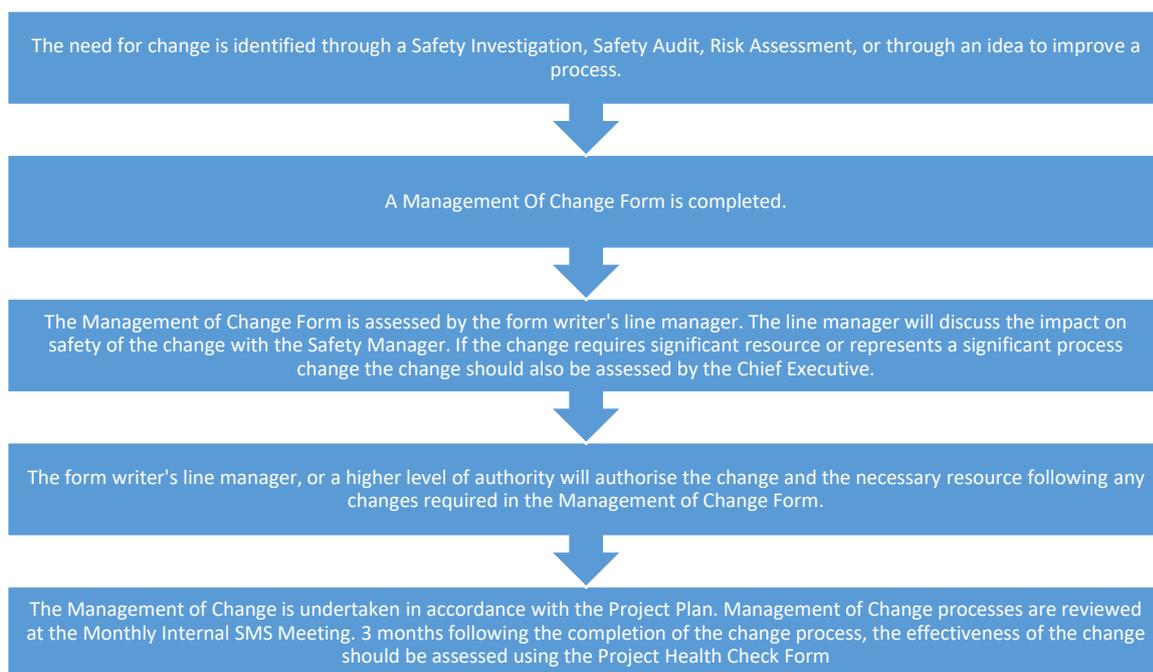


Figure 5 - Management of Change Process

8.3 MANAGEMENT OF CHANGE FORM

MOC processes are guided through the use of the Management of Change Form, found [here](#). All MOCs are recorded and monitored on the [MOC Register](#).

The purpose of the Management of Change (MOC) Form is to provide a mechanism to plan, track and manage changes. The MOC Form is designed to:

- Identify the trigger for the change to ensure the change proposed is appropriately justified;
- Identify hazards and associated risks of both not implementing the change and during the change process and ensuring that the appropriate mitigation or controls have been put in place;
- Ensure that a systematic approach to change management is applied to all significant changes;
- Ensure the any change is adequately resourced;
- Ensure that the change is appropriately communicated;
- Ensure that the appropriate documentation is amended; and
- Ensure that the change proposer has received approval for the change at the appropriate level.

It is important that the proposed change is mapped out in as much detail as necessary. In order to achieve this, the Project Plan element should be mapped out using a Work Breakdown Structure. An example of a Work Breakdown Structure is shown at Annex B – Work Breakdown Schedule Example.

Once authority for the change has been given, the MOC form should be used to monitor the progress of the change. Temporary hazards that are identified for the change process are to be added to the Hazard and Risk Register, and should be assessed and managed in the same way as all Airport Hazards. On the completion of the change process these Hazards should be reviewed to determine whether they are still applicable.

8.4 MANAGEMENT OF CHANGE REVIEW

To ensure that MOCs are being effectively managed, Management of Change is a standing agenda item in the Monthly Internal SMS Meetings and to ensure that the change has been effectively implemented all completed changes are to be reviewed 3 months following the completion date.

9 Continuous Improvement

9.1 INTRODUCTION

Rotorua Airport's SMS is a constantly evolving system and just like all other aspects of operations the Airport's staff should always consider ways of improving existing processes.

9.2 CONTINUOUS IMPROVEMENT ACTIVITY

Continuous Improvement is fundamental to all activities at the Airport and should be considered as part of every activity Airport staff undertake. Continuous improvement is exemplified in the following areas.

9.2.1 Occurrence Reporting and Safety Investigation Process

The fundamental purpose of the Occurrence Reporting and Safety Investigation process is to identify the root cause of occurrences, the influential factors and provide recommendations for ways that the Airport systems can be improved to ensure the occurrence is not repeated.

9.2.2 Safety Assurance Audit Process

RRAL operate an internal safety assurance system which ensures that the Airport processes are being undertaken to a high standard of safety and security. The Safety Assurance Audit process is used to identify hazards and areas of substandard performance, and provides recommendations on how Airport processes can be improved upon to improve performance and more effectively mitigate risks.

9.2.3 Project Health Check Record

Following major projects, project managers are to complete a Project Health Check Form, found [here](#). This form allows project managers to identify any lessons that can be discussed at a subsequent management meeting to ensure that lessons are identified, recorded and shared, to allow for improved performance in the future.

9.2.4 Suggestions Box

The Airport management is conscious that some of the best ideas for improvement come from those at the operational level, that experience processes first-hand. This level of insight is sought through all Safety Investigation processes, and the SMS Mgr operates an "open-door" policy for new ideas and ways of doing things.

Additionally, there is a "Suggestions" Box in the Operations Centre where Airport staff, operators and tenants can leave suggestions regarding any aspect of Airport operations. All suggestions received are recorded in the [Suggestions Register](#).

10 Internal Audit

10.1 INTRODUCTION

RRAL operate an internal safety assurance (SA) system which ensures that Airport processes are being undertaken to a high standard of safety and security, in accordance with published procedures and to adhere to the provisions of CAR Part 100 and Part 139.

The procedures identified in the Exposition Suite of documents detail what is required of a person responsible for carrying out a procedure, the frequency of the procedures and the required documentation and reporting processes.

10.2 INTERNAL AUDIT PROGRAMME

At RRAL, the Internal Audit Programme is detailed within the [Safety Assurance \(SA\) Audit Register](#). The frequency of audits is determined by:

- The level of risk posed by the part of the operation or organisation being audited;
- The findings, observations and recommendations that resulted from previous audits ; and
- The resource available and practicality of the audit schedule.

Following an audit, the frequency of future audits will be reviewed based on the above criteria to determine the proposed timeframe for the next audit. This timeframe, corrective action and follow up planning will be discussed with the process owner and documented in a [Safety Assurance \(SA\) Audit Report](#).

An audit can also be triggered at any point if the requirement for one is identified through an Occurrence Report, or the recommendations of a Safety Investigation.

As RRAL implement the SMS, the Internal Audit programme and process are likely to be subject to considerable levels of change as risks are assessed. It is important that all changes to the system are controlled and recorded. In addition to adhering to the Information Management and Document Control Policy, all changes to the [SA Audit Register](#) are logged in the Change Log.

10.3 INTERNAL SAFETY ASSURANCE AUDIT PROCESS

It is vital that SA audits are undertaken with a high-level of independence ensuring that procedure owners are not auditing their own procedures. The SMS Mgr operates independently from the Airport Operations team and is therefore responsible for the majority of internal audits. Similarly to ensure that the SMS is audited with the same level of independence the AO Mgr is to audit the SM processes. Any procedures that are determined to be dependent on both the AO Mgr and the SMS Mgr will be discussed at SM meetings to determine the value of utilising external auditors to review these procedures.

All personnel that undertake internal audits shall be suitably trained and experienced. All personnel training is recorded in the [Training Register](#).

When undertaking an internal audit the nominated auditor shall:

1. Prepare for the audit by reviewing the procedures detailed in the relevant manuals.
2. Confirm with the procedure owner when the audit will take place, what procedure will be audited and what method will be used to audit it (e.g. records review, walkthrough review, and desktop review). The audit shall be in line with the [SA Audit Register](#).

3. Conduct the audit focussing on how the procedure described aligns with the procedure undertaken, and areas where the procedure could be improved so that it is safer and more effective.
4. Compile a draft SA audit report using the [SA Audit Report](#).
5. Review the hazards, recommendations and actions at the weekly SM meeting.
6. Non-conformances are reviewed using the 5-why's analysis method to determine root cause.
7. Finalise the SA audit report.
8. Present the report to the audited personnel and agree on an appropriate timeline for any improvements recommended.
9. Upload the SA Audit Report to the [Safety Assurance Audit Evidence](#) folder and update the SA Audit Register accordingly.
10. Audit actions are tracked on the [SA Audit Action Tracker](#) and reviewed at routine SM meetings.

11 Management Review

11.1 INTRODUCTION

Management review is the process by which the Airport senior management ensures that the Airport's SMS is suitable, adequate and effective. By reviewing the development of the SMS the Airport management team can identify and assess opportunities for improvement and the need for change within the system.

11.2 MANAGEMENT REVIEW PROCESSES

11.2.1 Weekly SMS Meeting

The weekly SMS meeting involves all of the Airport management team aside from the CE. This meeting looks at the following items:

- 1 A review of the occurrence reports generated since the last meeting and the intent to undertake investigations. This provides the management team an opportunity to be updated on significant events, and instigate any additional Safety Investigations they consider necessary.
- 2 A review of the status of ongoing Safety Investigations and a review and acceptance of draft Safety Investigation reports.
- 3 A review of the status of Safety Investigation recommendations.
- 4 A review of the Airport Training Register. This provides the Airport management the opportunity to identify upcoming training requirements and to update the Training Register for training that has been undertaken.
- 5 A review of any Safety Assurance Audit processes from the preceding week including acceptance of new Safety Assurance Audit recommendations and a review of outstanding Safety Assurance Recommendations.
- 6 A review of the Hazard and Risk Register. This review focusses on identified hazards and risks and reviews the acceptability of existing Risk Assessments and mitigating controls.

11.2.2 Monthly SMS Meeting

Rotorua Airport operates a monthly SMS meeting that is attended by the CE. This meeting allows the CE the ability to ensure the continuing suitability, adequacy and effectiveness of the Airport's SMS. In this meeting the SMS Mgr will provide a series of trend analysis metrics to demonstrate the effectiveness of the SMS, including:

- Completion data regarding Safety Investigations;
- The progress of Safety Investigation Recommendations; and
- An Occurrence Report meta-data heat map.

Additionally, this meeting will include the following standing agenda items:

- **SMS Engagement Plan:** Reviewing the plan to engage with the Airport Community regarding SMS, and to review training requirements. The SMS Engagement Plan be found [here](#).
- **Safety Assurance Audits:** Reviewing the SA Audit schedule to ensure it is in line with current risk profiles.
- **Hazard and Risk Register Review:** Reviewing and updating the Hazard and Risk Register.
- **Management of Change Review** Reviewing the progress of MOC processes against project milestones.

11.2.3 SMS attendance at RRAL Board

At every RRAL Board meeting, the SMS Mgr has an opportunity to present progress to the Board and to highlight any challenges that are being addressed. The SMS Mgr is also given an opportunity to speak to the Board without the CE present to address any concerns with the CE's approach to SMS.

12 Safety Training and Competency

12.1 INTRODUCTION

To ensure that Airport staff are competent to perform their safety-related duties, it is necessary for them to be trained in the concepts and application of the Rotorua Airport SMS. The Airport SMS is available to all staff and Airport Operators, however a level of job-specific safety training is also required. The Airport's training requirements are detailed in the Section below.

12.2 TRAINING REQUIREMENTS

All staff at Rotorua Airport must receive Safety Management training that reflects their role in the Safety Management System. The training requirement has been divided into the SM training of the SMS Mgr, the Management Team and staff.

12.2.1 SM Training for SMS Manager

The SMS Mgr is the focal point for SM expertise at the Airport. Therefore it is necessary that they suitably qualified. The SMS manager is required to be competent in:

- Safety Management Principle and Practices in the Aviation Environment;
- Components of SMS;
- Safety Risk Management Principles;
- Safety Investigation Principles;
- Safety Audit;
- Human Performance; and
- Safety Culture.

The Airport does not have the required competencies to deliver this training internally, therefore it is necessary for this training to be provided by an external training provider.

12.2.2 SM Training for Managers

General SM Training for Managers can be found [here](#).

The CE and AO Manager should attend an SMS training course provided by an external training provider.

The scope of the SM Training for Managers is shown in Table 9 below.

Topic	Description
Why do we need an SMS?	This section describes the requirement for an SMS
Components of an SMS	This section details the key components of an SMS
Just Culture	This section looks at what Just Culture means at Rotorua Airport
Safety Policy and Organisation	This section reviews the Safety Policies and the Safety organisational structure
Safety Risk Management	This section reviews the requirements of safety risk management and the importance of the occurrence reporting process
Human Error vs Human Factors	This section reviews the evolution of Human Factors
Safety Assurance	This section reviews the requirements of Safety Assurance, focussing on auditing
Safety Promotion	This section reviews what the Airport does with respect to safety promotion

Table 9 - Scope of SM Training for Managers

12.2.3 SM Training for Staff

SM Training for Staff can be found [here](#).

The scope of the SM Training for Staff is shown in Table 10 below.

Topic	Description
Why do we need an SMS?	This section describes the requirement for an SMS
Components of an SMS	This section details the key components of an SMS
Just Culture	This section looks at what Just Culture means at Rotorua Airport
Safety Policy and Organisation	This section reviews the Safety Policies and the Safety organisational structure
Safety Risk Management	This section reviews the requirements of safety risk management and the importance of the occurrence reporting process
Human Error vs Human Factors	This section reviews the evolution of Human Factors
Safety Assurance	This section reviews the requirements of Safety Assurance, focussing on auditing
Safety Promotion	This section reviews what the Airport does with respect to safety promotion

Table 10 - Scope of SM Training for Staff

12.2.4 Record of Training

Once SM training has been undertaken it is to be logged in the Airport's [Training Register](#).

To ensure that staff are involved in the Safety Management System as early as possible SM training is included as part of staff induction training, and is recorded in staff member's Induction Training, which is recorded in staff member's Record of Competence.

As the Airport is evolving and improving its Safety Culture it is important that SM training is undertaken with sufficient recurrence to ensure that the Safety Culture continues to

improve. Therefore, in this SMS development phase, all aspects of Safety Training is valid for 1 year.

As part of the SMS drive for continuous improvement the SM Training will be adapted every year to capture the evolution of SM and the greater understanding of SM principles.

12.3 TRAINING REGISTER

The Airport maintains a record of all relevant training and qualifications help by Airport staff in the Airport’s Training Register. The Training Register is designed to give 3 months’ notice of any recurrent training requirement, however it is ultimately each line-manager’s responsibility to ensure that their staff are suitably qualified and experienced.

12.4 TRAINING EFFECTIVENESS

One of the best known models for analysing and evaluating the results of training is the Kirkpatrick Model, and the Airport will use this model to evaluate its safety training effectiveness.

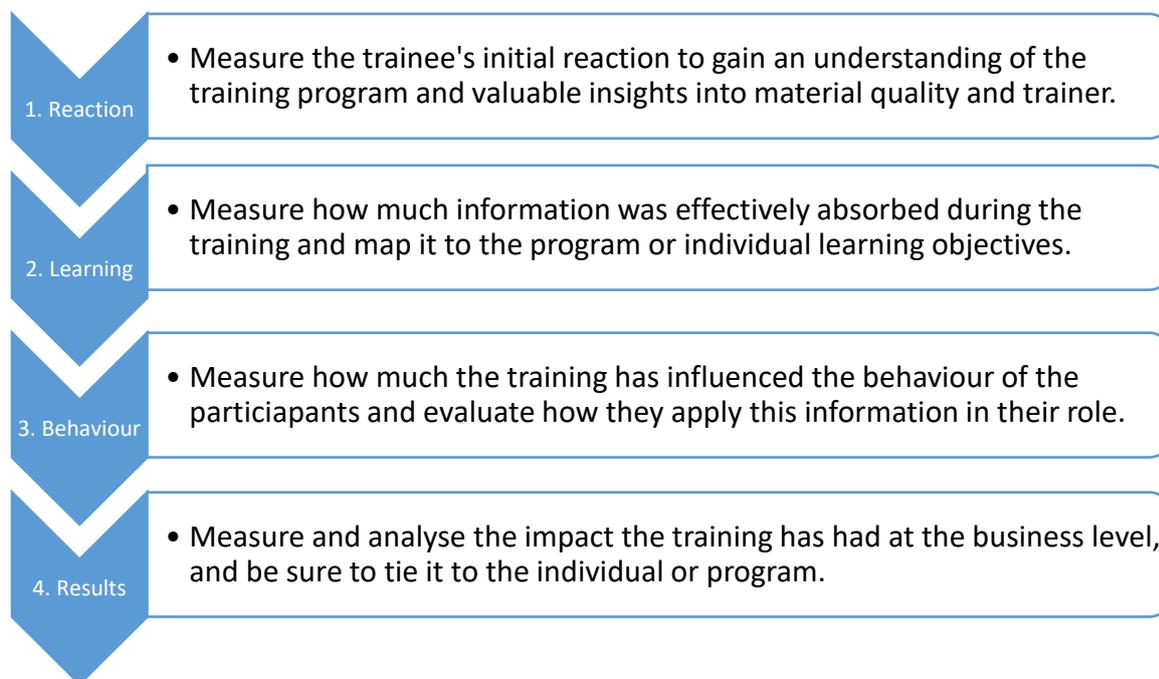


Figure 6 - The Kirkpatrick Model

To evaluate Safety Training the Airport considers the Kirkpatrick Model in reverse. The first consideration is what the Safety Training is trying to achieve. As the SMS is in the process of being implemented this will be reviewed annually.

In 2020, the Safety Training is trying to improve the Safety Culture at the Airport (Level 4). To determine whether this has been effective, the Airport will focus on one aspect of a positive Safety Culture; Occurrence Reporting. The Safety Culture will be demonstrably improved if the number of occurrence reports received both from AO staff and the wider Airport community increases as a result of the Safety Training (Level 3). It is therefore vital that the learning gained from Airport Safety Training includes how to undertake occurrence reporting and why it is important (Level 2).

In addition, at the end of all Safety Training, the training delivered will be reviewed by the participants using the Airport’s Training Validation Form (Level 1). Training Validation Forms are available [here](#). The forms will be reviewed by the SMS Mgr to determine if any

changes to the course content is required to ensure that the training is positively received.

12.5 SAFETY COMPETENCY ASSESSMENT

Competency assessment is method by which the Airport measures and documents personnel's competencies. The SMS Mgr is responsible for assessing whether Airport staff are competent to undertake their Safety-related duties. Competency assessments are undertaken within 6 months of undertaking initial or recurrent training and are recorded on the Airport's [Competency Assessment Form Template](#). The Competency Assessment determines whether the member of staff is considered to be competent to undertake their safety-related duties and any corrective action that is required.

13 Communication of Safety-Critical Information

13.1 INTRODUCTION

The communication of safety-critical information is considered to be one of the most important aspects of an effective SMS. If information is not effectively shared, then the value of the information is diminished. Rotorua Airport has a multitude of methods for communicating safety-critical information as described in the following Sections.

13.2 SAFETY EVENT NOTIFICATION SYSTEM

Rotorua Airport recognises that Safety Critical information may need to be passed more dynamically than on a meeting to meeting basis. Accordingly, the Airport operates a Safety Event notification system. The Safety Event notification system has two tiers:

- Safety Notices
- Safety Warnings

13.2.1 Safety Notices

For planned events, such as routine maintenance, a Safety Notice is to be sent to potentially affected stakeholders with as much notice as possible. Safety Notices are promulgated via email. Safety Notices that affect the airside environment are to be promulgated by the AO Mgr, and Safety Notices that affect the landside environment are to be promulgated by the Terminal Services Manager (TS Mgr).

13.2.2 Safety Warnings

Safety Warnings are designed to communicate information about situations that are considered to pose an immediate hazard to the safety of operations. A hazard can come from a wide array of sources as described in Section 4.2. On receipt of an occurrence report, the SMS Mgr will immediately assess whether there are any new hazards and associated risks and determine whether a Safety Warning is necessary, and what area of the Airport (Airside, Landside or the whole Airport) needs to be notified. Safety Warnings are promulgated via email.

13.3 SAFETY MEETING SCHEDULE

The SMS meeting schedule for Rotorua Airport is shown in Annex C - Safety Meeting Schedule.

In addition to this meeting schedule, the Airport SMS Mgr will aim to attend the New Zealand Airport Association Forums when practicable and provide feedback on the development of the SMS.

13.4 SAFETY MOMENT

To ensure that Safety remains an integral part of everything we do at Rotorua Airport, the concept of a Safety Moment has been introduced, and shall be an agenda item on every meeting is organised by Rotorua Airport staff.

A Safety Moment is an opportunity to discuss a recent occurrence and the safety learnings that came from it, or to discuss a concept within SMS. They should be ideally be concise (no more than 5 minutes in length) and if possible should be of relevance to the attendees of the meeting.

13.5 SAFETY COMMUNICATION

It is critical for the Airport's institution of a Just Culture that individuals at all levels should not be afraid to communicate safety critical information, therefore there is no prescribed lines of communication for Safety. Anyone at the Airport can approach the SMS Mgr directly to discuss a safety matter.

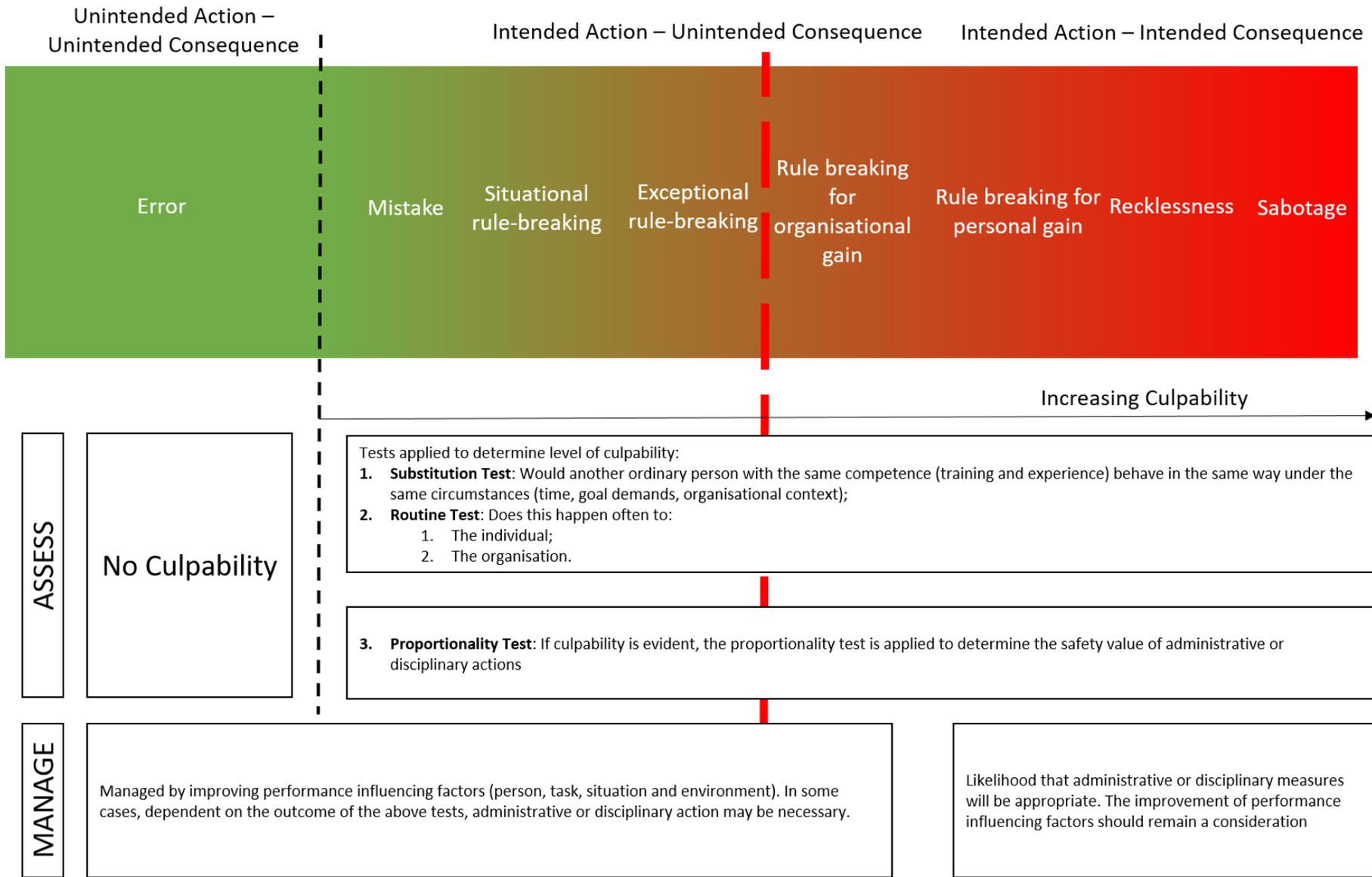
In order to foster the reporting and informed Safety culture, the SMS Mgr provides the Airport Operations team a daily summary of Occurrence Reports received during the previous week. The SMS Mgr may elect not to share some occurrence reports if they refer to a sensitive personnel issue, or the report writer has asked that the report is not shared.

13.6 SAFETY PROMOTION

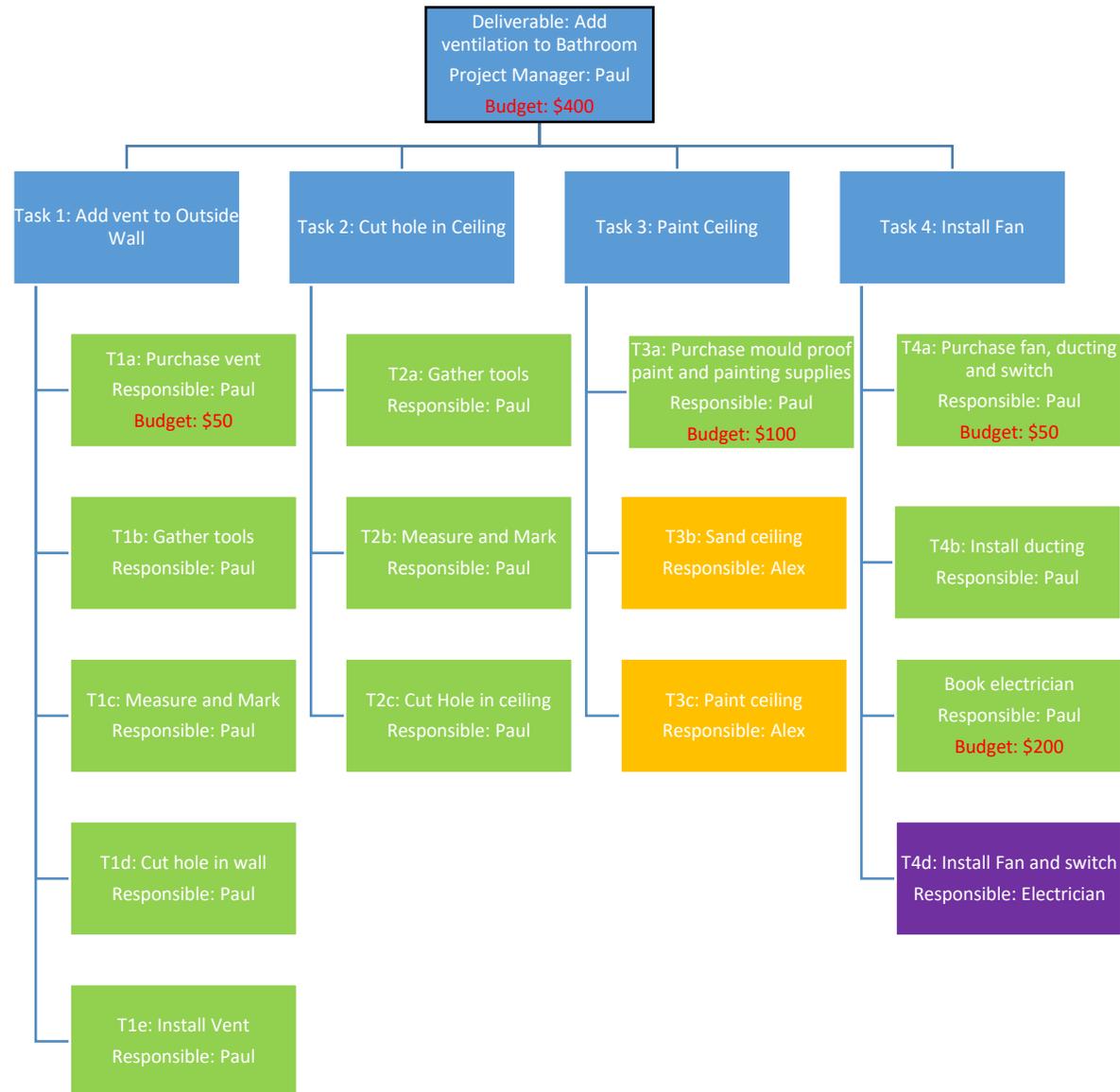
The Airport publishes a quarterly newsletter. The SMS Mgr will publish a Safety-focussed article in each edition. Additionally, the newsletter will be used to recognise positive Safety Culture actions by individuals within the Airport community.

Rotorua Airport's website has a dedicated Safety webpage that provides a method of widely communicating safety-critical information.

Annex A – FAIR System



Annex B – Work Breakdown Schedule Example



Annex C - Safety Meeting Schedule

Meeting Name	Purpose	Frequency	Invited Attendees		Standing Agenda Items	
			Organisation	Role		
Daily Management System Meeting	Communication of Safety Critical Information to Airport Operations team	Daily – 0900hrs	RAL	All AO staff All Mgt staff		
Internal SMS Meeting	Internal operation of the Airport Safety Management System	Weekly	RAL	SMS Mgr (Organiser)	<ol style="list-style-type: none"> 1. Safety Moment 2. Management of Change 3. SMS Implementation 4. Daily Work in Progress Safety Moment 5. Occurrence Report Register Review 6. Safety Investigations 7. Training 8. Safety Policy 9. SA Auditing 10. Hazard Review 	
				AO Mgr		
				Terminal Services and Finance Manager		
Internal Monthly SMS Meeting	Internal operation of the Airport Safety Management System Management Review	Monthly	RAL	CE		
				SMS Mgr (Organiser)		
				AO Mgr		
				Terminal Services and Finance Mgr		
Runway User Safety Group	Focus on the operational safety of the runway	Quarterly	RAL	CE		
				AO Mgr (Organiser)		
				SMS Mgr		
				JNP	Manager	
				Super Air	Pilot	
				Airways	Chief Controller	
				ANZ	Airport Manager	
Rotorua Aero Club	President					

Meeting Name	Purpose	Frequency	Invited Attendees		Standing Agenda Items
			Organisation	Role	
				Secretary	
			JAK Air	Operations Manager	
			Volcanic Air	Director	
			Action Aviation	Owner	
			Span Air	Operator	
			Brian Stanley	Owner	
			Air BP	Manager	
Airport Users SMS Meeting	External operation of the Airport Safety Management System Communication of Safety Critical Information Integration of external SMS with Airport SMS	Monthly	RAL	CE	1. Safety Moment 2. Training 3. Occurrence Report Register Review 4. Safety Investigation Review 5. Hazard and Risk Review 6. Safety Communication
				AO Mgr	
				SMS Mgr (Organiser)	
				Terminal Services and Finance Manager	
			JNP	Manager	
			Super Air	Pilot	
			Airways	Chief Controller	
			ANZ	Airport Manager	
			Rotorua Aero Club	President	
				Secretary	
			JAK Air	Operations Manager	
			Volcanic Air	Director	
			Action Aviation	Owner	
			Span Air	Operator	
			Brian Stanley	Owner	
			Air BP	Manager	
			Aqua Ag	Operator	
MPI Customs ²	Representative				
Rotorua Gliding Club	Operator				
Read Lougher ³	Operator				
Airports SMS Meeting	Sharing of information regarding	Monthly	RAL	SMS Mgr	No standing agenda set
			Tauranga Airport	SMS Mgr	

² Invited if an MPI Customs presence is instituted at the Airport

³ Airfield Maintenance Provider

Meeting Name	Purpose	Frequency	Invited Attendees		Standing Agenda Items
			Organisation	Role	
	SMS, and recommendations that all Airports can consider for future development		Whakatane Airport	SMS Mgr	