

# Safety Management: Nuts & Bolts

# Safety Management



# State Safety Programme (SSP)

## ICAO safety management SARPS – The big picture

- Two Audience Groups
  - States
  - Service Providers
- Three distinct requirements
  - State Safety Program (SSP)
    - Acceptable Level of Safety (ALoS)
  - Safety Management System (SMS)
    - Safety performance of the SMS
  - Management Accountability



## State Safety Programme (SSP)

### Basic Safety Management SARPs – Part 1

- *ICAO States (191 members as of the 2016) shall establish a State Safety Program (SSP), in order to achieve an acceptable level of safety (ALoS) in civil aviation*
- So what does that mean – what is an SSP?
- AN INTEGRATED SET OF REGULATIONS AND ACTIVITIES AIMED AT IMPROVING SAFETY
- in other words;
  - An SSP is a management system for the administration of safety by the State



## State Safety Programme (SSP)

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### Basic Safety Management SARPs – Part 11

*States shall require, as part of their SSP, that a service provider implement an SMS acceptable to the State that, as a minimum;*

- Identifies safety hazards*
- Ensures the implementation of remedial action necessary to maintain agreed safety performance*
- Provides for continuous monitoring and regular assessment of the safety performance*
- Aims at a continuous improvement of the overall performance of the safety management system*

## State Safety Programme (SSP)

### Service Providers required to implement an SMS include:

- Approved training organizations that are exposed to safety risks during the provision of their services
- Aircraft operators
- Approved maintenance organizations
- Organizations responsible for design and/or manufacture of aircraft
- Air traffic services providers
- **Certified Aerodromes**





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## Heathrow Airport UK



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### Safety Policy

The place where the **aerodrome certificate holder/management** says what it aims to achieve with regard to **safety**...

The Boss



...but do they do what they say they will do?

...and what is safety? How many times have we mentioned **SAFETY** this morning?



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At least 30 times already...so what is the definition of safety?

Before we answer this, shout out what comes in to your mind when I say “Ferrari”

Red  
Horses  
Powerful



Speed  
Expensive  
Attractive

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Shout out what comes in to your mind when I say  
“Brazil”

Football  
Colourful  
Hot



Music  
Salsa Dance  
Crowded

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Shout out what comes in to your mind when I say  
“Safety”

Hazard  
Harm  
Culture



Risk  
Damage  
System

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### ICAO Definition of Safety

The state in which the **possibility of harm to persons or of property damage is reduced to, and maintained at or below, an acceptable level through a continuing process of hazard identification and safety risk management.**



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### Safety

But Safety just does not happen!!! Safety needs to be fed and watered for it to thrive



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### What do we need to manage safety?

Well It used to be the three 'P's



**SAFETY  
FIRST**

**THE SAFE WAY IS  
THE BEST WAY**

Policy

Procedures

Practises



Consultants will have you believe there is a fourth,

Philosophy ?

I would add one more very important 'P'

# People



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### Safety Culture

- **Starts at the Top – Senior Management – they are accountable and reflect the Philosophy through the organisations Policy**
- Must permeate through the entire operation ... top to bottom
- System of belief



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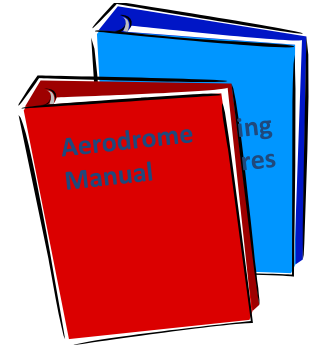
### Safety Culture



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### Accountability and Responsibility

- Must be identified in documentation
- Everyone has a degree of responsibility
- Those accountable cannot hide behind anyone!
  - No gaps!
  - No overlaps!
- Review after restructuring



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### Your Safety

Who has the biggest responsibility for your safety?

The Director of Safety or ... The Safety Officer or....?

It is **YOU** who has the ultimate responsibility for your own safety

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# Competent Staff

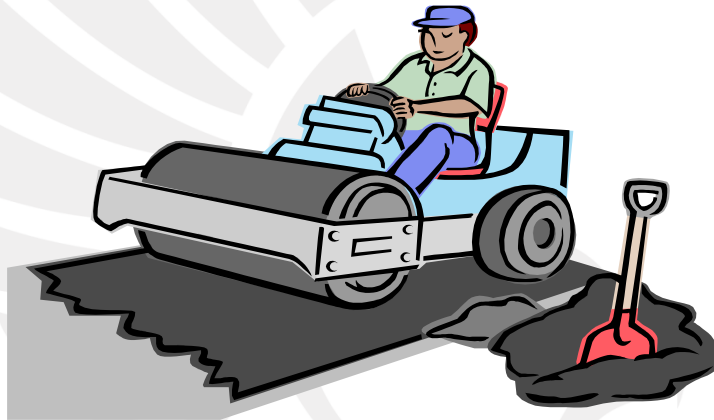
## Staff Recruitment, Training & Safety Awareness



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## Contractors

- Management of third parties ... whoever they may be!
- Must not degrade safety standards

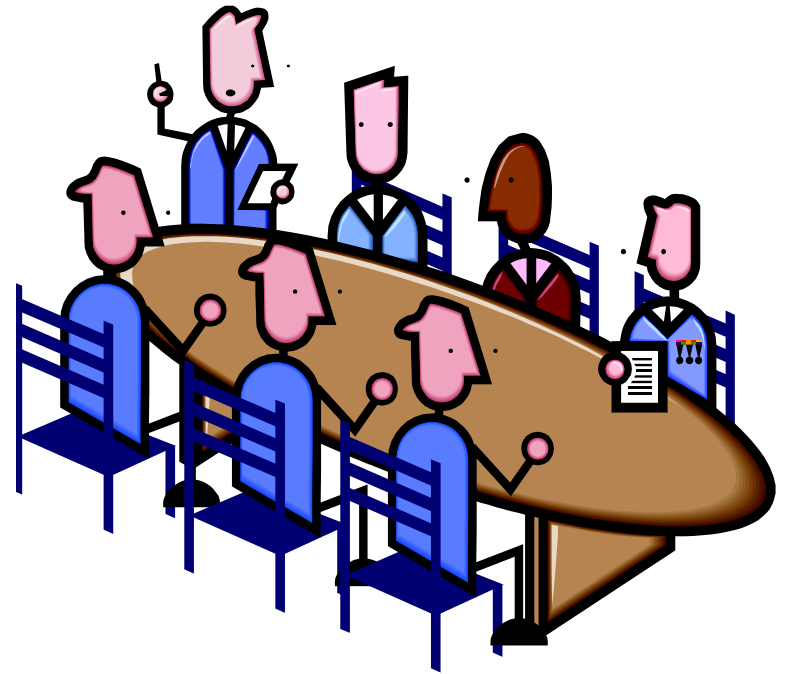




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### Safety Related Committees

- For Communication,
  - Sharing ideas and problems
  - Resolving Safety Issues
- 
- Or are they just a talk shop?
  - Do the right people attend?



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## Management of Change

- Equipment, Procedures, Personnel
- Nothing left to chance, there should be no surprises

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### Systematic Risk Assessments (SRA)

#### What is a Systematic Risk Assessment (SRA)?

Risk assessment is the process where you:

- Identify hazards.
- Analyze or evaluate the risk associated with that hazard.
- Determine appropriate ways to eliminate or control the hazard.
- In practical terms, a risk assessment is a thorough look at your workplace to identify those things, situations, processes, etc that may cause harm, particularly to people. After identification is made, you evaluate how likely and severe the risk is, and then decide what measures should be in place to effectively prevent or control the harm from happening.

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### Accident & Incident Analysis

- A vital aspect of safety improvement
- Learning from mistakes and previous problems
- This data must be captured for analysis
- The five “W’s” Where, When, Who, What and possible Why
- To establish the root cause

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### Monitoring and Audit

- To check out if the systems for managing safety are working
- Inspection ... audit ... monitoring ... call it what you wish!
- Or you can take this approach



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### Safety Assurance Documentation (SAD)

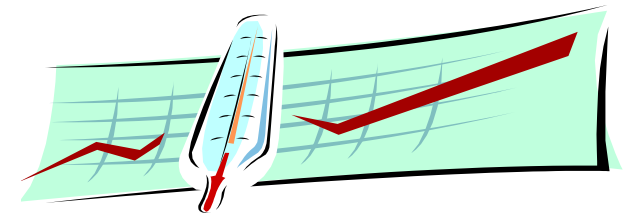
Compliance Statements, Audits, Hazard Identification, Risk Assessments, Safety Cases, etc. which provide assurance that the “system” is working



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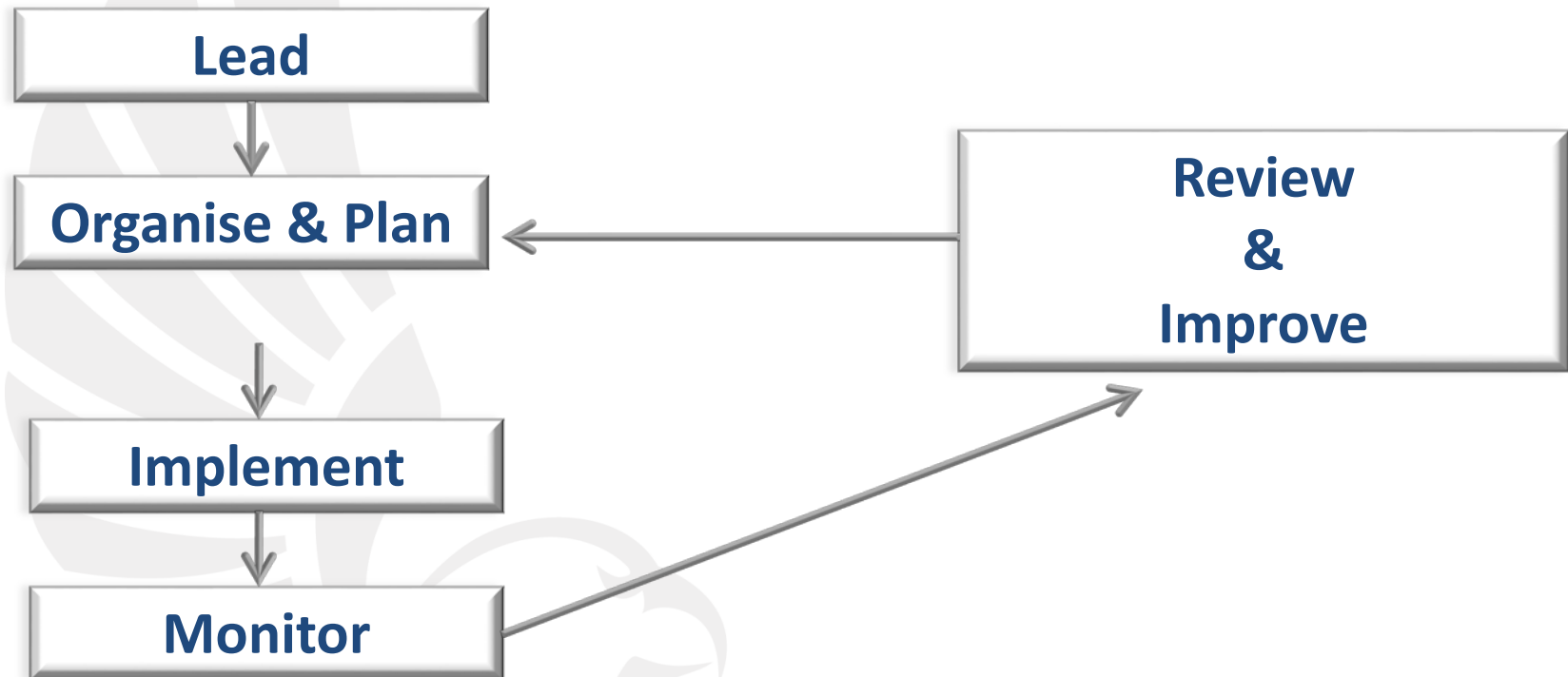
### Records and Documents

- Aerodrome/Safety Manuals
- Procedure Manuals
- Instructions
- Record Logs, etc., etc.
- The documents which tell us how to do it and prove that we did it!



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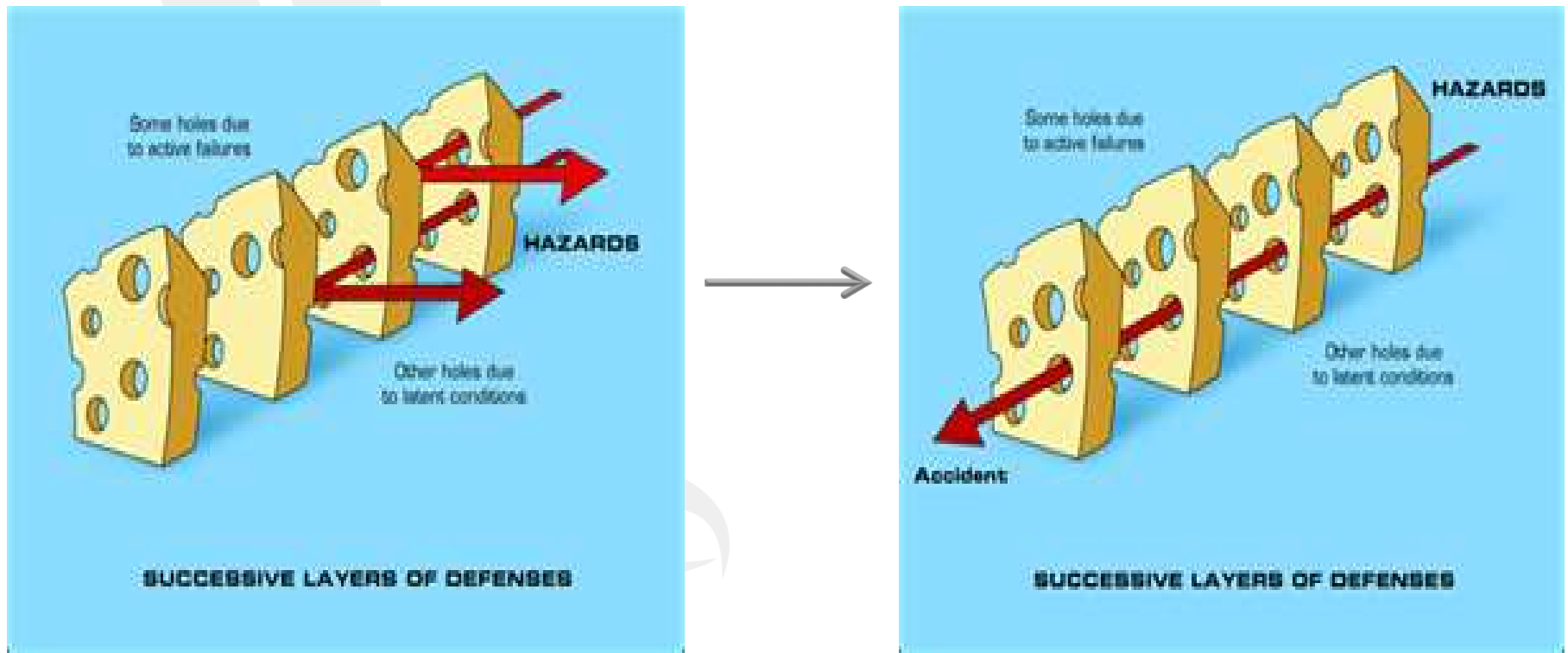
### Management Principles



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### THINK!! - SMS Principles

### Professor James Reason's Swiss Cheese Model



# Carelessness and overconfidence are more dangerous than deliberately accepted risk

Wilbur Wright, 1901



Do not let all the holes in the cheese line up  
– you can stop it

Thank You

Any Questions ?

