NSW Ambulance

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Paramedic Safety Investigators:

Investigating the Past to Improve the Future

Cameron Edgar & Troy Anforth
NSW Ambulance Rescue Helicopter Service


HELLO
I AM...
AN EXPERT

"We have purchased at great cost, lessons literally bought with blood that we have to preserve as institutional knowledge and pass on to succeeding generations.

We cannot have the moral failure of forgetting those lessons and have to relearn them"

Captain Cheslsey 'Sulley' Sullenberger
PIC Hudson River aircraft incident


Paramedic Michael Wilson


Carrington Falls, NSW

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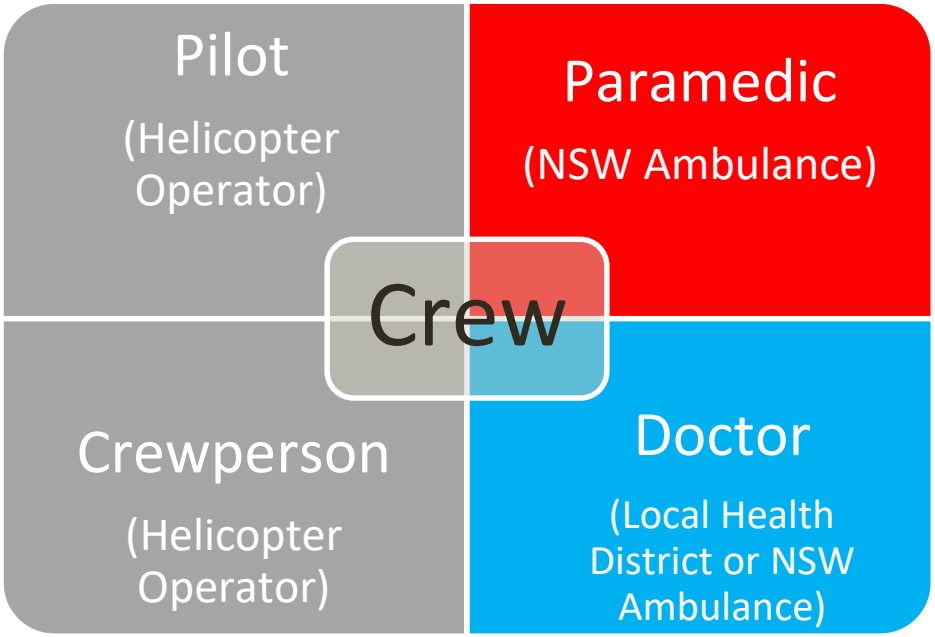
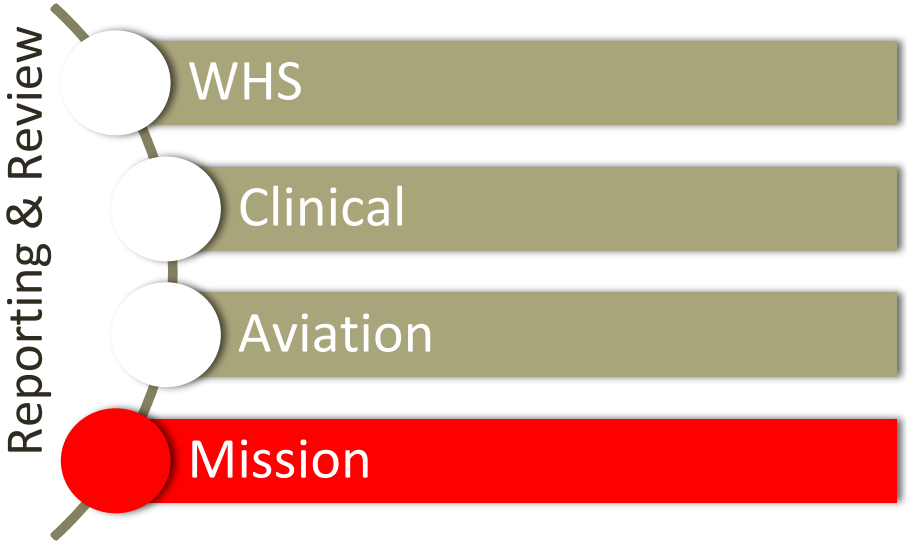
Context


Pilot
(Helicopter Operator)
Paramedic
(NSW Ambulance)
Crew
Crewperson
(Helicopter Operator)
Doctor
(Local Health District or NSW Ambulance)


Reporting & Review
WHS
Clinical
Aviation
Mission

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Aeromedical Integrated Risk and Safety Management System

Safety Culture:

Positive safety cultures are characterized by:

- *communications founded on mutual trust,*
- *shared perceptions of the importance of safety, and*
- *confidence in preventative measures*

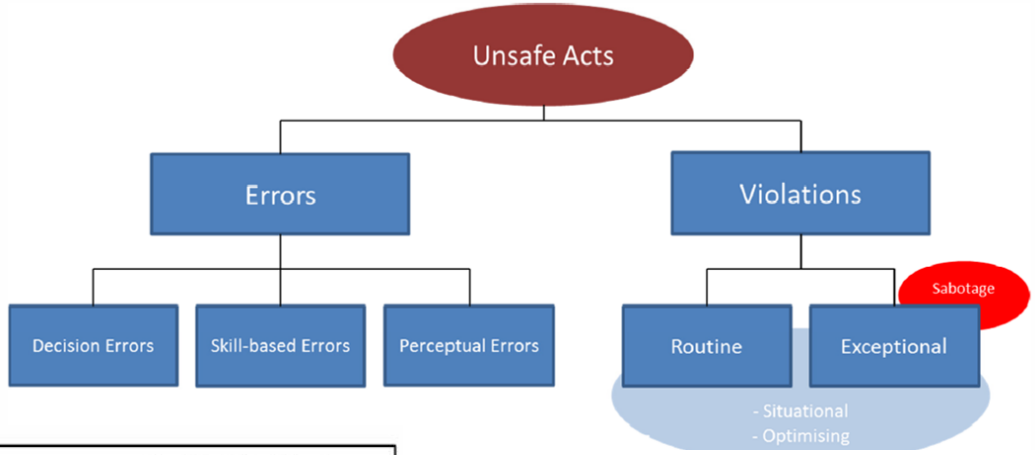
OPERATIONAL RISK PROFILE
Evacuation from Remote Areas

ORP Title	Evacuation from Remote Areas		Compiled by	ORP Implementation Team	
ORP Reference Number	G001		Accepted by	Sig:	Date: 11 Sep 2015
Version	1.1	Date: 17-08-15		Name:	
ORP Risk	Initial	EXTREME	Residual		
			Evacuation by Aircraft winch	HIGH	
			Evacuation by Ground Team	HIGH	

This Operational Risk Profile (ORP) identifies risks and suggests treatments associated with the evacuation of patients and/or responders from remote areas. The evacuation of a patient and responders from a remote location can be achieved by, or any combination of, the following means:

- Aircraft (most commonly by winch)
- Vehicles
- Walk and/or Carry out. This is typically required when evacuation by aircraft is

Education



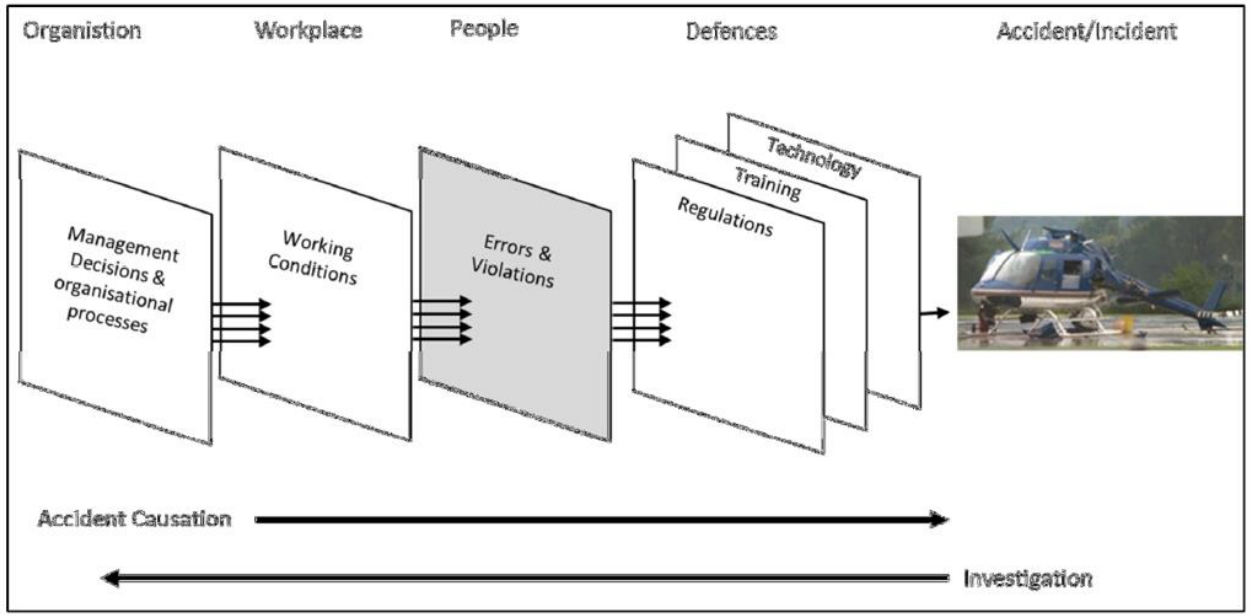


Figure 3: Reason's Model of System Safety

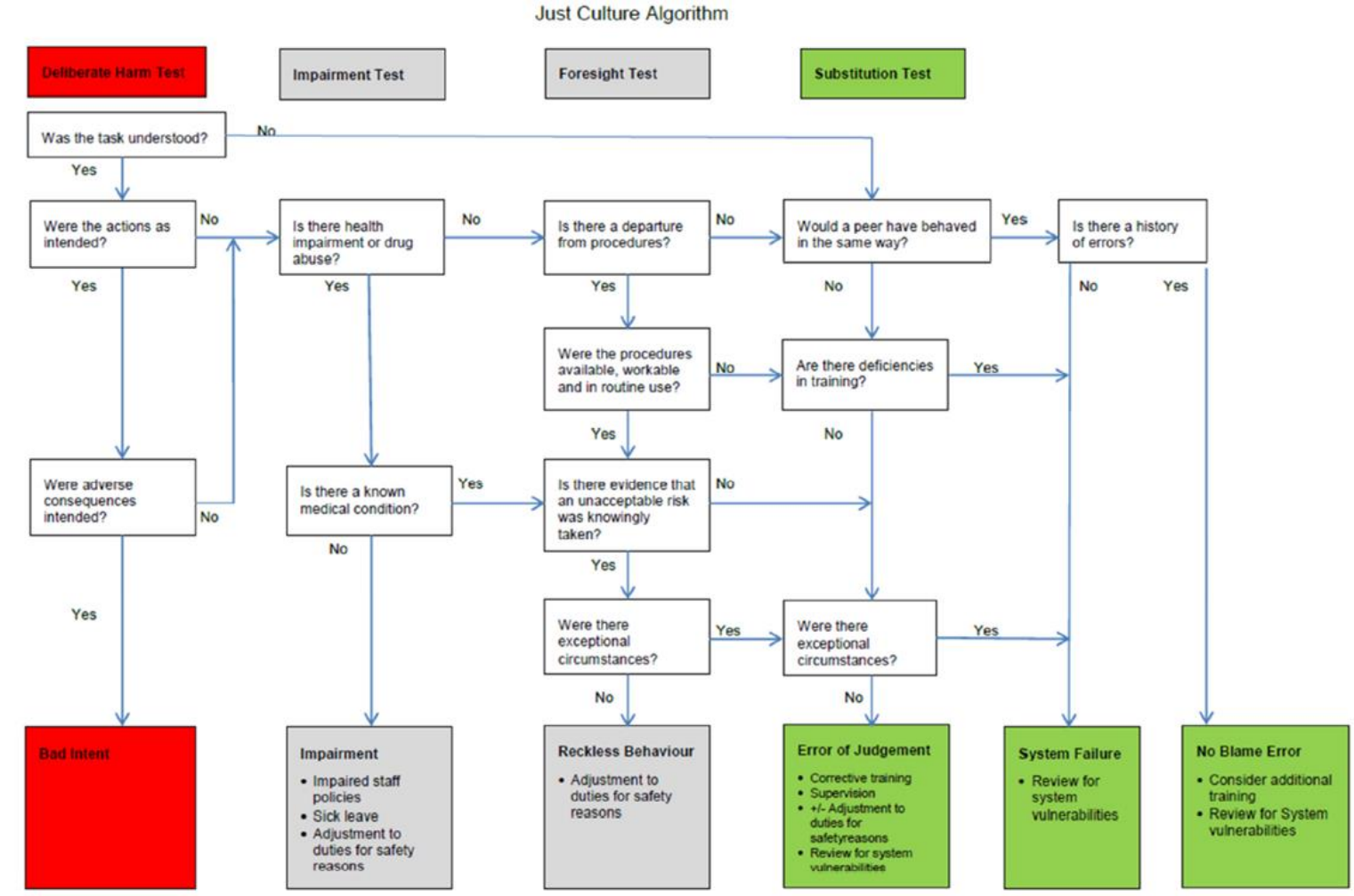
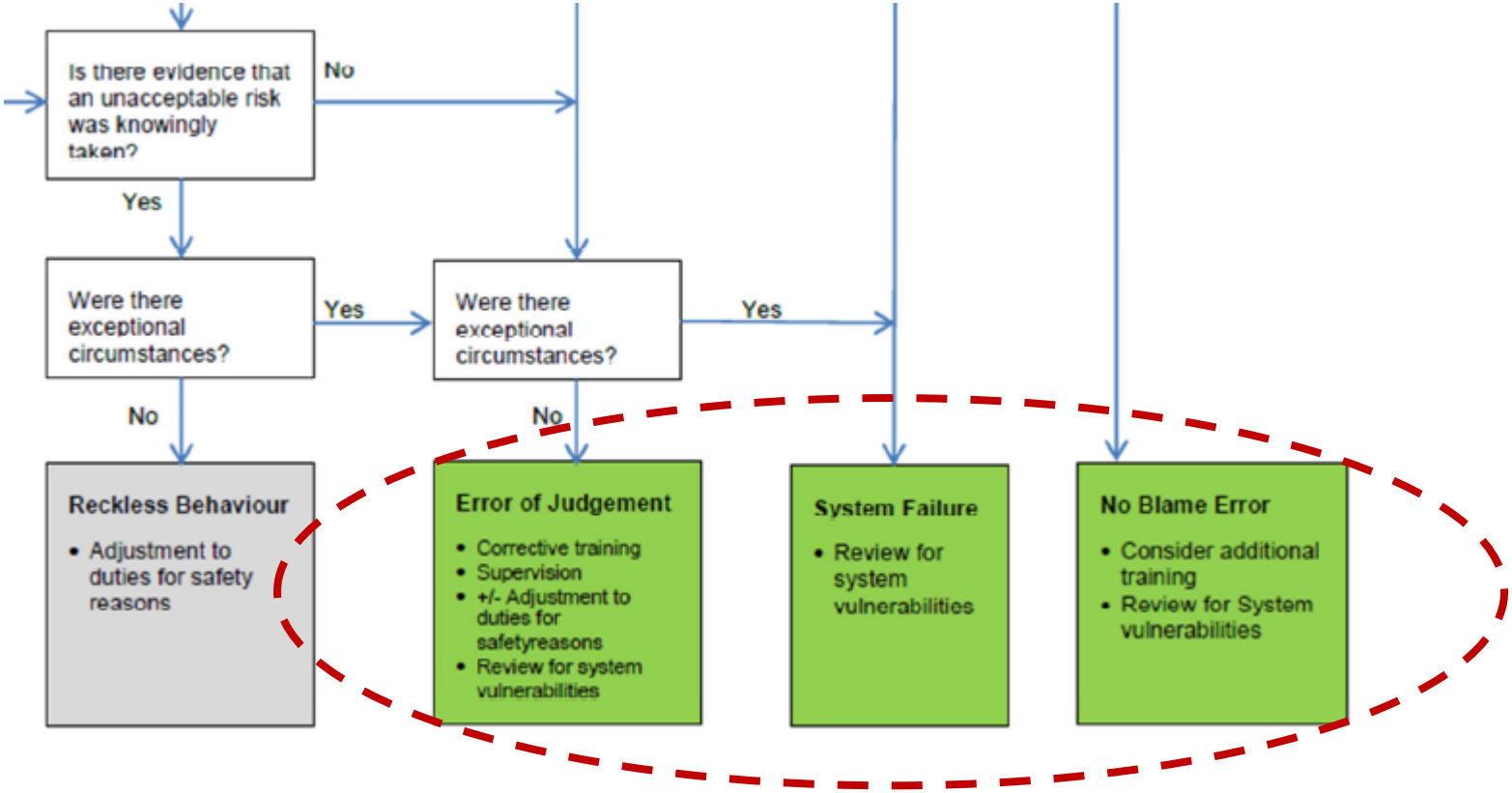
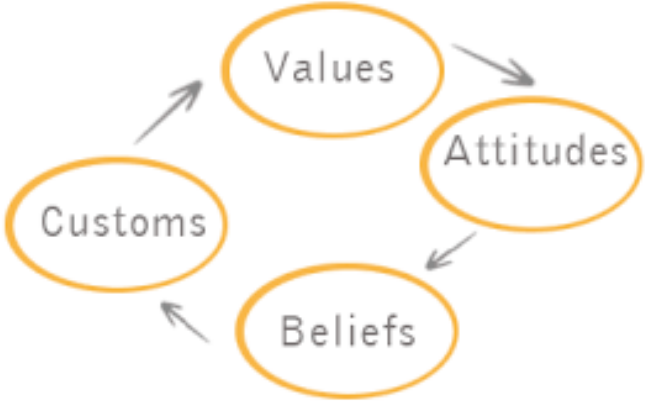


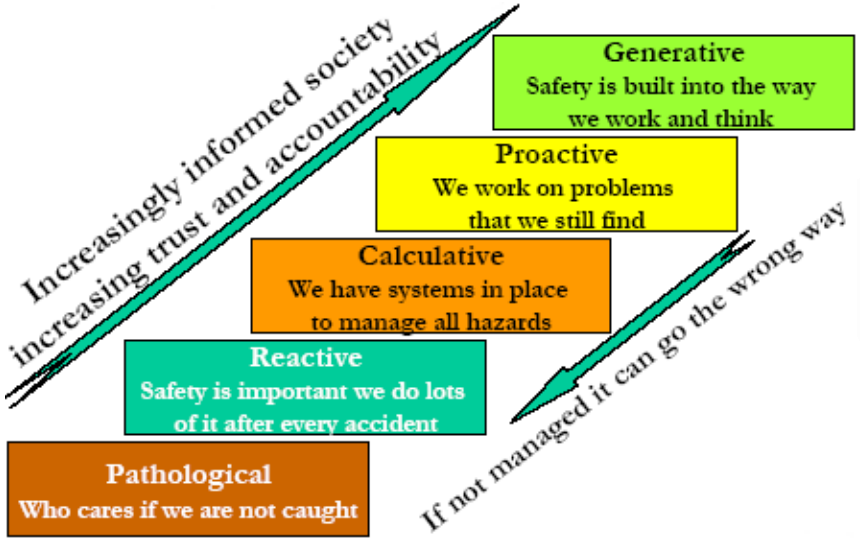
Figure 4: Just Culture Algorithm

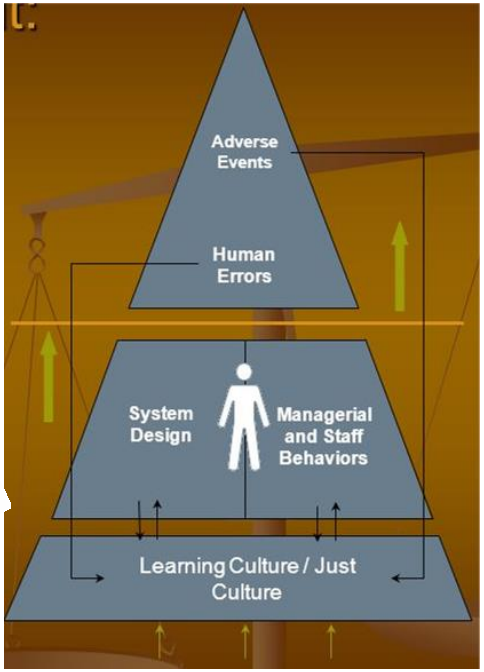
Just Culture



More Cultural stuff…

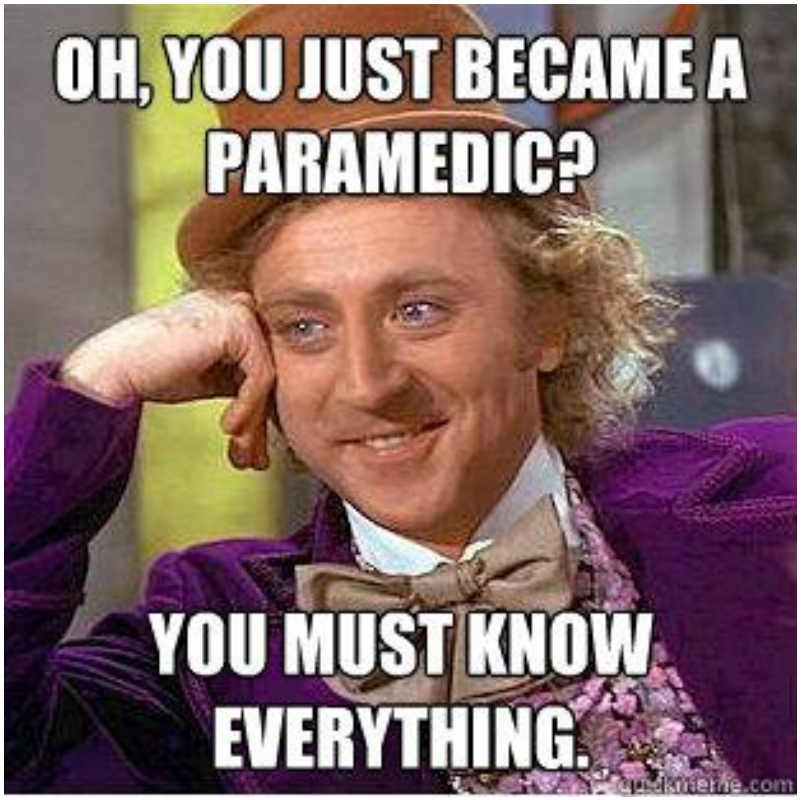






Challenges

- Existing Culture
  - Health system
  - Routine ‘optimising’ violations
- Resources
- Training overhead
- Organisational and reporting interfaces
- Resolution of external actions



The Process…

1. Reviews have a **trigger**
2. Reviewers are **jointly commissioned** and trained investigators appointed
3. Reviewers are given access to **all mission related information** and access to crew.
4. Reviewers work through an approved investigation **template**.
5. Consideration of **human factors/non-technical skill** aspects.
6. **Recommendations** and actions are identified.
7. Senior Management **Approval**
8. Report **made available to all** aeromedical staff and
9. Actions sent to managers and external agencies
10. Actions monitored through Air Meastro

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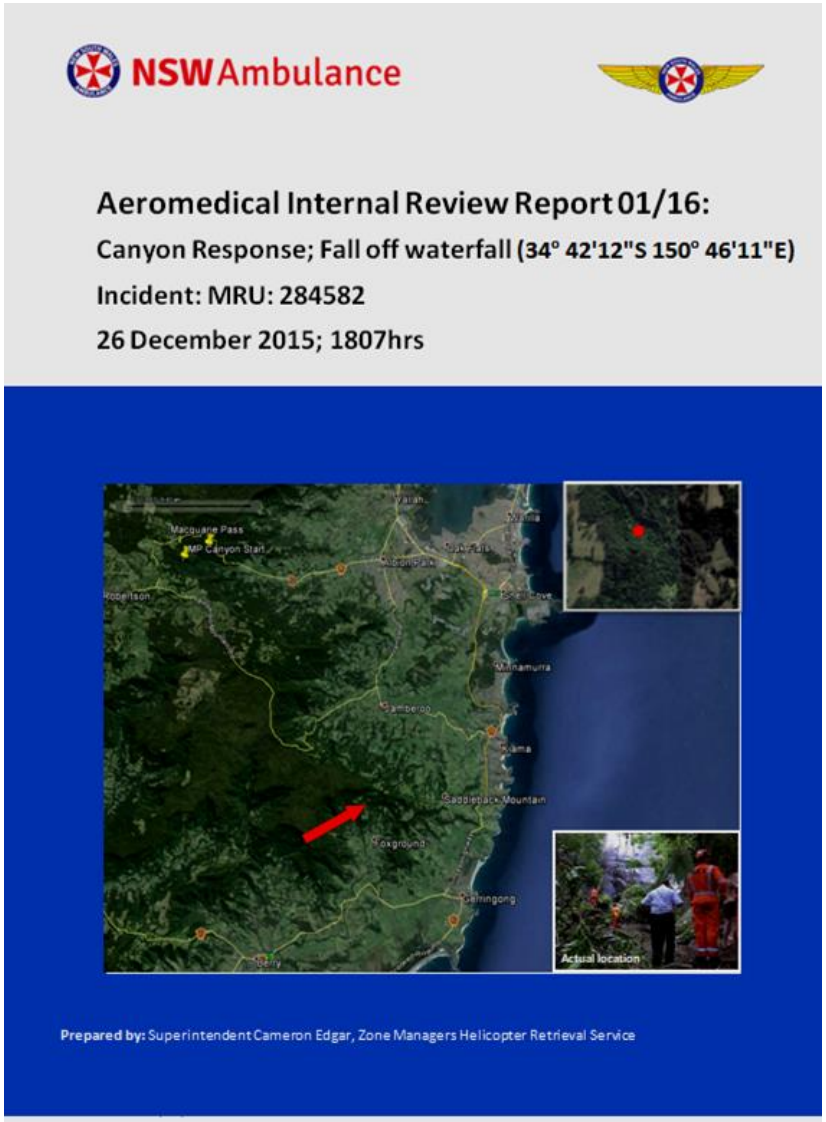

Old Method	Current Method
• Nil or clinical investigation methodology	• Aviation investigation methodology
• Focus mainly on explaining a timeline of events and actions of individuals;	• Focus on latent risk factors, and system fixes – emphasis on pro-active measures;
• Conducted by untrained staff;	• Trained staff using a formal template;
• No review of non-technical skill influences;	• Critical review of non-technical skills;
• No formal system to capture and action recommendations	• Robust system for submission, allocation of actions and follow up

Lessons Learned (applied!)

1. Staff and contractor consultation is essential
2. Training is critical
3. Documented procedures are important
4. An agreed template is vital
5. Trust is only built through experience ('the proof is in the pudding')
6. Review good practice as well as incidents
7. You learn more than you think…

Thank you

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