Chapter 02
Introduction to SMS

- Annex 19 & Doc 9589
- What is Safety Management?
- Integrated Risk Management
- CAAM CAD 19 ; CAGM 1902

ICAO SARPs

ICAO Annex 19

- Safety Management

ICAO published DOC 9589

- Safety Management Manual (SMM) as a guideline to organizations.

ICAO ANNEX 19:

All states are responsible to accept and oversee the development, implementation and operational performance of the service provider’s SMS under its authority.

The Big Picture: SSP, SMS, QMS

SSP: State Safety Program
Integrated set of regulations and activities aimed at improving safety.

→ to oversee the development, implementation & operational performance of SMS

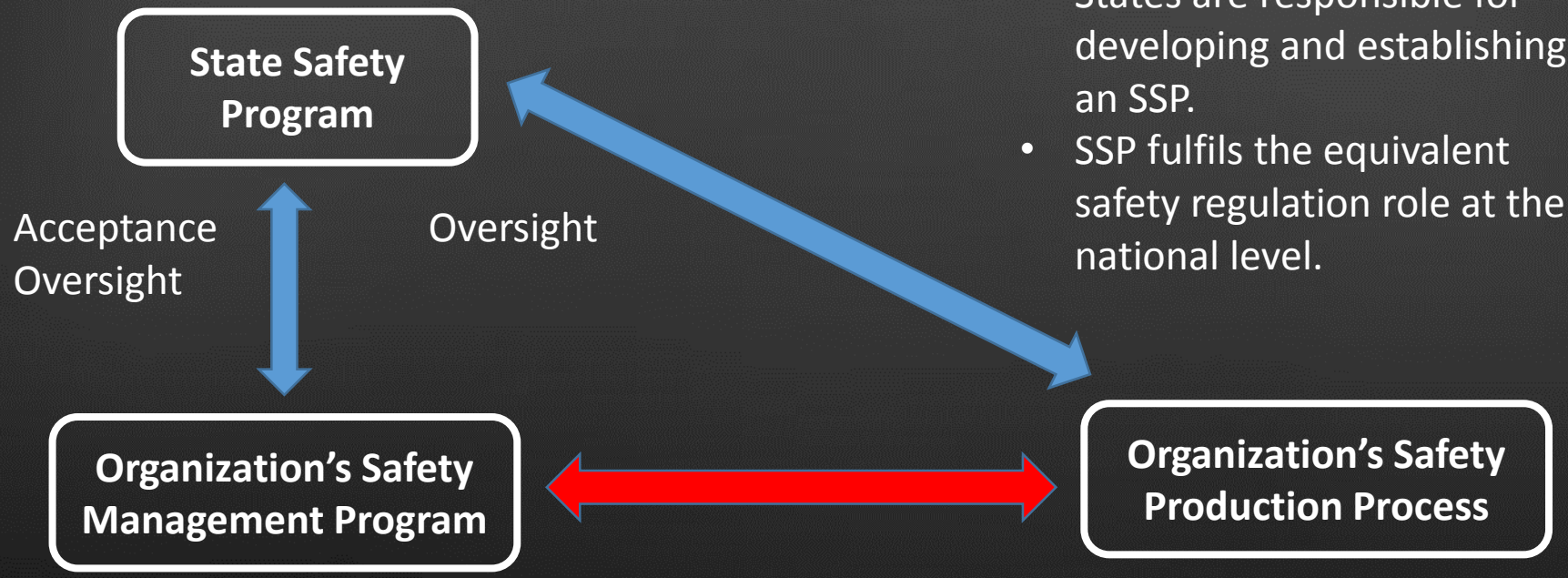
SMS: Safety Management System
Managed by the Service provider

→ Identifying hazards and managing risks.

QMS: Quality Management System
Managed by the Service provider

→ Geared towards customer expectations

The Big Picture: SSP, SMS, QMS



- States are responsible for developing and establishing an SSP.
- SSP fulfils the equivalent safety regulation role at the national level.

Service providers (Airlines, MRO) are responsible for developing and establishing an SMS.

- Risk Management
- Safety Assurance (QMS)

The Big Picture: SSP, SMS, QMS

A State shall require that an SMS is developed and maintained by those service providers under it's authority, as identified in Annex 19 – Safety Management, to continuously improve safety performance by:

- Identifying Hazards
- Collecting And Analyzing Data
- Continuously Assessing And Managing Safety Risks

Acceptable Level of Safety Performance (ALoSP)

The level of safety performance agreed by State authorities to be achieved for the civil aviation system in a State, as defined in its State safety program, expressed in terms of safety performance targets and safety performance indicators.

Acceptable Level of Safety Performance (ALoSP)

Safety Performance Targets

- Short-term and medium-term safety performance management desired achievements.
- “milestones” that provide confidence that the organization is on track to achieving its safety objectives and provide a measurable way of verifying the effectiveness of safety performance management activities.

Safety Performance Indicators

- used to help senior management know whether the organization is likely to achieve its safety objective.
- The parameters that provide the organization with a view of its safety performance: where it has been; where it is now; and where it is headed, in relation to safety.

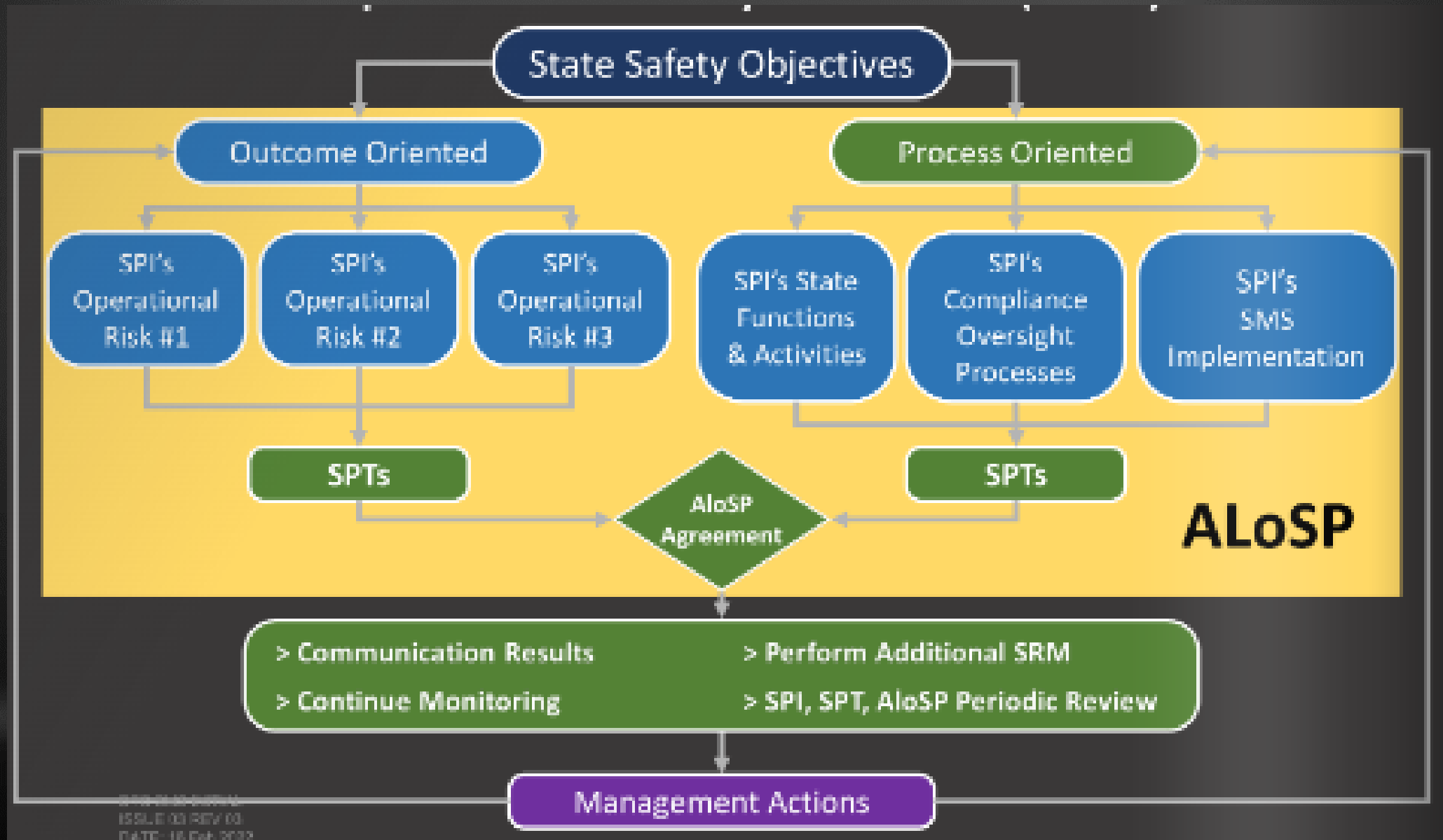
Acceptable Level of Safety Performance (ALoSP)

The ALoSP concept complements this traditional approach to safety oversight with a performance-based approach that defines actual safety performance levels within a prescribed SSP framework.

The ALoSP expresses the safety levels the State expects of their aviation system, including the targets that each sector needs to achieve and maintain in relation to safety.

ALoSP, then, reflects what the State considers important and is agreed on by the State level aviation stakeholders

Acceptable Level of Safety Performance (ALoSP)



What is SMS?

A SMS is *a systematic approach to managing safety*, including the necessary organizational structures, accountabilities, policies and procedures.

What is SMS?

A series of defined, organization-wide *processes* that provide for *effective risk-based decision-making* related to a company's daily business.

Purpose Of SMS:

- Provide a systematic way to control risk. **(Core Objective)**
- Provide assurance (confidence) that those risk controls are effective.

By 

Method:

Proactively mitigate *safety risks* before they result in aviation accidents and incidents.

Safety Risk
The predicted probability and severity of the consequences or outcomes of a hazard.

SMS Future:

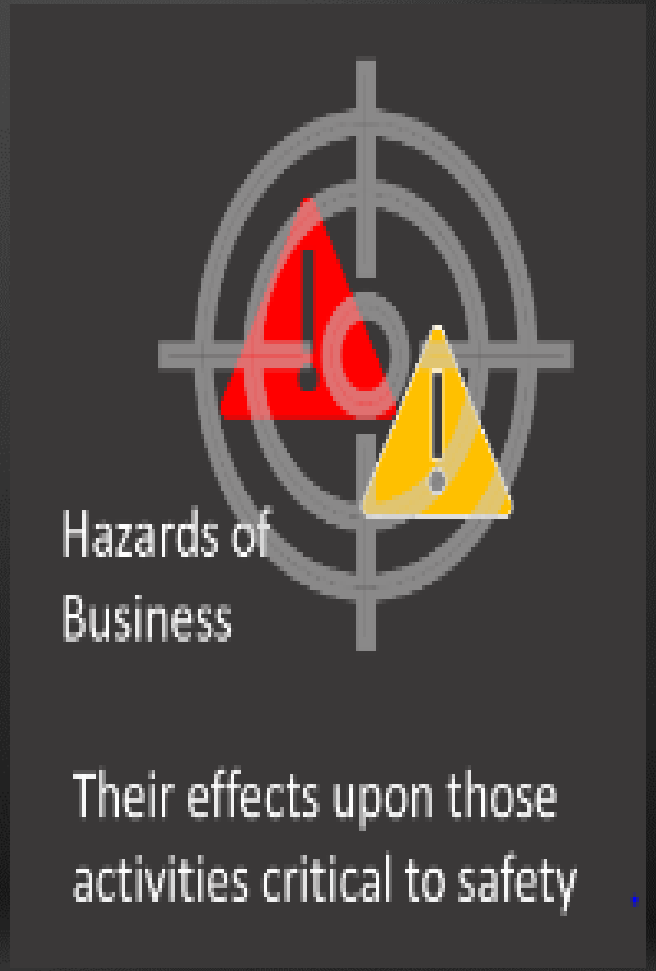
A comprehensive systematic approach to the management of aviation safety.

All aspects of the business processes critical to safety.

SMS Future:

Active monitoring and audit processes to validate that the necessary controls identified through the hazard management process.

Hazards
A condition that could cause of contribute to an aircraft incident or accident.



As identified in Annex 19 – Safety Management to continuously improve safety performance can be achieved by :

The Aviation Functional Systems

- The aviation system comprises many and different functional systems such as finance, environment, safety and security.
- Traditionally, each systems has developed sector specific risk management frameworks and practices designed to address the distinct characteristics of each system.

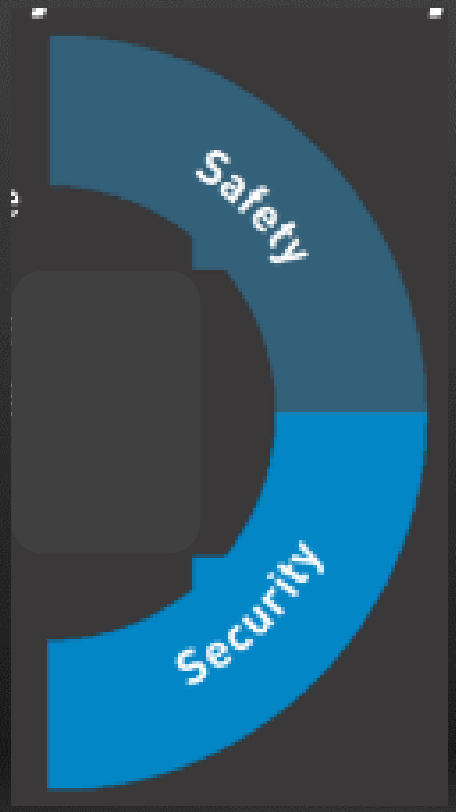
Safety & Security Systems In Aviation

- Safety and Security being the two primary operational domains of the greater aviation system.

- May have direct impacts on each other.
- Differ in the element of underlying internet.
- Common is goal to protect people and assets.

Safety & Security Systems In Aviation

- Safety Effective security measures may have negative impacts on safety, and vice versa.

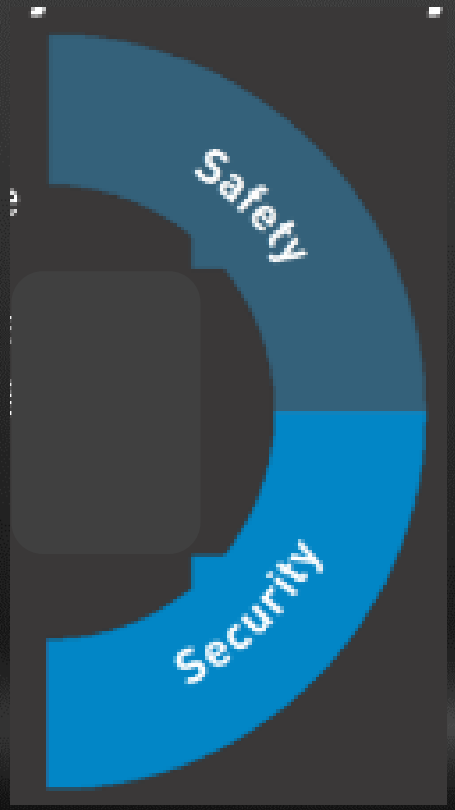


In some cases the management of their inherent risk maybe affect the other domain in unforgotten ways, such as in the following examples:

Reinforced cockpit doors necessitated due to security risks may have safety implications on the operation of an aircraft.

Safety & Security Systems In Aviation

- Effective security measures may have negative impacts on safety, and vice versa.

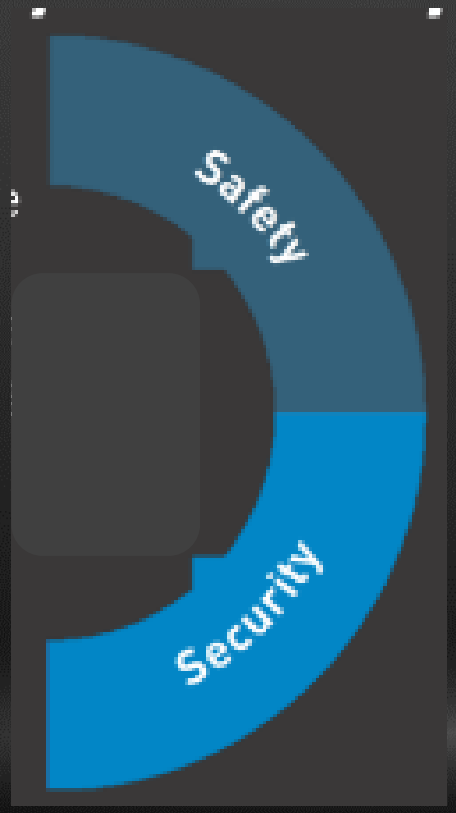


In some cases the management of their inherent risk maybe affect the other domain in unforeseen ways, such as in the following examples:

Restrictions on the carriage of personal electronic devices in the cabin may displace the security risk from the cabin to the cargo hold leading to heightened safety risk.

Safety & Security Systems In Aviation

- Effective security measures may have negative impacts on safety, and vice versa.



In some cases the management of their inherent risk maybe affect the other domain in unforeseen ways, such as in the following examples:

Change of routes to avoid flying over conflict zones may result in congested air corridors that pose a safety issue.

Integrated Risk Management

Successful risk management in aviation should aim for overall risk reduction in the system, including all of the involved functional systems.

Integrated Risk Management

The assessment and integration of functional system needs, and interdependence is referred to as Integrated Risk Management (IRM).

Integrated Risk Management

This process requires the analytical assessment of the whole system at the highest level of the appropriate entity (State, regional organizations, service providers.

Integrated Risk Management

This is achieved through the quantitative and qualitative analysis of both the inherent risks, and the effectiveness and impact of sector-specific risk management processes.

Regulatory Requirements

CIVIL AVIATION DIRECTIVE - 19

SAFETY MANAGEMENT

CIVIL AVIATION GUIDANCE MATERIAL- 1902

SAFETY MANAGEMENT SYSTEM

On 1 Nov 2019, Civil Aviation Authority Malaysia (CAAM) introduced AN 2101 titled “Safety Management System” (SMS) for Approved Maintenance Organization (AMO) superseding the older AN 101.

This is now superseded by CAD 19, Issue 02 snd CAGM 1902, Issue 01 on Safety Management, published on 17 Dec 2021.

Regulatory Requirements (Reg 167)

(for other than aerodrome operator or ATC service provider.

CAA Malaysia Approved Organizations requiring a SM

a) An approved training organization that is expos to safety risks related to aircraft operations during the provision of its training services.

Regulatory Requirements

CAA Malaysia Approved Organizations requiring a SMS:

b) A holder of Air Operator Certificate or an approved maintenance organization providing services to the holder of air operator certificate.


WARTA KERAJAAN PERSEKUTUAN

FEDERAL GOVERNMENT GAZETTE

PERATURAN-PERATURAN PENERBANGAN AWAM 2016

CIVIL AVIATION REGULATIONS 2016

Regulatory Requirements

CAA Malaysia Approved Organizations requiring a SMS:

c) The operator or the approved maintenance organization providing services for the operator of an aero plane registered in Malaysia with a maximum certificated take-off mass exceeding 5,700 kilograms or equipped with one or more turbojet engines used in any international general aviation operations.

Regulatory Requirements

CAA Malaysia Approved Organizations requiring a SMS:

d) An approved organization responsible for the type design or manufacture of aircraft.

Regulatory Requirements

CAA Malaysia Approved Organizations requiring a SMS:

An applicant for the approved organization under paragraphs (a), (b), (c) and (d).

Summary

1. Safety Management System (SMS) provides a systematic way to control risk and assurance (confidence) that those risk controls are effective.

2. Successful risk management in aviation should aim for overall risk reduction in the system that is also known as integrated Risk Management (IRM).

Chapter 03

Accident Caution

- Swiss Cheese Metaphor
- Swiss Cheese Application
- Active and Latent Failure
- The Organizational Accident
- Practical Drift
- Human in the System- S-H-E-L-L
- Error and Violations

Swiss Cheese Metaphor

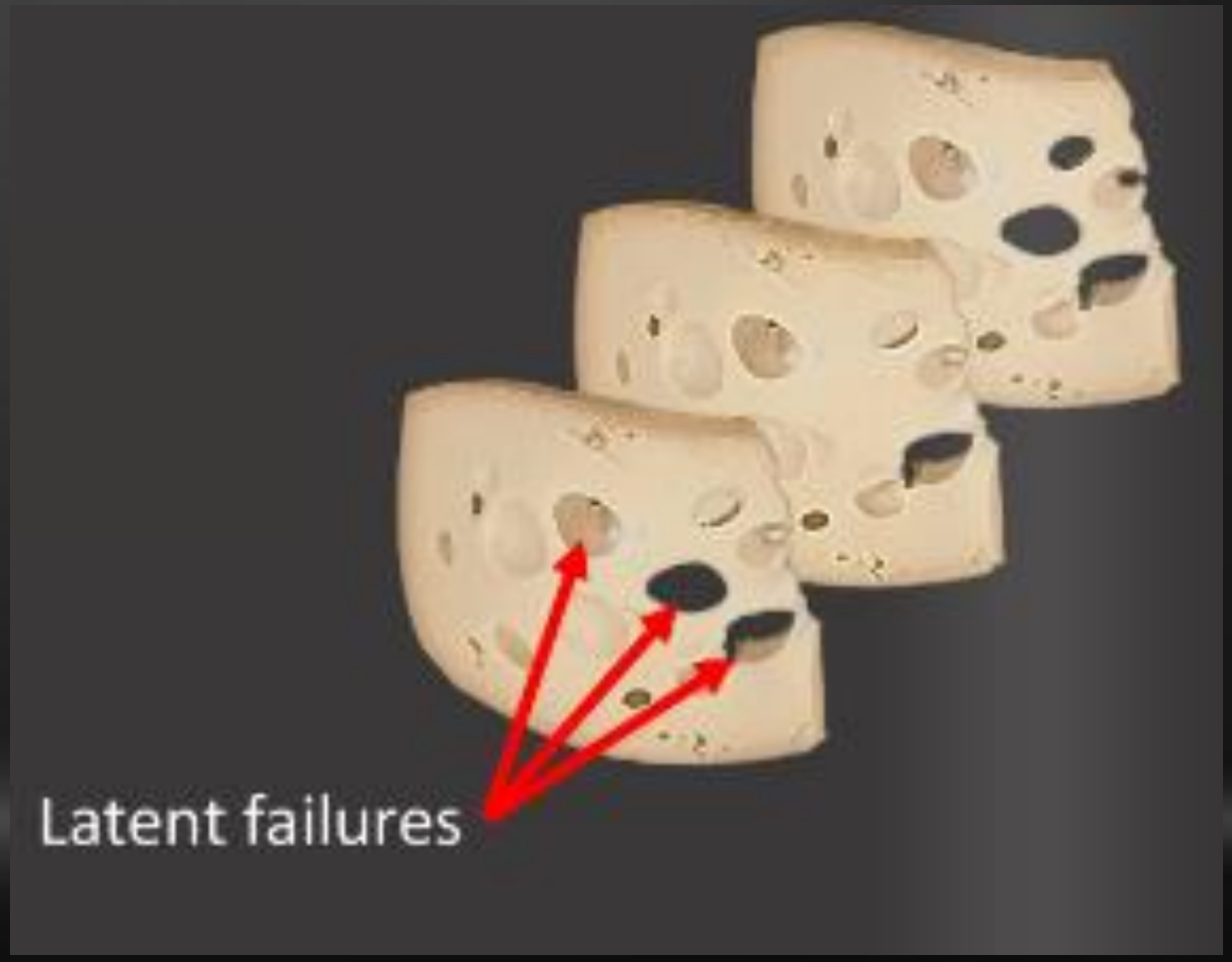
James Reason proposed the image of “Swiss Cheese” to explain the occurrence of system failures.

Swiss Cheese Metaphor

According to this metaphor in a complex system, hazards are prevented from causing human losses by a series of barriers.

Swiss Cheese Metaphor

Each barrier has unintended weaknesses, or holes – hence the similarity with Swiss cheese.



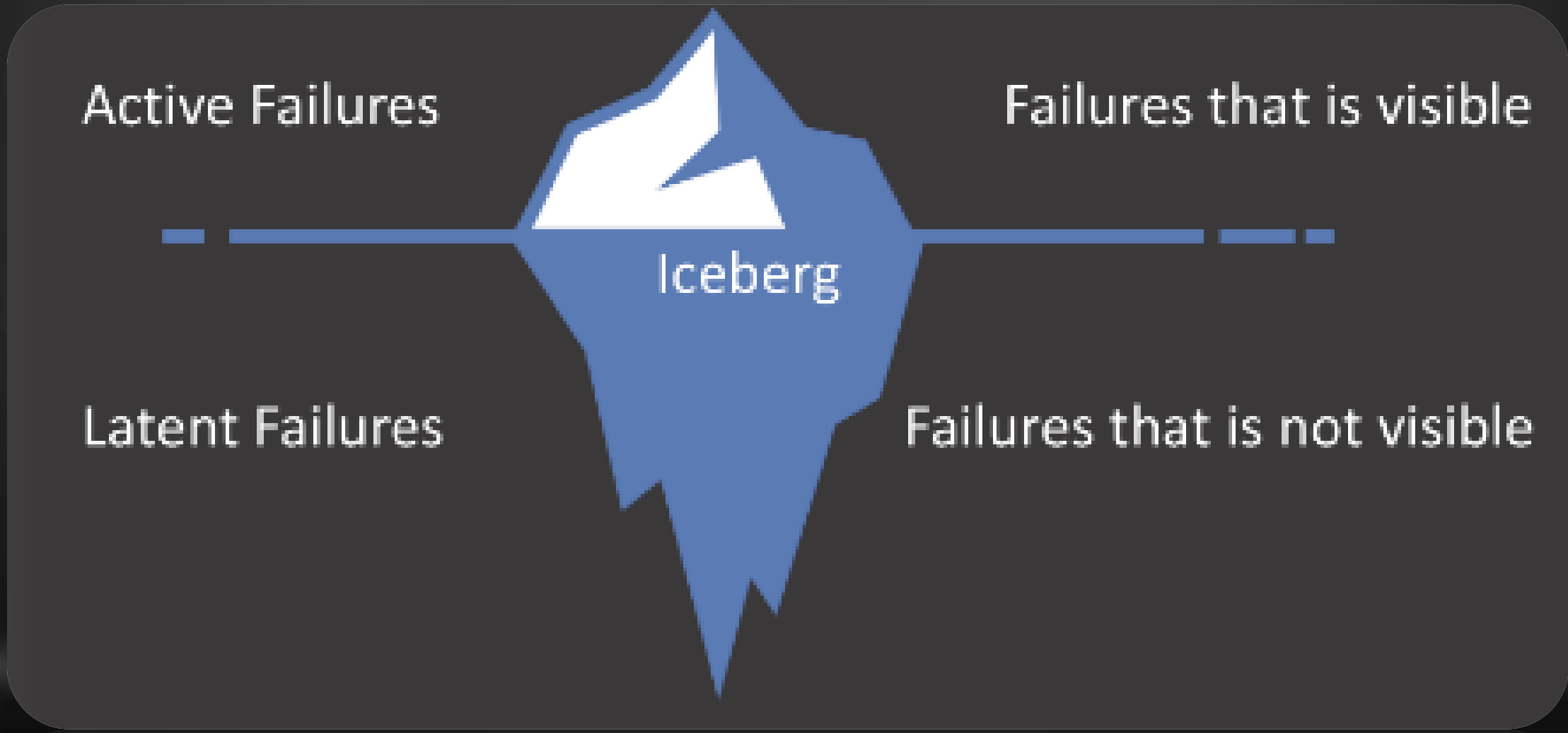
Swiss Cheese Metaphor

These weaknesses are in constant motion – the holes open and close at random.

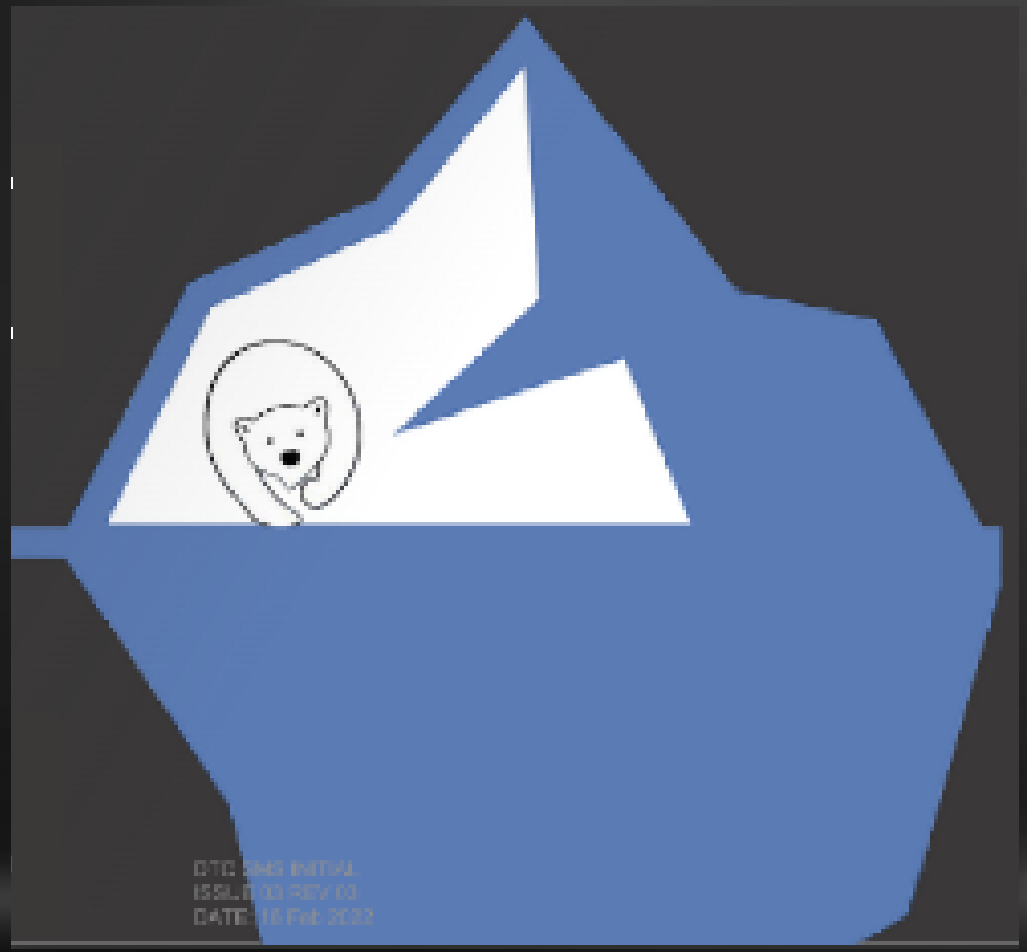
Swiss Cheese Metaphor

When by chance all holes are aligned, the hazard reaches the event and causes harm.

Active and Latent Failure



Active Failures



- Actions or inactions which have an immediate adverse effect.
- They are generally viewed, with the benefit of hindsight, as unsafe acts.
- Generally associated with front-line personnel and may result in a harmful outcome.

Latent Failures

The Organizational Accident

- The notion of the organizational accident underlying Reason's Model can be best understood through a building-block approach, consisting of five block:

- Policy-making
- Planning
- Communication
- Allocation of resources
- Supervision

Activities over which any organization has a reasonable degree of direct control

The Organizational Accident

Normalization of Deviance:

- Where the exception becomes the rule.

For example:

Because of the lack of resources, the only way that operational personnel who are directly responsible for the actual performance of the production activities can successfully achieve these activities is **by adopting shortcuts** that involve **constant violation of the rules and procedures.**

The Organizational Accident

Latent Condition Pathway

- Inadequate hazard identification and risk management
- Normalization of deviance

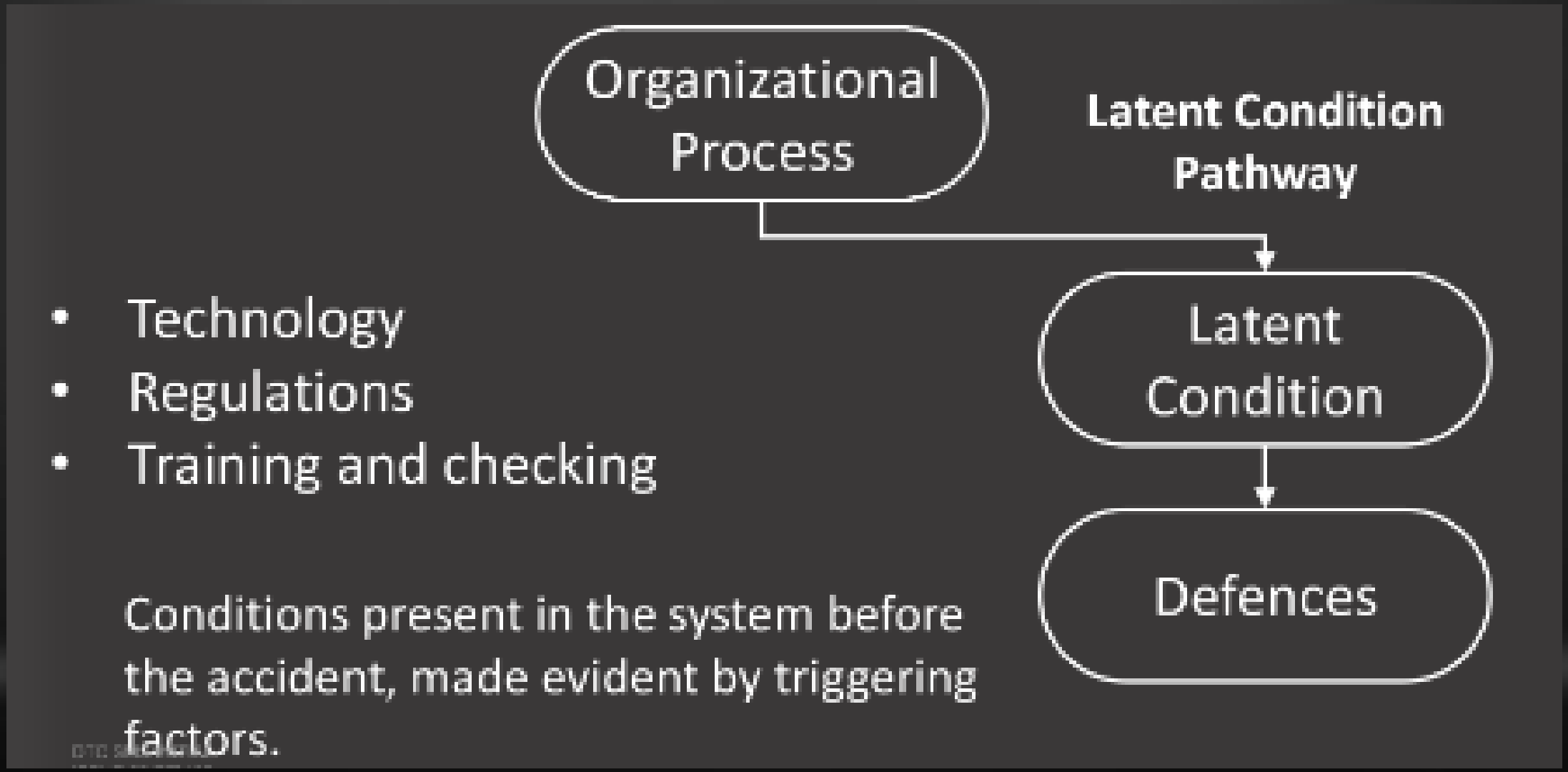
The Organizational Accident

Defenses:

- Last safety net to contain latent error

Most, if not all, mitigation strategies against the safety risks of the consequences of hazards are based upon the **strengthening of existing defenses** or **development of new ones.**

The Organizational Accident



The Organizational Accident

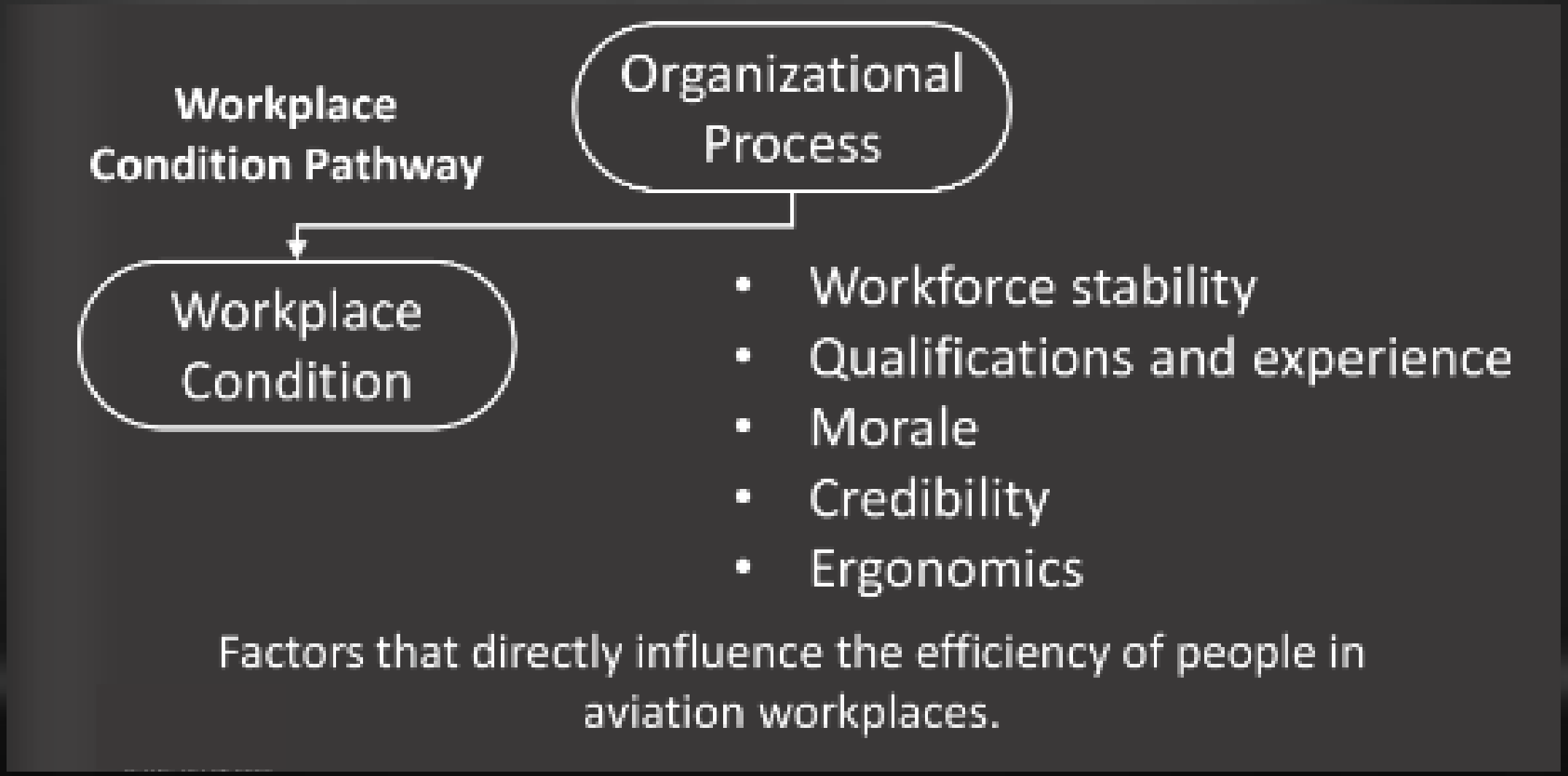
Workplace Condition Pathway

Workplace Conditions:

- Less-than-optimum workplace conditions foster active failures by operational personnel

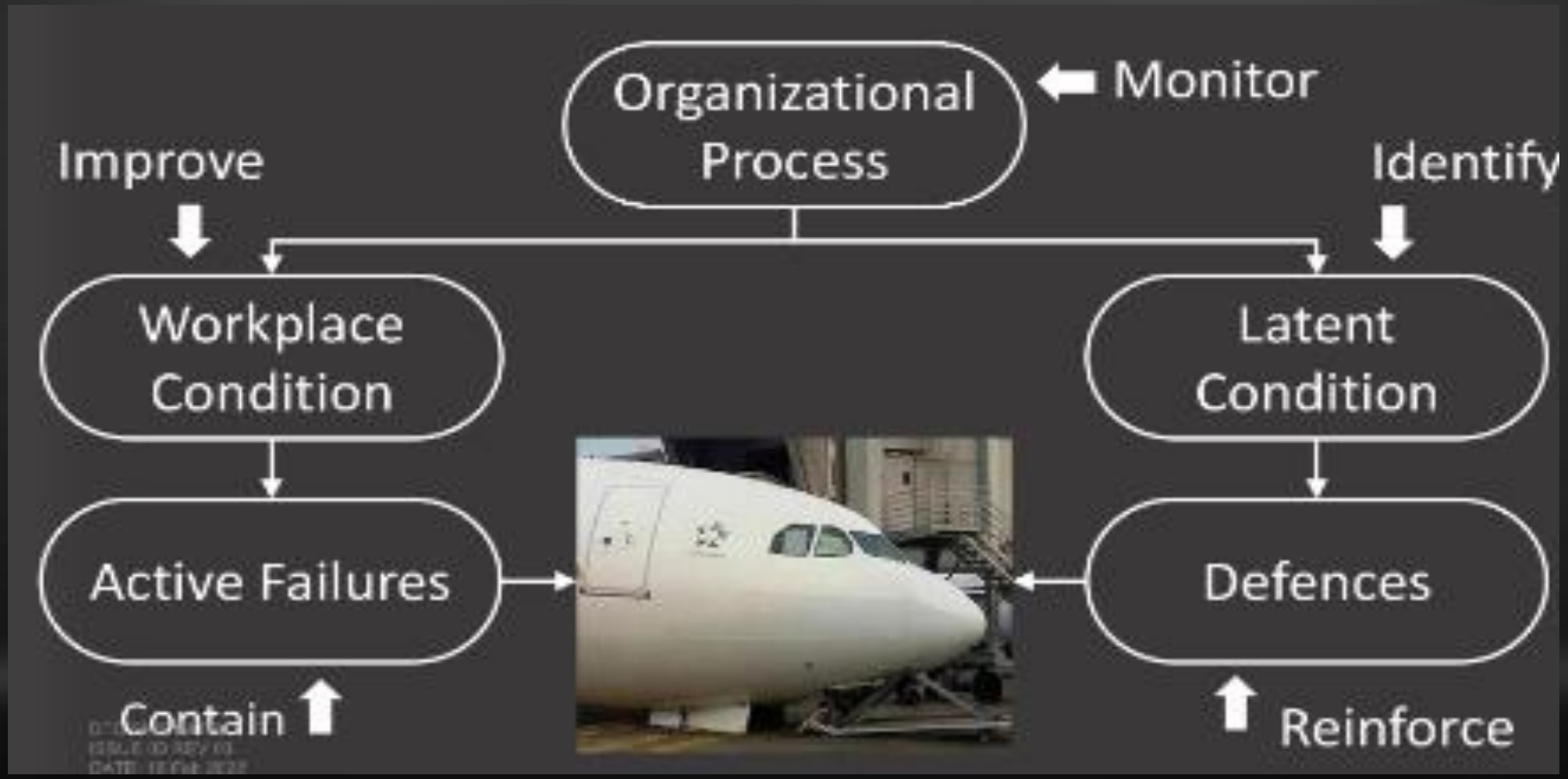
- Workplace conditions are factors that directly influence the efficiency of people in aviation workplaces.

The Organizational Accident



The Organizational Accident

The Organizational Accident



Practical Drift

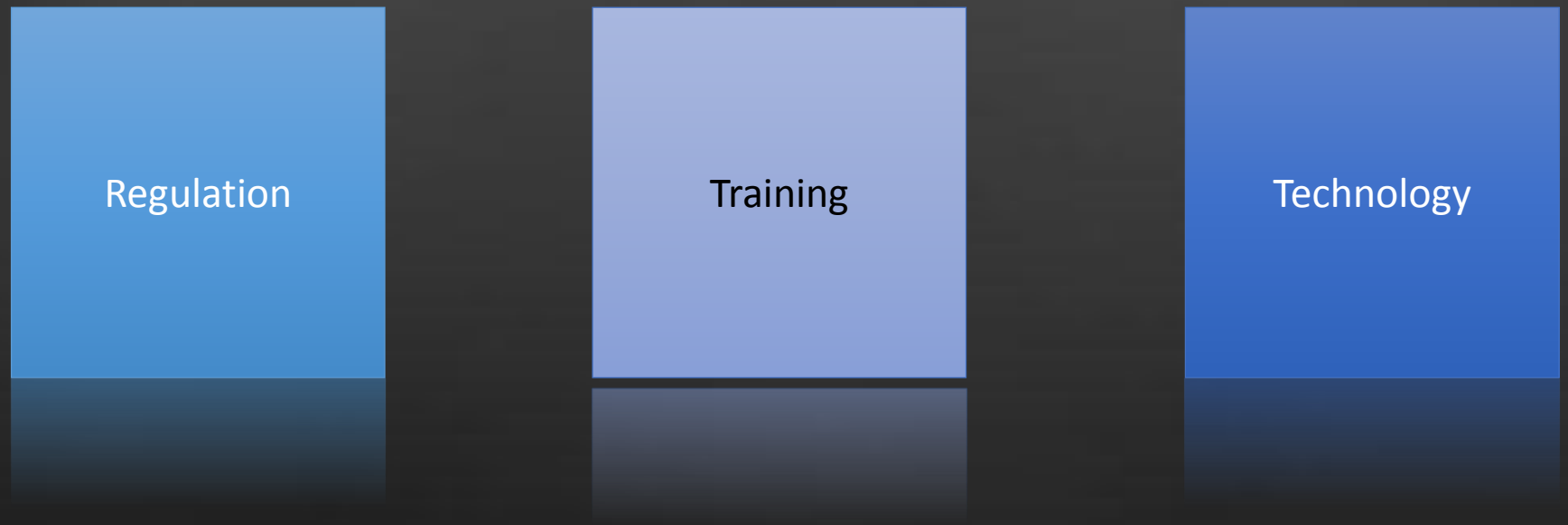
- Is used as the basis to understand how, in aviation, the baseline performance of any system “drifts away” from its original design when the organization’s processes and procedures cannot anticipate all situations that may arise in daily operations.

Practical Drift

This is usually based on three fundamental assumptions that the:

- Technology needed to achieve the system productions goals is available.
- Training of the personnel to be competent and motivated to properly operate the technology as intended.
- Regulation like policy and procedures will dictate system and human behavior.

Practical Drift



These 3 assumptions form the BASELINE (IDEAL) System Performance.

Practical Drift

- Operational performance is different from baseline performance because of real-life operations and changes in the operational and regulatory environment.

- Since the drift is a consequence of daily practice, it is referred to as a – **PRACTICAL DRIFT**. The term “drift” is used in this context as the gradual departure from an intended course due to external influences.

Practical Drift

Some of the reasons for PRACTICAL DRIFT:

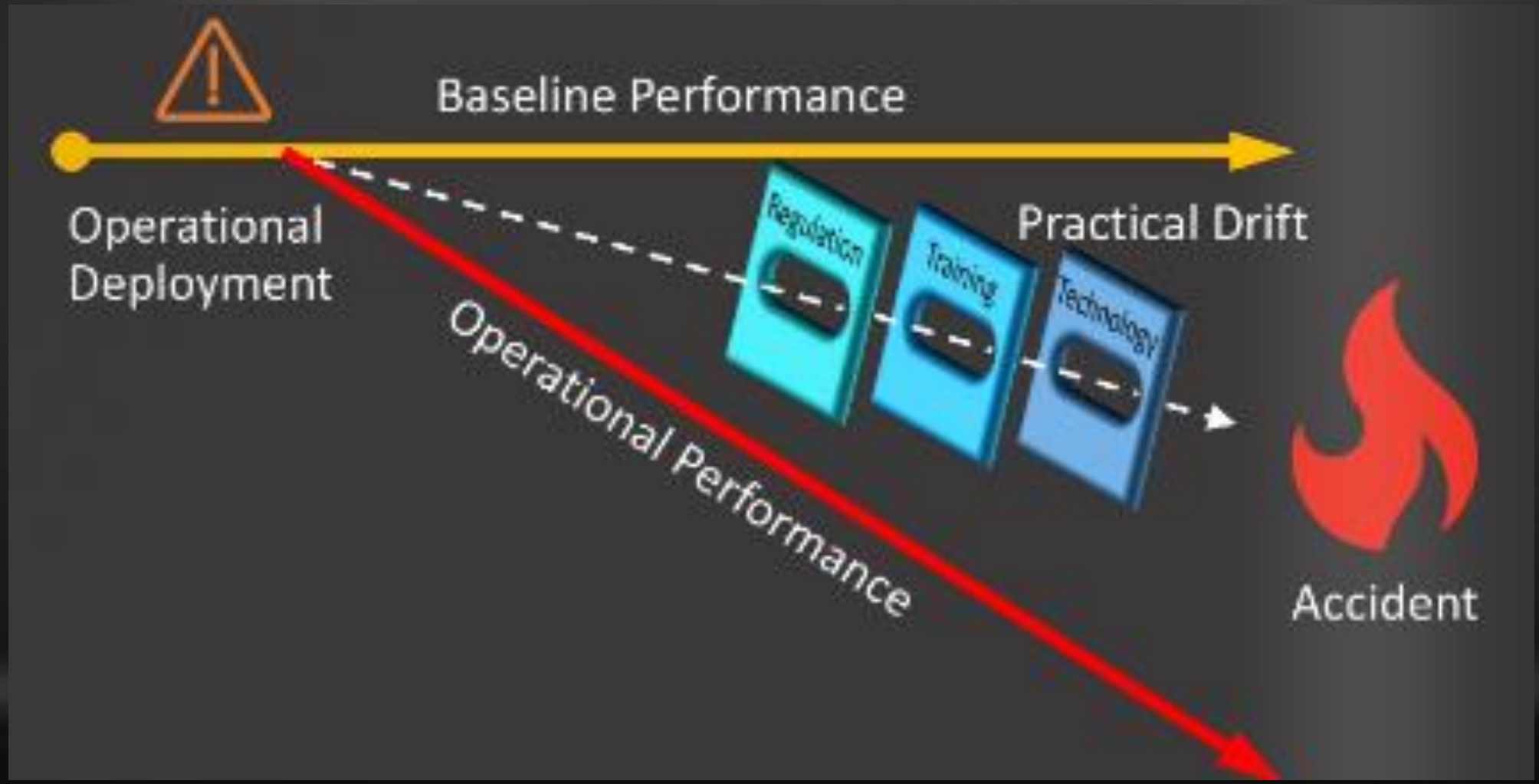
- Technology that does not operate as predicted
- Procedures that cannot be executed in certain conditions
- Changes to the system, including the additional components

Practical Drift

Some of the reasons for PRACTICAL DRIFT:

- Interactions with other systems
- Safety culture
- Adequacy (or inadequacy) of resources (e.g. support equipment)
- Learning from successes and failures to improve the operations, and so forth.

Practical Drift



Human In The S-H-E-L-L System

The SHELL Model is well known and useful to illustrate the impact and interaction of the different system components on the human.

Human In The S-H-E-L-L System

Software

- Procedures
- Training
- Support

Human In The S-H-E-L-L System

Hardware

- Machines
- Equipment

Human In The S-H-E-L-L System

Environment

- Working environment in which the rest of the L-H-S system must function

Human In The S-H-E-L-L System

Liveware

- Other personnel in the workplace

Human In The S-H-E-L-L System

Liveware

- In the center of SHELL model are the humans at the front line of operations

Human In The S-H-E-L-L System

Liveware - Hardware

- The interface between the human and technology is referred to human performance in the context of aviation operations and there is a natural human tendency to adapt to L-H mismatches.

Human In The S-H-E-L-L System

Liveware – Software

- The relationship between the human and the supporting systems found in the workplace such as regulations, manuals, publications, standard operating procedures (SOPs) and computer software.

Human In The S-H-E-L-L System

<u>Liveware – Environment</u>

- The relationship between the human and both the internal and external environments

Human In The S-H-E-L-L System

Liveware – Environment

- The internal workplace environment includes temperature, ambient light, noise, vibration and air quality.

Human In The S-H-E-L-L System

Liveware – Environment

- The external environment includes operational aspects such as weather factors, aviation infrastructure and terrain.

Human In The S-H-E-L-L System

Liveware – Environment

- This also includes psychological and physiological forces, including illness, fatigue, financial uncertainties, and relationship and career concerns.

Human In The S-H-E-L-L System

Liveware – Liveware

- Is the relationship among persons in the work environment

Human In The S-H-E-L-L System

Liveware – Liveware

- It is important to recognize that communication and inter-personal skills, as well as group dynamics play a role in determining human performance.

Human In The S-H-E-L-L System

Liveware – Liveware

- It is important to recognize that communication and inter-personal skills, as well as group dynamics play a role in determining human performance.

Human In The S-H-E-L-L System

Liveware – Liveware

- The advent of crew resource management (CRM) and its extension to air traffic services (ATS) and maintenance operations has created a focus on the management of operational errors across multiple aviation domains.

Human In The S-H-E-L-L System

Liveware – Liveware

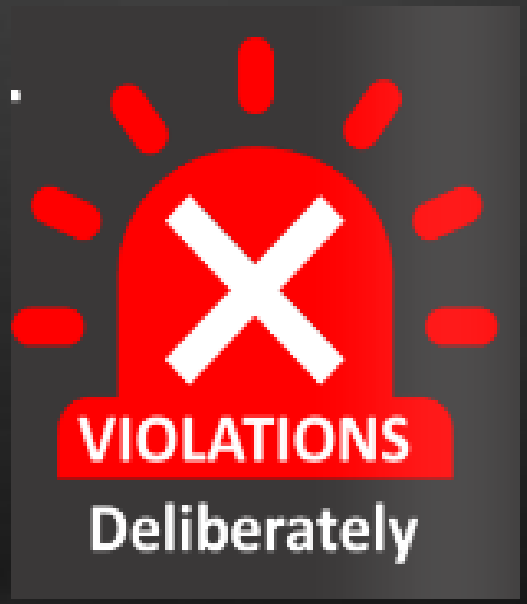
- Staff/management relationships as well as overall organizational culture are also within the scope of this interface.

Human In The S-H-E-L-L System

" A mismatch between the Liveware and other four components contributes to human error"

Errors and Violations

The difference between errors and violations lies in INTENT



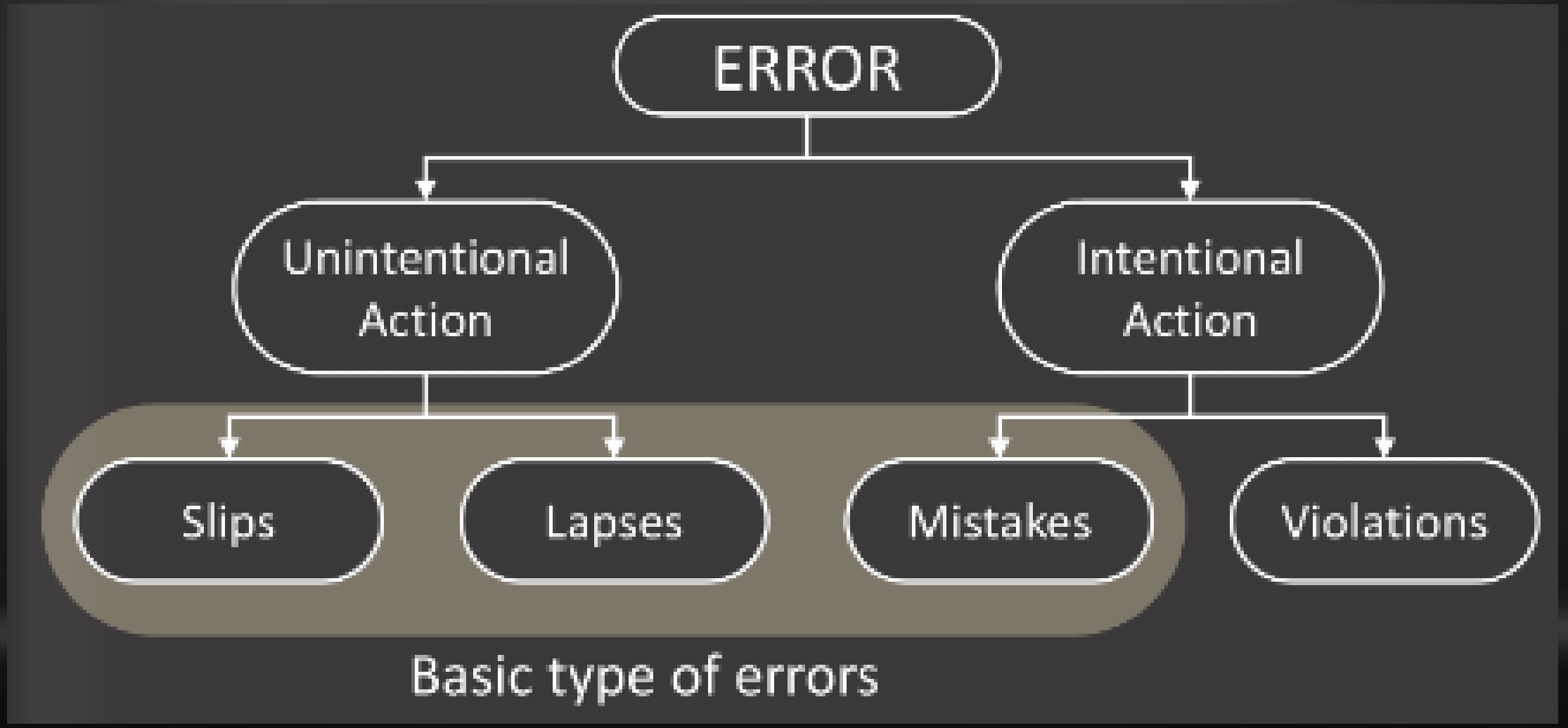
Errors and Violations

- “An action or inaction by an operational person that leads to deviations from organizational or the operational person’s intentions or expectations”

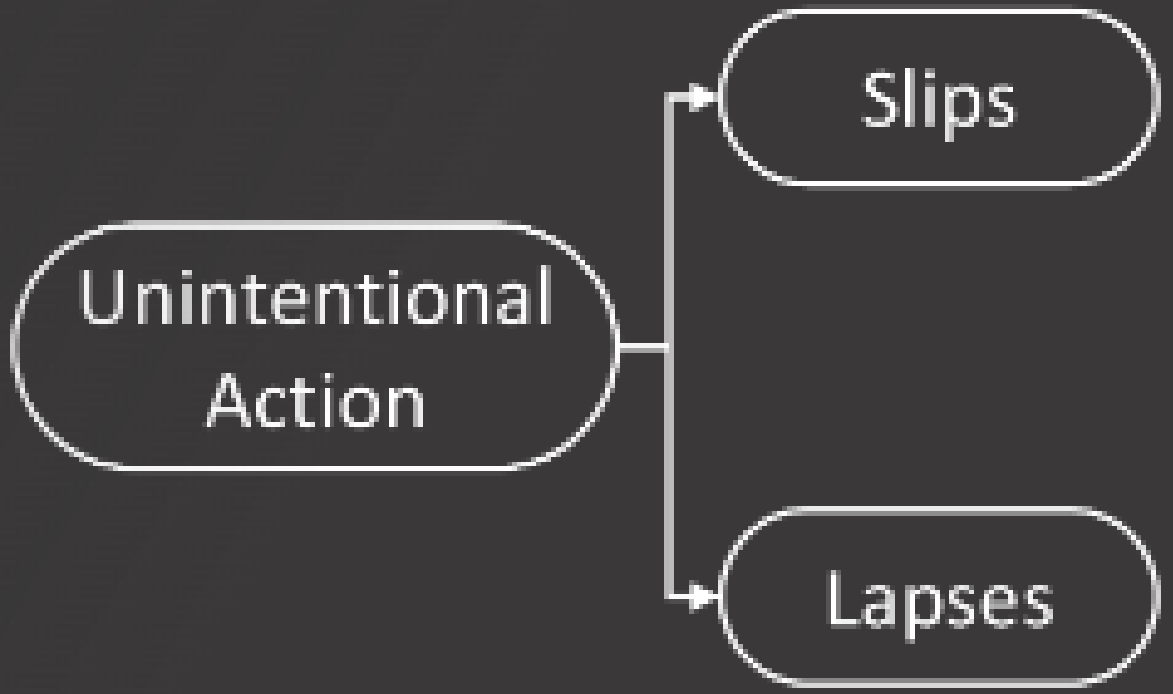
Errors and Violations

- “A deliberate act of willful misconduct or omission resulting in a deviation from established regulations, procedures, norms or practices”.

Errors and Violations

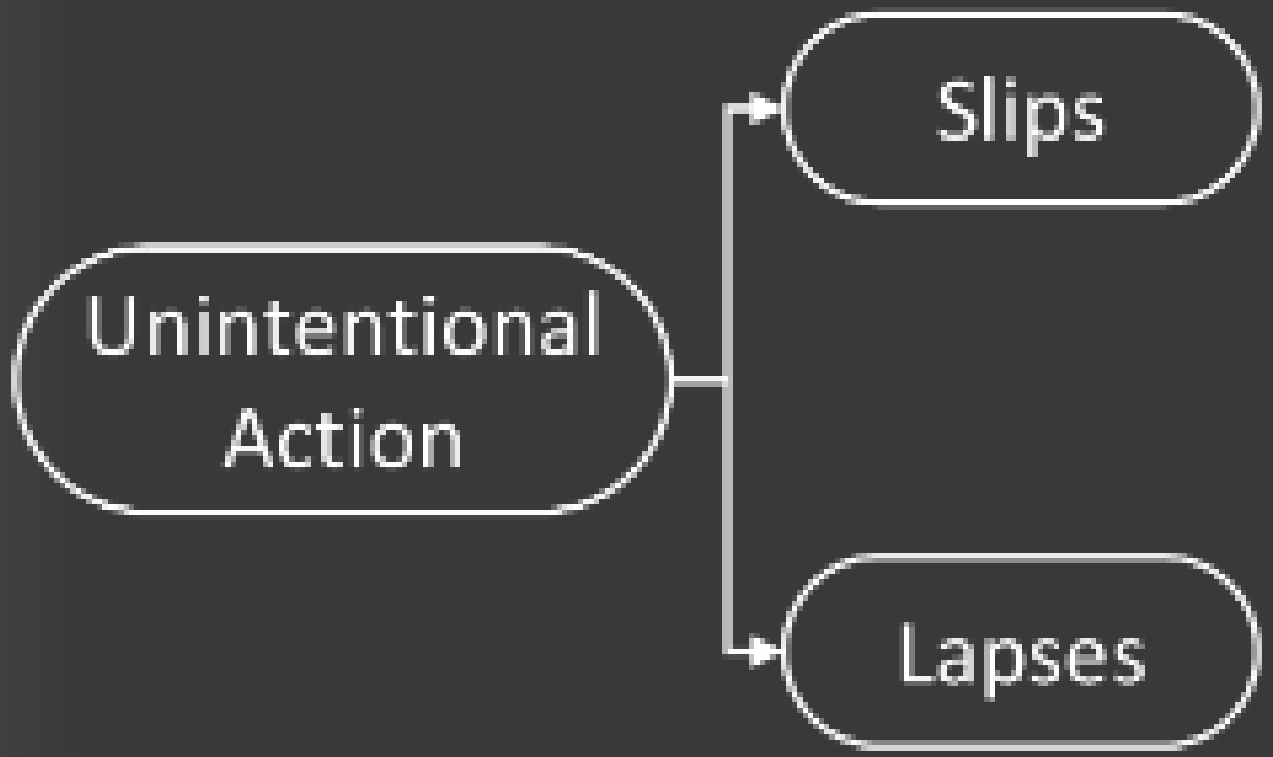


Errors and Violations



Slips and lapses are failures in the execution of the intended action.

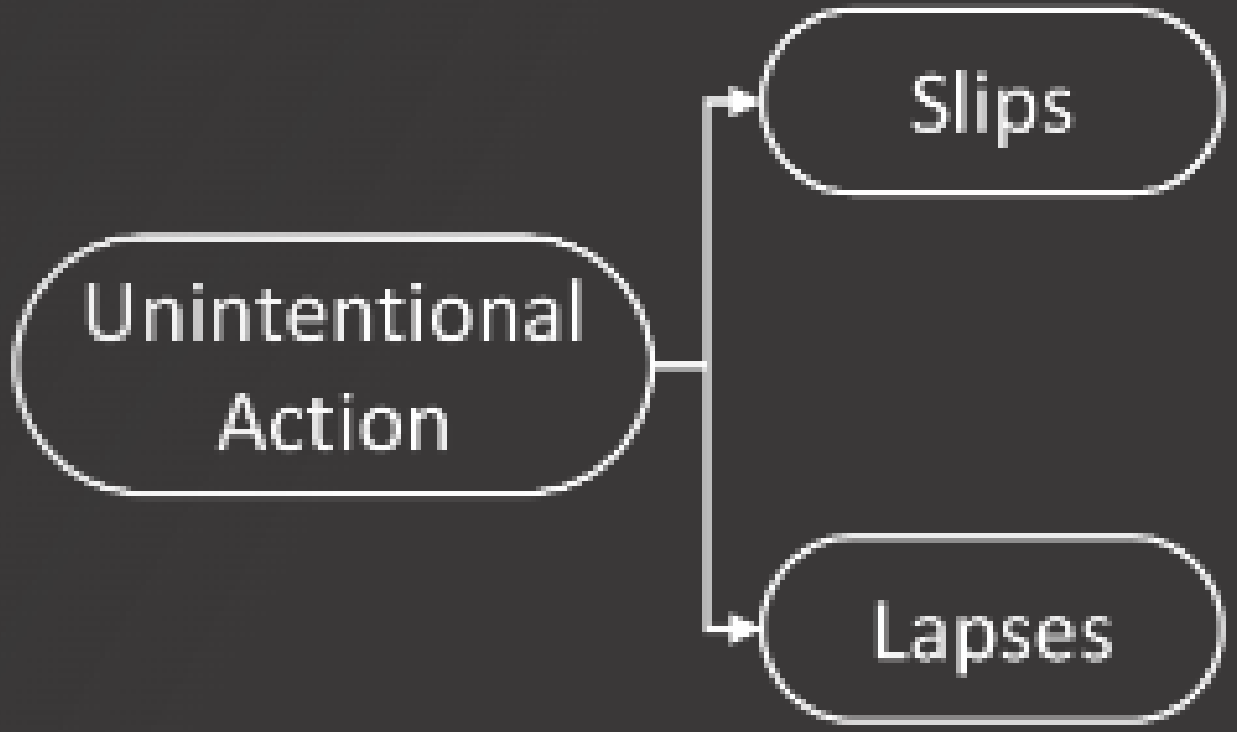
Errors and Violations



Slips are actions that do not go as planned.

Lapses are memory failures.

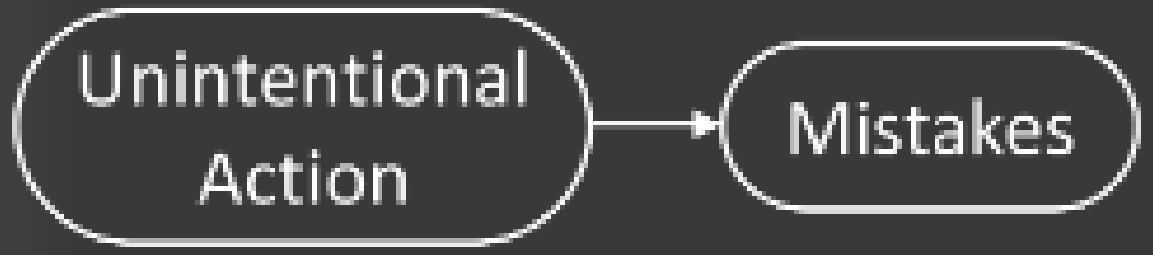
Errors and Violations



- Attention failure
- Omissions
- Mis-ordering etc.

- Memory failure
- Losing place
- Omitting items etc.

Errors and Violations



- Rule-Based
- Knowledge-Based

Mistakes are failures in the plan of action.
Even if execution of the plan were correct,
it would not have been possible to achieve
the intended outcome.

Errors and Violations

- Routine
- Situational
- Exceptional

ERRORS

If the context of an SMS, both the State and the product/service provider must understand and expect that humans will commit errors regardless of the level of technology used, the level of training or the existence of regulations, processes and procedures.

ERRORS

An important goal then is to set and maintain defenses to reduce the likelihood of errors and, just as importantly, reduce the consequences of errors when they do occur.

ERRORS

To effectively accomplish this task, errors must be:

- Identified
- Reported
- Analyzed

So that appropriate remedial action can be taken.

ERRORS

- Safety strategies to control errors leverage the basic defenses within the aviation system must be put into place to control or eliminate errors.

REDUCTION STRATEGIES

CAPTURING STRATEGIES

TOLERANCE STRATEGIES

ERRORS

REDUCTION STRATEGIES

Direct intervention to reduce or eliminate the factors contributing to the error.

For example:

Improvement of ergonomic factors and reduction of environmental distractions.

ERRORS

CAPTURING STRATEGIES

This assumes the error will be made.

The intent is to “capture” the error before any adverse consequences of the error are felt.

ERRORS

CAPTURING STRATEGIES

Capturing strategies are different from reduction strategies in that they utilize checklists and other procedural interventions rather than directly eliminating the error.

ERRORS

TOLERENCE STRATEGIES

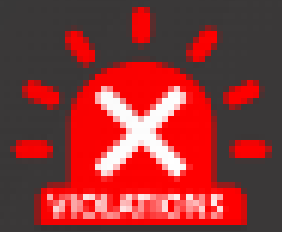
The ability of a system to accept that an error will be made but without experiencing serious consequences.

ERRORS

TOLERENCE STRATEGIES

The incorporation of redundant systems or multiple inspection processes are examples of measures that increase system tolerance to errors.

Violations

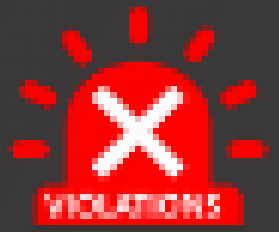


When worker thinks that there is no rule to follow and doing violation is way of life. For the purpose of:

- Time saving
- Increasing productivity
- Competitive image

→ Routine Violation

Violations

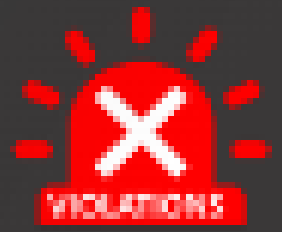


Routine Violation

For example:

- These are committed in response to situations where compliance with established procedures makes task completion difficult.
- Causes persons to adopt “workaround” procedures, can become routine.

Violations

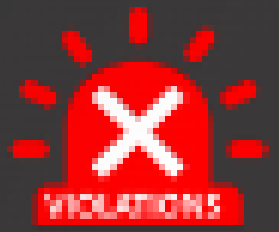


Routine Violation

For example:

- These deviations, referred to as “drift”, may continue without consequence, but over time they may become frequent and result in potentially severe consequences.

Violations

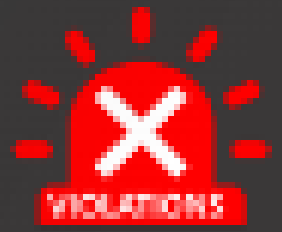


Situational Violation

This type of violations occurs due to bottleneck faced by individual worker while performing his job at workplace.

Such as time pressure or high workload.

Violations

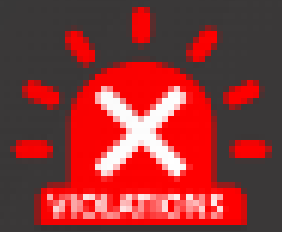


Situational Violation

More examples:

- Poor workplace design
- Inadequate supervision
- Night working
- Lone working
- Absence of standard equipment

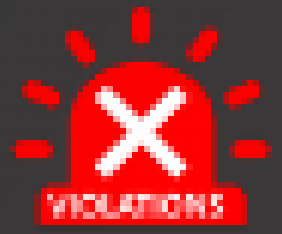
Violations



Situational Violation

Usually these violations done by worker due to constrains in following the workplace norms and standards.

Violations



- When there is a breakdown situation and there is need to get the work done as soon as possible. The workers need to solve an existing problem and violate the norms and standards of health and safety.

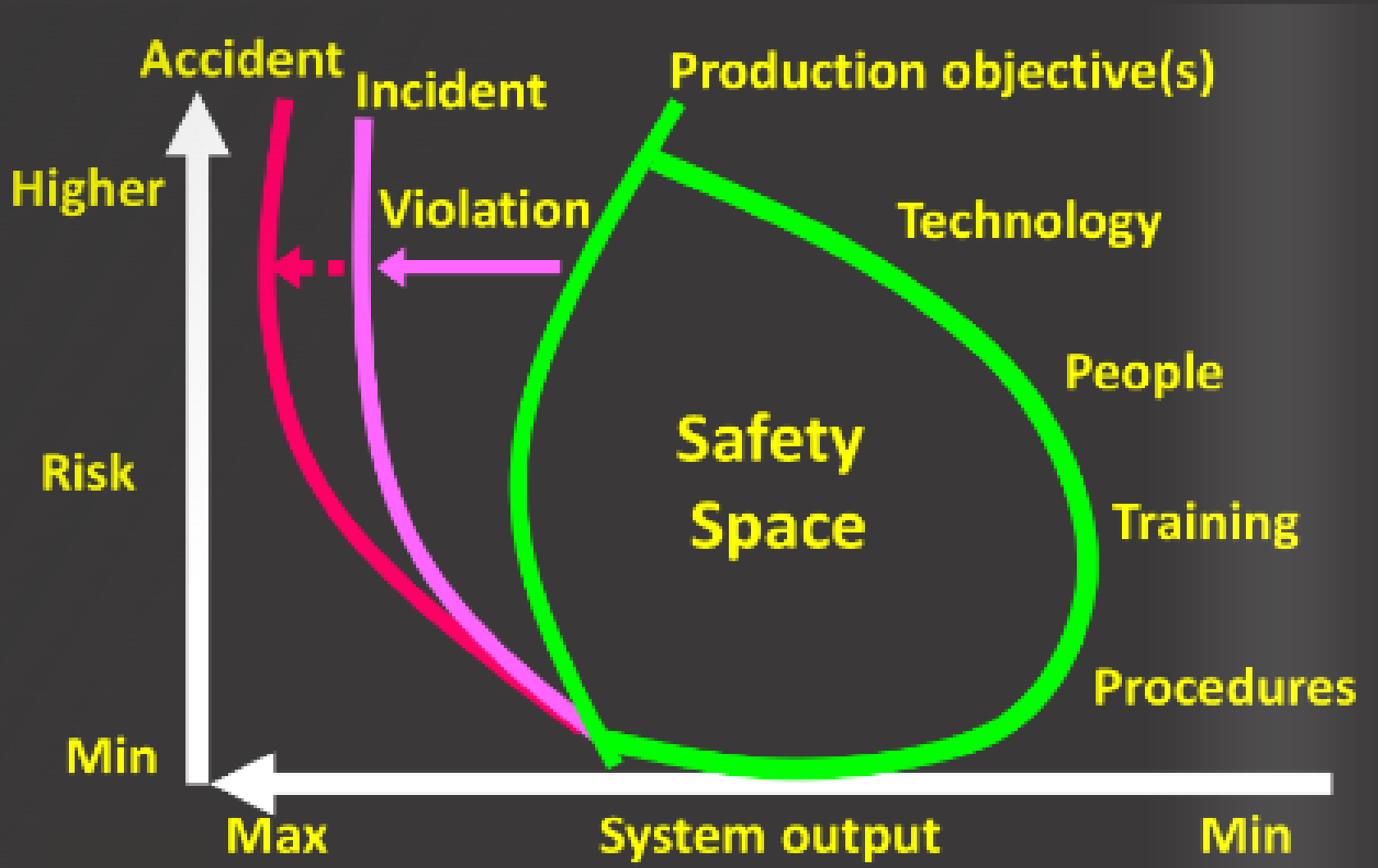
Exceptional Violation

ORGANISATIONALLY INDUCED VIOLATIONS

This type of violation tends to occur when an organization attempts to meet increased output demands by ignoring or stretching its safety defenses.

May be considered as an extension of

Routine Violation

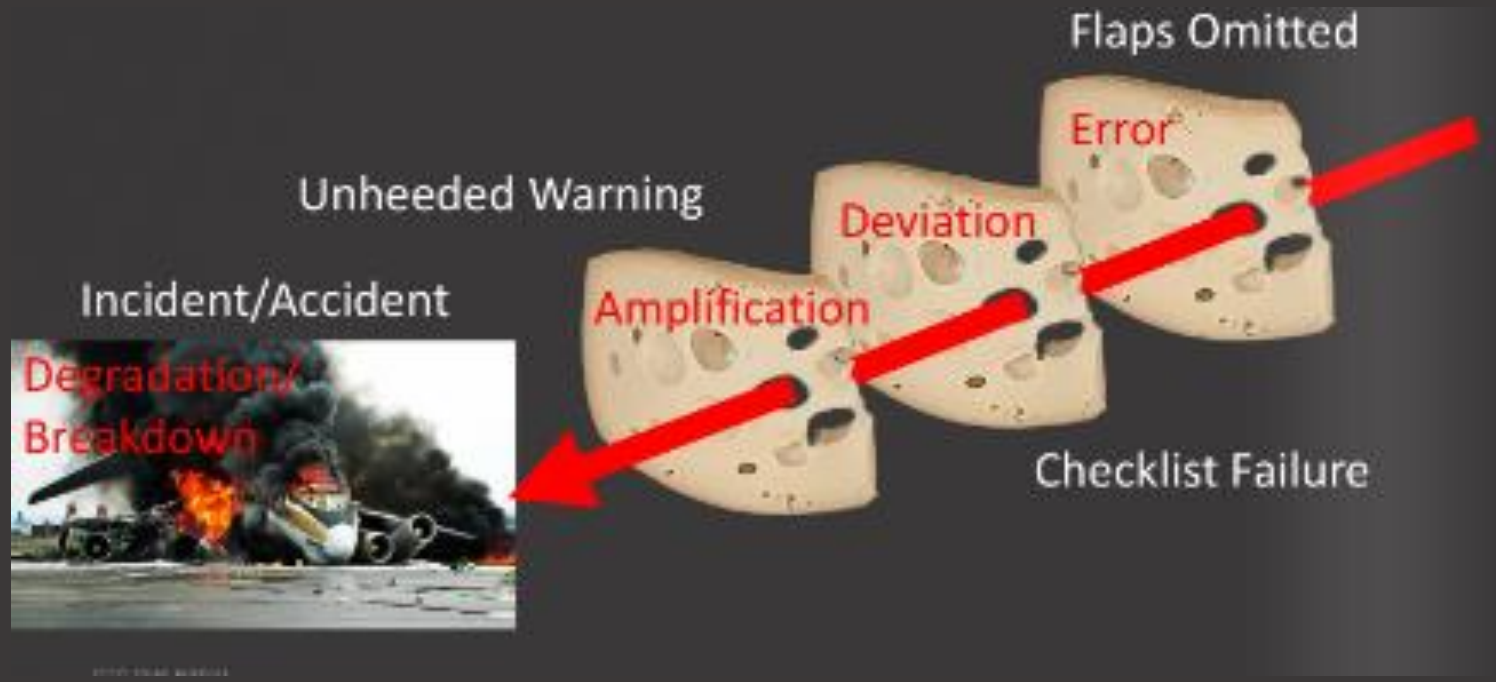

Accident
Incident
Production objective(s)
Higher
Violation
Technology
People
Safety
Space
Risk
Training
Procedures
Min
Max
System output
Min

Quiz: Which Violation is This?

Not using the correct work stand and proper lightning because equipment is broken.	• SITUATIONAL
Relying on memory to perform a checklist	• ROUTINE
Working 2 straight shifts because of insufficient technicians	• ORGANIZATIONAL

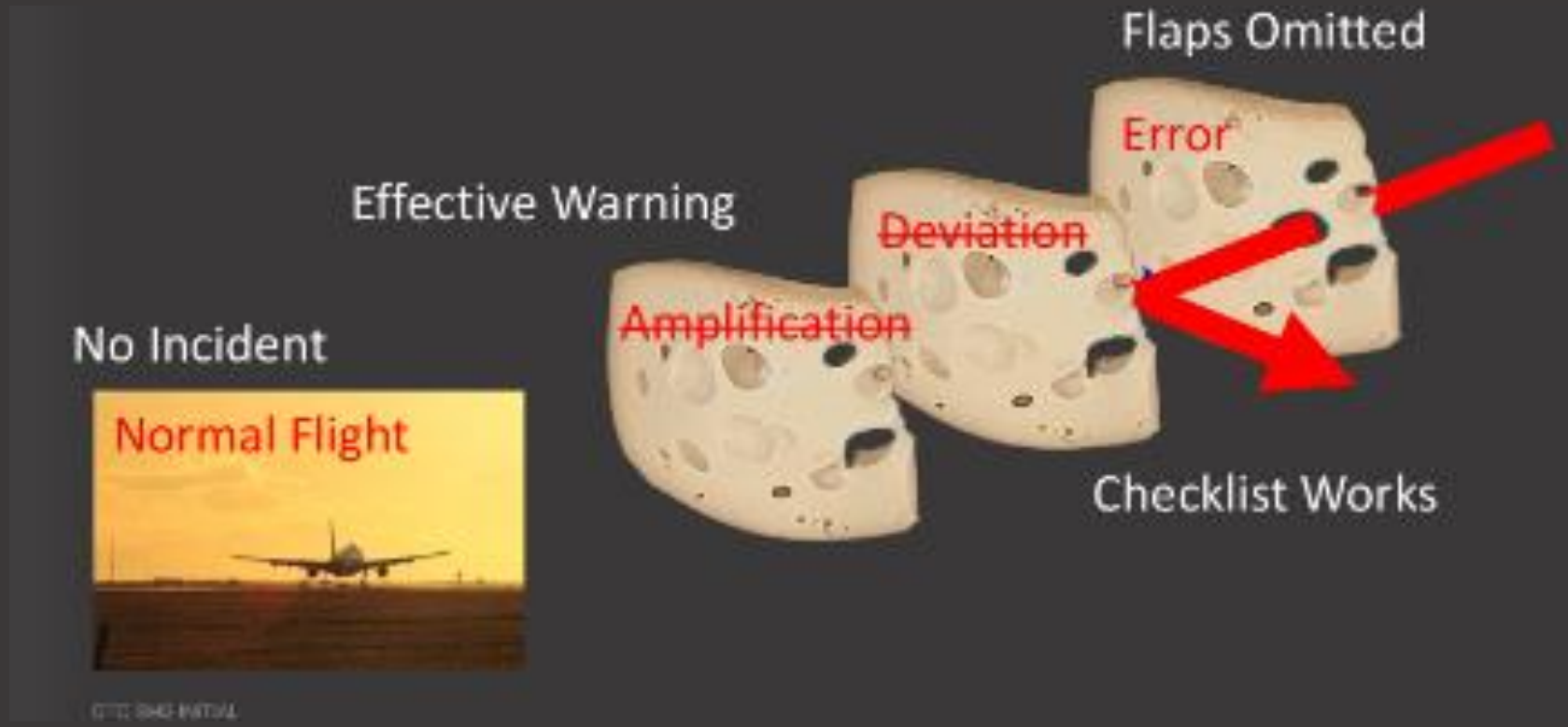
Errors and Violations

Accidents/ Incidents happen when;



Errors and Violations

But with SMS in place:



Errors and Violations

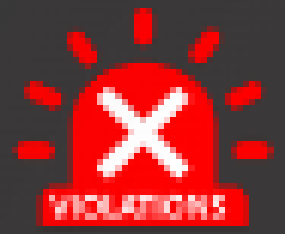
Errors and violations may result in non-compliance with regulations or approved operating procedures.

Punitive measure taken in response to acts of non-compliance.

May lead to a reduction in the reporting of errors in the absence of other processes.

Errors and Violations

The State and the service provider must consider whether acts of non-compliance are the result of a



OR

when determining whether punitive action is appropriate, with the criteria normally being whether non-compliance is the result of willful misconduct or gross negligence.

SUMMARY

1. Errors or violations may result punitive measures that may lead to a reduction in the reporting of errors in the absence of other processes.

2. The State and the service provider must consider whether acts of non-compliance are the result of an error or a violation when determining whether punitive action is appropriate.

Chapter 04
Safety Culture

- Introduction to Safety Culture
- 3 Cultural Components
- Healthy Safety Culture
- Safety Reporting
- Just Culture
- Non-Punitive Disciplinary Policies
- Promotion of a Positive Safety Culture
- Safety Culture Maturity

Introduction to Safety Culture

Safety culture have been described as:

"How people believe in relation to safety and risk when no one is watching"

Introduction to Safety Culture

It is an expression of how safety is **perceived**, **valued** and **prioritized** by management and employees in an organization.

Introduction to Safety Culture

It reflects to which extent individuals and groups are:

- Able to access the resources required for safe operation
- Willing and able to adapt when facing safety issues

Introduction to Safety Culture

It reflects to which extent individuals and groups are:

- Willing to communicate safety issues
- Consistently assessing the safety related behaviors throughout the organization

Introduction to Safety Culture

" The beliefs, values, biases and their resultant behavior that are shared by members of a society, group or organization"

Introduction to Safety Culture

Culture permeates the organization, runs across all SMS Components, and must be considered in the discussion of any SMS.

Introduction to Safety Culture

"Commonly held perceptions and beliefs of an organization's members pertaining to the public's safety and can be a determinant of the behavior of the members"

Introduction to Safety Culture

- Safety Culture is not something you get or buy
- It is something an organization acquires as a product of the combined effects of organizational culture, professional culture and, often, national culture

Introduction to Safety Culture

- The ultimate responsibility for the establishment and adherence to sound safety practices rests with the management of the organization

3 Cultural Components

3 Cultural Components

Professional

Differentiates the values and behaviours of professional groups (e.g. pilots, maintenance engineers)

3 Cultural Components

Professional

- Differentiates the characteristics of particular professional groups

3 Cultural Components

- Through personnel selection, education, training, on-the-job experience and peer pressure, etc., professionals tend to adopt the value system and develop behavior patterns consistent with their peers or predecessors.

3 Cultural Components

ORGANIZATIONAL

Differentiates the values and behaviours of particular organizations
(e.g. government vs. private organizations).

3 Cultural Components

- Sets the boundaries for acceptable behavior in the workplace by establishing norms and limits
- Provides a framework for managerial and employee decision-making

3 Cultural Components

- “This is how we do things here, and how we talk about the way we do things here”
- Organizational/corporate culture shapes – among many others – safety reporting procedures and practices by operational personnel

3 Cultural Components

Organizational culture – Can affect the following:

- Interactions between senior and junior members of a group
- Interactions between industry and regulatory authority personnel

3 Cultural Components

Organizational culture – Can affect the following:

- The degree to which information is shared internally and with the regulatory authorities

- The prevalence of teamwork in the regulatory authority or industry organization;

3 Cultural Components

Organizational culture – Can affect the following:

- Reactions of personnel under demanding operational conditions
- Acceptance and utilization of particular technologies

3 Cultural Components

Organizational culture – Can affect the following:

- The tendency to take punitive measures in reaction to operational errors within a product or service provider or by the regulatory authorities.

3 Cultural Components

Organizational culture – Is affected the following:

- Business policies and procedures
- Supervisory behavior and practices
- Safety improvement goals as well as minimum tolerance levels

3 Cultural Components

Organizational culture – Is affected the following:

- Management attitude toward quality or safety issues
- Employee training and motivation

3 Cultural Components

Organizational culture – Is affected the following:

- The relationship between the regulatory authorities and product and service providers and work life balance policies.

3 Cultural Components

NATIONAL

Encompasses the value system of particular nations.

3 Cultural Components

Differentiates the characteristics of nations, including the role of the individual within society, the way authority is distributed, and national priorities with respect to resources, accountabilities, morality, objectives and different legal systems

3 Cultural Components

So why is understanding culture important?

- The mix of cultural components may vary greatly among organizations and can negatively influence effective hazard reporting, collaborative root-cause analysis and acceptable risk mitigation.

3 Cultural Components

So why is understanding culture important?

- Continuous improvement in safety performance is possible when safety becomes a value within an organization as week as a priority at the national or professional level.

A Healthy Safety Culture

Shared commitment between personnel & management to safety responsibilities

Relies on a high degree of trust and respect between personnel and management.

Actively seeks improvements

Utilizes systems and tools for continuous monitoring, analysis and investigation

Must be created and supported by the management – Top Down Approach

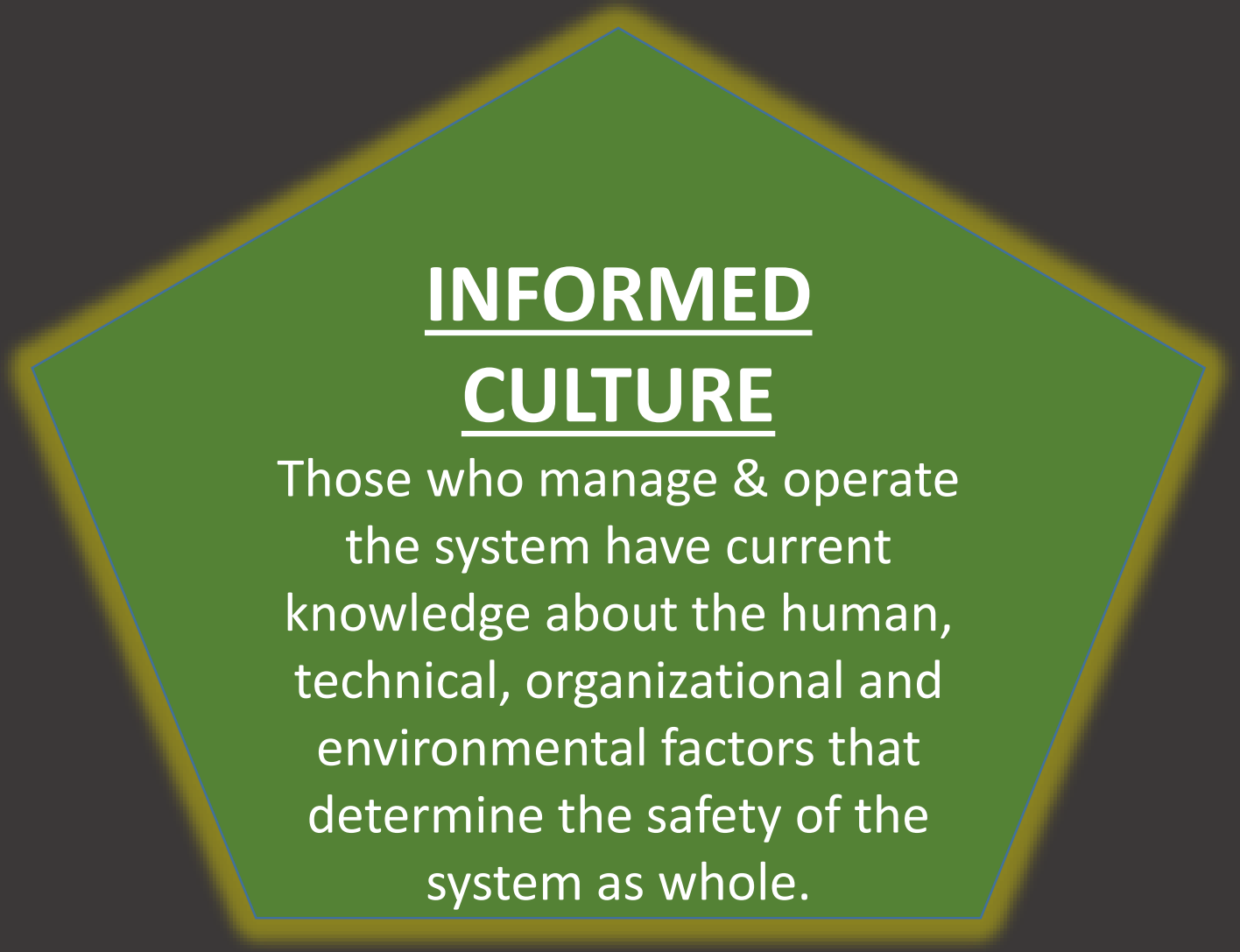
A Healthy Safety Culture

Has a documented set of rules and policies

Vigilantly remains aware of hazards

5 Ingredients of an Effective Safety Culture

No.1



5 Ingredients of an Effective Safety Culture

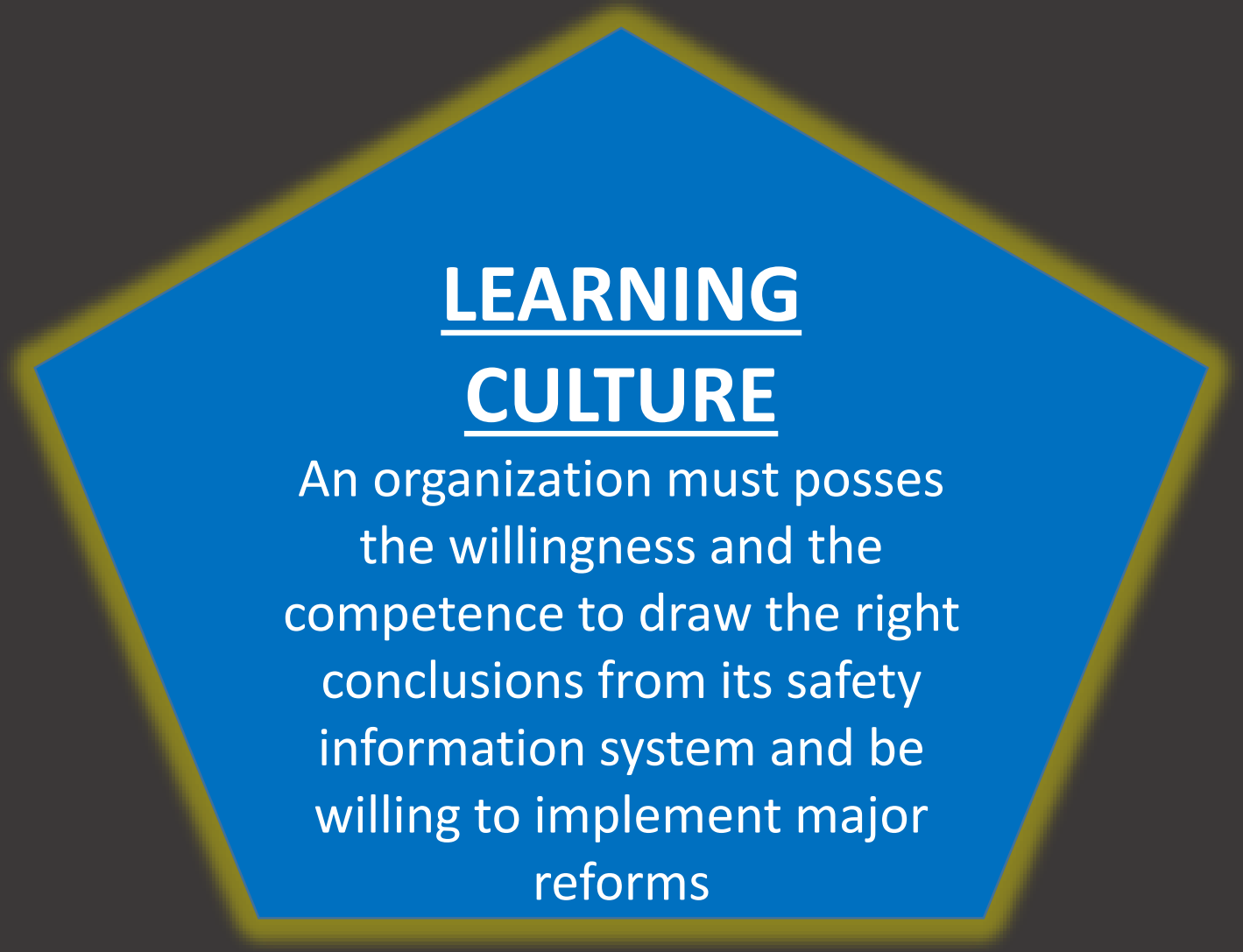
No.2

REPORTING CULTURE

An organizational climate in which people are prepared to report their errors and near-misses.

5 Ingredients of an Effective Safety Culture

No.3



5 Ingredients of an Effective Safety Culture

No.4

JUST CULTURE

There is an atmosphere of trust. People are encouraged (even rewarded) for providing essential safety-related information, but they are also clear about where the line must be drawn between acceptable and unacceptable behavior.

5 Ingredients of an Effective Safety Culture

No.5

FLEXIBLE CULTURE

An organization can adapt in the face of high-tempo operation of certain kinds of danger-often shifting from the conventional hierarchical mode to a flatter mode.

5 Ingredients of an Effective Safety Culture

FLEXIBLE CULTURE
An organization can adapt in the face of high-tempo operation of certain kinds of danger- often shifting from the conventional hierarchical mode to a flatter mode.

LEARNING CULTURE
An organization must posses the willingness and the competence to draw the right conclusions from its safety information system and be willing to implement major reforms

INFORMED CULTURE
Those who manage & operate the system have current knowledge about the human, technical, organizational and environmental factors that determine the safety of the system as whole.

JUST CULTURE
There is an atmosphere of trust. People are encouraged (even rewarded) for providing essential safety-related information, but they are also clear about where the line must be drawn between acceptable and unacceptable behavior.

REPORTING CULTURE
An organizational climate in which people are prepared to report their errors and near-misses.

3 Possible Organizational Cultures- Which is yours? Let's Discuss (we won't tell your boss!)

	Pathological	Bureaucratic	Generative
Information	**Hidden**	Ignored	Sought
Messenger	**Shouted**	Tolerated	Trained
Responsibilities	**Shirked**	Boxed	Shared
Reports	**Discouraged**	Allowed	Rewarded
Failures	**Covered Up**	Merciful	Scrutinized
New Ideas	**Crushed**	Problematic	Welcomed
Resulting Organisation	**Conflicted Organisation**	'Red Rape' Organisation	Reliable Organisation

Self Reporting

A healthy reporting culture aims to differentiate between INTENTIONAL and UNINTENTIONAL deviations and determine the best course of action for both the organization as a whole and the individuals directly involved.

Self Reporting

A good reporting culture is one criterion for judging the effectiveness of a safety system

Self Reporting

The success of a reporting system depends on the continuous flow of information.

REPORTING CULTURE

- It is greatly influenced by organizational, professional and national cultures and is one criterion for judging the effectiveness of a safety system.

Self Reporting

Violations

Errors

- Must have clear policies that distinguish willful acts of misconduct from inadvertent errors, providing for an appropriate punitive of non-punitive response

Self Reporting

Violations

Errors

Voluntary reporting system should be

CONFIDENTIAL !

Just Culture

LEARNING culture vs PUNITIVE

Encourage honesty & accountability

Takes **HUMAN ERROR** into consideration

Just Culture

LEARNING culture vs PUNITIVE

Encourage honesty & accountability

Takes **HUMAN ERROR** into consideration

An organizational perspective that discourages blaming the individual for an honest mistakes that has contributed to an accident of incident.

Just Culture

LEARNING culture vs PUNITIVE

Encourage honesty & accountability

Takes **HUMAN ERROR** into consideration

Sanctions are only applied when there is evidence of conscious violation, or intentional, reckless, or negligent behavior.

Just Culture

LEARNING culture vs PUNITIVE

Cultivating an atmosphere where people have confidence to report safety concerns without fear of blame

Encourage honesty & accountability

Employees must know that confidentially will be maintained and that the information they submit will be acted upon, otherwise they will decide that there is no benefit in their reporting

Takes **HUMAN ERROR** into consideration

Organization collects and analyses relevant data, and actively disseminates safety information

Non-Punitive Disciplinary Policies

- Effective SMS implementation dependent upon a clear, mutual understanding of

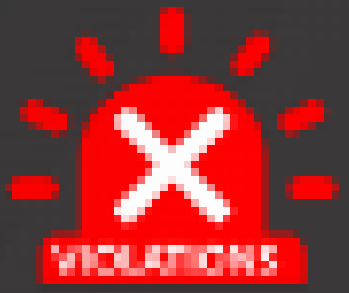
Unintentional

Deliberately

And the difference betwe**The understanding of internet !**
en the two:

Non-Punitive Disciplinary Policies

Errors/violations may result ir non-compliance with regulations/approved operating procedures



Non-Punitive Disciplinary Policies

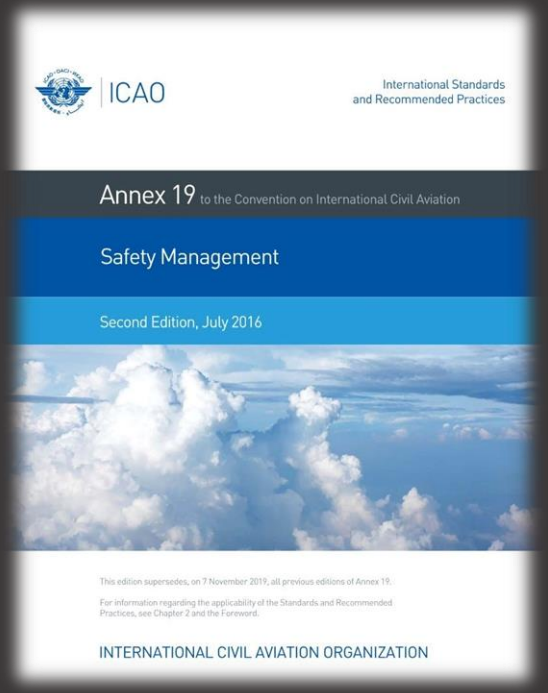
Punitive measures taken in response to acts of non-compliance may lead to a reduction in the reporting of errors in the absence of other processes.

Non-Punitive Disciplinary Policies

- The service provider must consider whether acts of non-compliance are the result of a violation or inadvertent error when determining whether punitive action is appropriate, with the criteria normally being whether non-compliance is the result of willful misconduct of gross negligence.

Promotion of a Positive Safety Culture

- “Both States and service providers are required to promote positive safety culture with the aim of fostering effective safety management the SSP/SMS”.



ICAO Annex 19
– Safety Management

Promotion of a Positive Safety Culture

A positive safety culture has the following features:

- Managers and employees, individually and collectively, want to make decisions and take actions that promote safety

Promotion of a Positive Safety Culture

A positive safety has he following:

- Individuals ad groups continually critique their behaviors and processes and welcome the critique of other for opportunities to change and improve as their environment changes

Promotion of a Positive Safety Culture

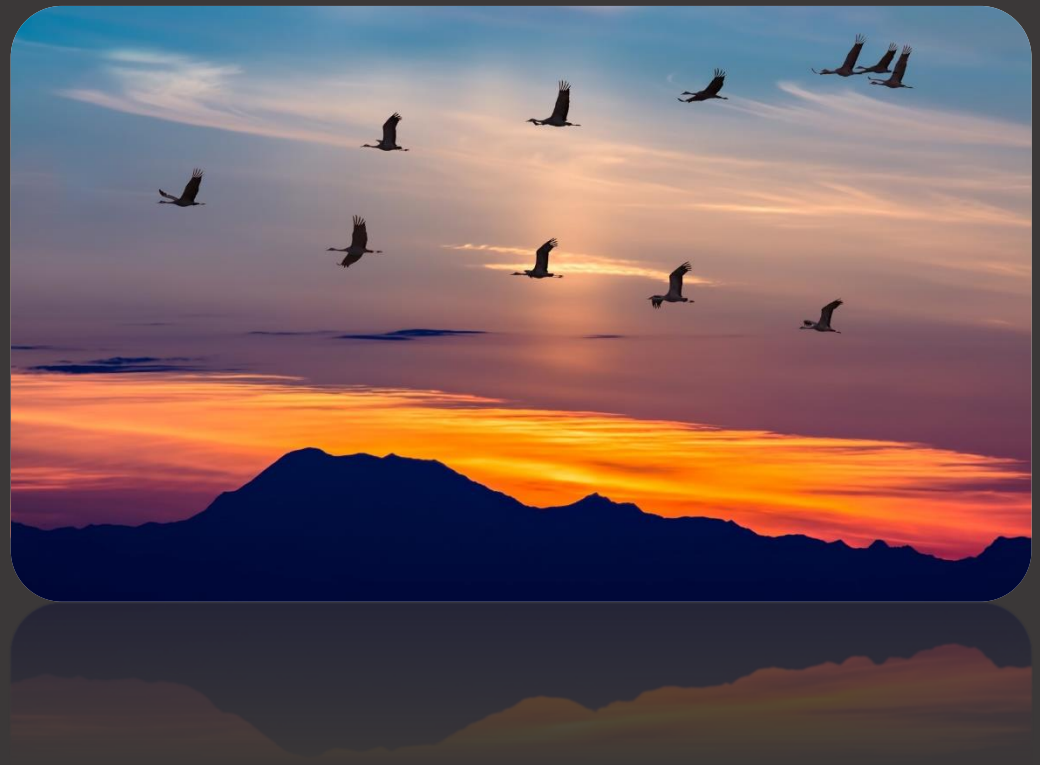
A positive safety culture has the following features:

- Management and staffs share a common awareness of the hazards and risks faced by the organization and its activities

Promotion of a Positive Safety Culture

A positive safety culture has the following features:

- Individuals act and make decisions according to a common belief that safety is part of the way they do business



Promotion of a Positive Safety Culture

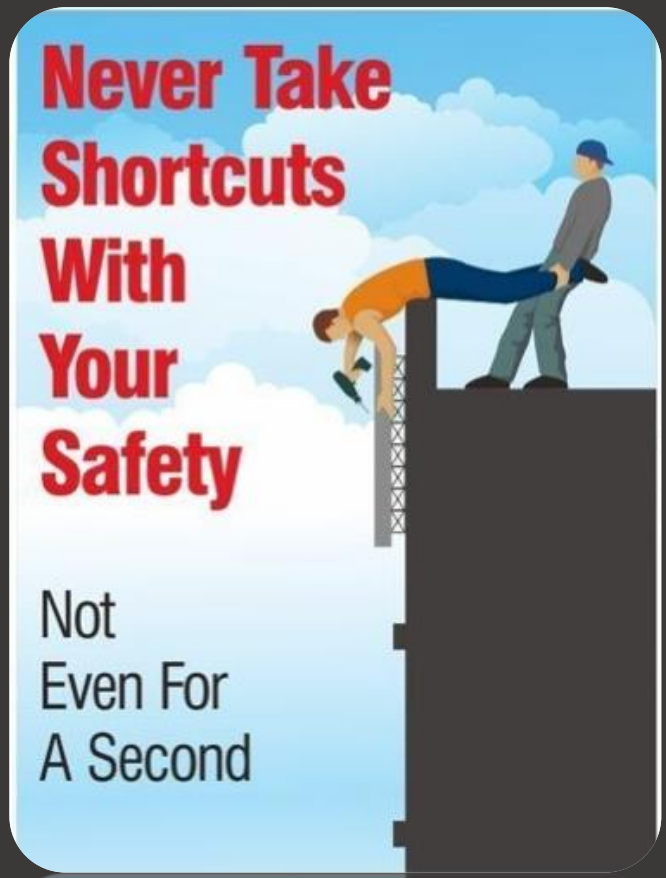
A positive safety culture has the following features:

Individuals values being informed, and informing the others, about safety.

Promotion of a Positive Safety Culture

A positive safety culture has the following features:

Individuals trust their colleagues and managers with information about their experiences, and the reporting of errors and mistakes is encourage to improve how things are done in the future



Safety Culture Maturity

Safety culture is subject to many influences and organizations may choose to access their safety culture to:

- Understand how people feel about the organization and how importantly safety is perceived

- Identify strengths and weaknesses

Safety Culture Maturity

Safety culture is subject to many influences and organizations may choose to access their safety culture to:

- Identify differences between various groups (subcultures) within an organization

Safety Culture Maturity

Safety culture is subject to many influences and organizations may choose to access their safety culture to:

- examine changes over time (e.g. in response to significant organizational changes such as following an accident, a change in senior management or altered industrial relations arrangement).

Safety Culture Maturity

- There are several tools which are used to assess safety culture maturity, usually in combination:

Safety Culture Maturity

Assessing the safety culture maturity can provide valuable insight, leading to actions by management that will encourage the desired safety behaviors.

Safety Culture Maturity

It should be noted that there is a degree of subjectivity with such assessments and may reflect the views and perceptions of the people involved at a particular moment only.

Safety Culture Maturity

Also, scoring safety culture maturity can have unintended consequences by inadvertently encouraging the organization to strive to achieve the “right” score, rather than working together to understand and improve the safety culture.

Summary:

1. A Healthy Safety Culture requires shared commitment between personnel & management to safety responsibilities

2. A “JUST CULTURE” can only be established with trust and accountability among the personnel within an organization, considering the Human Errors, and discourages blaming the individual for an honest mistake that has contributed to an accident or incident.