



How to build a Quality & Safety System

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Helpful stuff for operators who have not previously run a formal management system



In many cases organisations will already have detailed their Quality & Safety procedures in their CAA exposition. This document is intended to help those who as yet have not been required to document their management systems anywhere.

HEADING	IN PLAIN LANGUAGE
1. SAFETY & QUALITY POLICY	The boss's public statement on how his company does business and what is important to them
2.SMS MANUAL	The place where the standards and procedures are found
3. QUALITY / PERFORMANCE INDICATORS	Evidence that can be used to show that the Company is doing a good job and the statements set out in 1. above are being met
4. MANAGEMENT REVIEW	The boss or their deputy checking that everything they say they do is being done, and what, if anything needs changing
5. INTERNAL AUDIT	Someone with a fresh pair of eyes independently checking that procedures are being complied with
6. DOCUMENTATION CONTROL	Any documents used as evidence of good practice will need to be dated and tracked
7. PROCEDURES	How you go about your work
8. RECORD KEEPING	How you recording it all?
9. CORRECTIVE ACTION	What you do when something has gone wrong
10. MANAGEMENT OF RISK	How you minimize risk
11. COMPLAINT HANDLING	What you do when (if) there is a complaint

This SOP says how this company is going to assure its quality and safety requirements are met.

When we use the word safety, we are referring to:

- the personal safety of ourselves and our customers and contractors under HSE legislation
- flight safety under Civil Aviation legislation and rules
- environmental safety under RMA legislation and rules and the AIRCARE™ environmental codes of practice

When we use the word quality, we are referring to:

- delivering high quality services to customers with no unplanned interruptions, no complaints and repeat business assured

We have appointed *Lucy Jane* (Safety Officer) to do look after this and it is up to her to make sure everyone else in the company does what they have to do when it needs doing. She's answerable to the CEO. Because she has lots of other duties, Lucy has developed a checklist on SMS items and other useful stuff so she won't forget when things have to be done. Her checklist is shown as Appendix 1 to this SoP. The Safety Officer goes through this checklist every month before the 7th of the month and looks for items that need addressing that month and the next.

For the SMS part of her job her duties are:

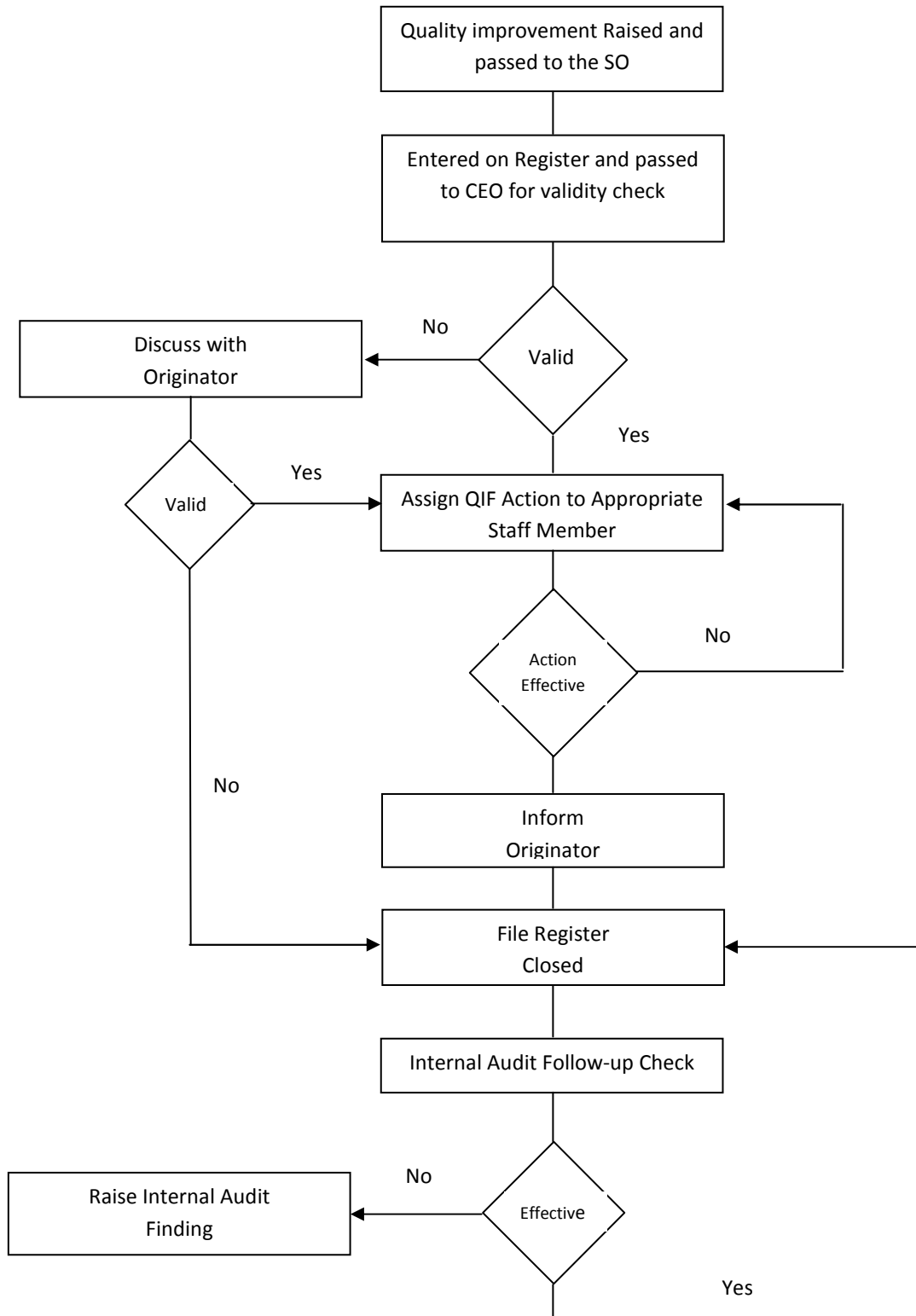
- 1) Make sure the staff understand the company policies and rules on quality and safety. She's going to make sure that every new staff member employed is told about this as part of their induction training. And because the company has only just started doing this she is also going to explain the policy to the existing staff too. So she can *demonstrate* that they all understand she is going to get them all to sign and date a simple note saying they have read and understood the policy. Now this won't be the only item that staff have to understand so she has written a simple form with the other things on it and that form is shown as Appendix 2 to this SoP.
- 2) Make sure that at least one copy of the AIRCARE™ SMS Manual is available to all the staff along with copies of each of the codes of practice to which the company is accredited. One set will be printed and put in a cupboard in the hangar and the other will be saved to the office computer hard drive. If we print more than one copy the copies will be numbered
- 3) Make sure that each of these documents is the latest version by checking the www.aircare.co.nz/resources website once a month. When any one of these documents is amended she will reprint it, replace the hard copy, make an entry on the Amendment Page (if required), destroy the earlier version and delete the saved version and replace it with the new electronic one. Doing this means that the copies are *controlled*.

- 4) Items have to be identified that are indicators of whether or not the company is achieving its quality policy. This company has identified that letters or notes of appreciation from customers indicate that this is the case and to try and measure customer feedback we are going to include a simple questionnaire with each invoice we send out asking clients if their expectations were met in regard to timeliness and job quality. Other indicators the company has identified are complaints, incidents/events and audit findings. One of the rules of this program is that ALL of these items are recorded as they arrive or happen so it is vital that each staff member participates by recording the things that go wrong. We are going to consider each of these at staff meetings to see if we are meeting our targets and look at ways we can improve our processes if we are not.
- 5) When any complaint or incident/event is notified (as in 4 above) or when any audit findings are raised, we are going to try and ensure that mistakes that may have been made to cause the problem (negative indicators) are not made again. It may not be a mistake- it might be a maintenance breakdown that can be fixed by changing a maintenance schedule to check the offending item more often. But whatever it is we are going to write down the particular issue. The person who writes down (records) the issue hands the form to the Safety Officer who will give it a number. The Operations Manager is going to look at the report and decide whether or not it is valid. We use the Ops manager because he has a handle on all aspects of the business. If it's not valid he'll give it back to the person who recorded the event and explain why. If he decides it is valid he will write down who is going to correct the problem and when they have to have this done by. The time that is allowed for this will depend on how serious the problem is. The whole point about this is to prevent the same thing going wrong again so the person who is allocated to correct the problem is also going to write down some procedures that will prevent a reoccurrence (preventative action) If this involves changing the way we do things the Safety Officer will change the relevant SoP/Manual etc and mark the form accordingly. Then so the company knows that the corrective actions are working, the CEO will have a look every six months to make sure the original problem is not a recurring one. If he does find a recurring problem he will then raise another QIF and follow this process again. These Management Reviews are going to take place within two weeks of an Internal Audit. In our company, this process is all recorded on one form called a Quality Improvement Form (QIF) Information from these reviews will be shared with the staff at the next staff meeting. The Safety Officer keeps all the QIF's in a file in numbered order with a index in the front showing each QIF with a short title and its number.
- 6) There are four ways that this company knows it is doing things correctly. They are:
- The information gathered on the QIF's
 - The AIRCARE™ Audit that measures compliance with the relevant codes and the SMS
 - The CAA Audit that measures compliance with the relevant CAA Rules

- The Internal Audit that measures compliance with both AIRCARE™ and CAA requirements

In our company we know that we can appoint one of the staff to do the Internal Audits but we have elected to get an outsider to be the Internal Auditor because we have recognised the value of a fresh pair of eyes checking things over and we also see value in getting someone who can offer us helpful advice. The Safety Officer is going to arrange for this auditor to carry out Internal Audits every six months. The auditor will raise a QIF for any findings arising from the audit and the Safety Officer will ensure these findings are closed within the agreed time frame. The flowchart on the next page shows how we do this process.

The Quality System



- 7) Another one of the rules of this program is that everyone in the company writes down hazards they notice, so that a list of all the hazards is compiled. (Hazard Identification) The Safety Officer is going to chase up everyone to make sure that this happens. Once a hazard is recorded she will follow the procedure in 9). Involving everyone means that everyone knows about the new hazard and what measures are being taken to prevent an accident before it happens. To be fair the company has been doing this anyway because it is required to by the HSE Act 1992. What we have to do is **E**liminate, **I**solate or **M**inimise the risk. This list forms part of our Health and Safety Manual that we are now going to cut and paste into Part 1 of the AIRCARE™ SMS Manual.
- 8) As a company we are going to write down the way we go about our work because this will be useful in getting everybody doing the job the same way so nobody gets hurt, customers are satisfied and machinery is looked after. (Quality & Safety) These SoP's (Standard Operating Procedures) are kept together in a book that we call our Risk Management Manual (RMM) We know that when we employ new staff these SoP's will be really useful as guidance material for them. Every year in a quiet period we will have a special staff meeting to go through the SoP's to see that they are still relevant and that they are addressing (putting adequate controls on) the risks that we have identified. Doing this in conjunction with looking at the Hazard Register also satisfies HSE Requirements
- 9) But because the AIRCARE™ Program requires we go a stage further with risk management, we are going to follow the following procedure. It is crucial that we involve as many of our staff as possible in this process.

- Step 1 Hazard identified and recorded
- Step 2 Decide what the consequences will be if hazard not controlled - catastrophic, severe, major, serious, moderate, minor or negligible. To help us decide which of these apply we are going to use the Risk Matrix that is in Annex E of the AIRCARE™ SMS.
- Step 3 Decide what is the likelihood of the hazard causing an accident if the risk is not controlled - probable, even chance, unlikely, improbable, highly improbable, barely credible. Once again we will use the Risk Matrix to help us decide
- Step 4 Evaluate the risk by going to the bottom table of the Risk Matrix and see where it sits by lining up the appropriate vertical and horizontal columns.
Consequences x Likelihood = Risk level
- Step 5 If you can live with that risk level just record where the risk sits e.g. low, medium, high etc. If you cannot accept the risk level go to Step 6
- Step 6 Agree on what is appropriate corrective action. i.e. What controls are we going to put on this risk? Hint: we can go to www.aircare.co.nz/resources and look at a document there called *Some help on Risk Management and SMS* and get help from that. We are going to either control the consequences or likelihood or both to reduce the risk

- Step 7 With the control(s) in place we are going to go back to the Risk Matrix and re-evaluate the risk. If we are happy with the new risk level we record that and move on or if we don't, we are going to repeat Step 6.
- Step 8 At staff meetings we are going to continually revisit the controls we have applied to make sure they are effective and doing the job.

10) Because we want to keep things simple in this company we are not going to use the forms for Risk Assessment that are in the AIRCARE™ SMS Manual. So that all staff can use just one form we are going to put Hazard Identification, Quality Indicators, Incident/Event Reporting and Risk Assessment all onto just one form and it appears as Appendix 3.

We appreciate that Risk Management is a journey rather than a destination and we have to constantly measure that our controls are effective.

The Risk Matrix is also useful for measuring risks other than safety and environmental risks and the CEO is going to use the matrix to measure risks of compliance and business interruption.

Appendix 1 Monthly Checklist

ITEM	DATE DUE	ACTION			
GENERAL					
Staff Notice Board					
Part 135/137 Certificate Expiry Date					
AIRCARE™ documents currency AIA website					
Chart & AIP currency-check NZAIP website					
CAA Statistical Returns					
Annual Review SoP's					
Annual Review H & S					
AIRCARE™ Accreditation Expires					
2 monthly Staff Meeting due					
Location Test Certificate Due					
Internal Audit Due					
Management Review Due					
FLIGHT CREW	Pilot	Pilot	Pilot	Pilot	
Flight & Duty Times					
Flight Crew Competency Check Due					
BFR Check Due					
Medicals Due					
DG Endorsement Due					
Approved Handler Certificate Due					
Growsafe Certificate Due					
First Aid Certificate Due					
CSL Due					
Robinson Safety Course					
Ag Chemicals Blood Test					
C.S.L					
EQUIPMENT	DATE DUE	ACTION			
Water Test and Fuel Equipment Check					
Fuel Stocks					
Oil Stocks					
Fuel Pumps and Filters Service					
Fire Extinguishers					
First Aid Kits due					
Scale Calibration					
Lifting Chains and Strops, Shackles					
Pattern Testing Due					
3 Monthly Fire Bucket Service					
Life Jackets due annuals					
INDIVIDUAL AIRCRAFT		ZK-	ZK-	ZK-	ZK-
Annual Review of Airworthiness due					
First Aid Kit due					
Next Calendar items due					

ITEM	DATE DUE					
	Name	Name	Name	Name	Name	Name
Emergency Response Practice						
DG Endorsement Due						
Approved Handler Certificate						
Growsafe Certificate Due						
First Aid Certificate Due						
Ag Chemicals Bloodtest						
Over Due Aircraft Simulation Training						

VEHICLES	DATE OR MILEAGE DUE								
	Regn No.	Regn No.	Regn No.	Regn No.	Regn No.	Regn No.	Regn No.	Regn No.	Regn No.
WoF/CoF									
Regn									
RUC to									
Kms									
Modification Certification									
Modification Certification									

OTHER	DATE DUE
Fire Drill - annual	

I certify that I have carried out the above check and taken all the appropriate actions to correct any deficiencies.

Signed: Date:/...../.....

This form is to be filed in the Company Operations Office for a minimum period of two years from the date it is completed.

Appendix 2

Name.....

In signing the form below I am providing evidence that I have read and understood the material shown.

Note that not all of this material is required to be understood by every staff member. The Safety Officer will advise staff what material is applicable for their role in the organisation.

Material	Signature	Date
Safety Policy		
Quality Policy		
Noise Policy		
SoP Safety & Quality		
SoP Noise Abatement		
SoP Topdressing		
SoP Spraying		
SoP VTA		
Hazard/Incident/Event Reporting SoP		
SMS Manual		
HSE Responsibilities		
Growsafe Code of Practice		
Spreadmark Code of Practice		
Noise Abatement Code		
VTA Code		

This form shall be kept on the individual’s Personal File for a the time the staff member is employed and for a period of 2 years following.

Appendix 3

TO RECORD ALL PROBLEMS / COMPLAINTS / HAZARDS / INCIDENTS / ACCIDENTS/RISKS

Date:

Reference No:

Reported By:

Signed:

I hereby report the following Problem / Complaint / Hazard / Incident / Accident/ Risk
(Delete not applicable)

.....

Location:

I have assessed this report and consider it **VALID / NOT VALID** for the following reasons:-

.....

And/or have assessed the risk:.....

Potential Consequences	x	Likelihood	=	Risk

Assigned to for Corrective Action:

(Name)

To be completed by:/...../.....

(Date)

Signed:

(Operations Manager)

Date Assigned:/...../.....

I have carried out the following Corrective Action or action to reduce risk:

.....

Signed:

Date Completed:/...../.....

The Corrective Action or risk associated with this report has been re assessed:

.....

Potential Consequences	x	Likelihood	=	Risk

Signed: HR HSM RMMs MANUAL SUITE Date:/...../.....

(Operations Manager)

Except for the review of any risk controls, this report has been:

..... and is now **CLOSED**.

Signed:

(Internal Auditor)

Date:/...../.....