Safety Paradigm Shift & KE Just Culture

Corporate Aviation Safety and Security Department

KOREAN AIR

01

Human Factors & Performance

What do you think?

Human Performance is

the Root of the Problem.

Problem Starts with Human Performance?

Fundamental Issues of "Human Error"

- Mostly stems from **cognitive constraints**
- Human capability **is stagnant** , unlike machines
- Systems and tasks are **increasingly complex**
- Explosion in the **volume of knowledge** required

Limits and Expectations of Management

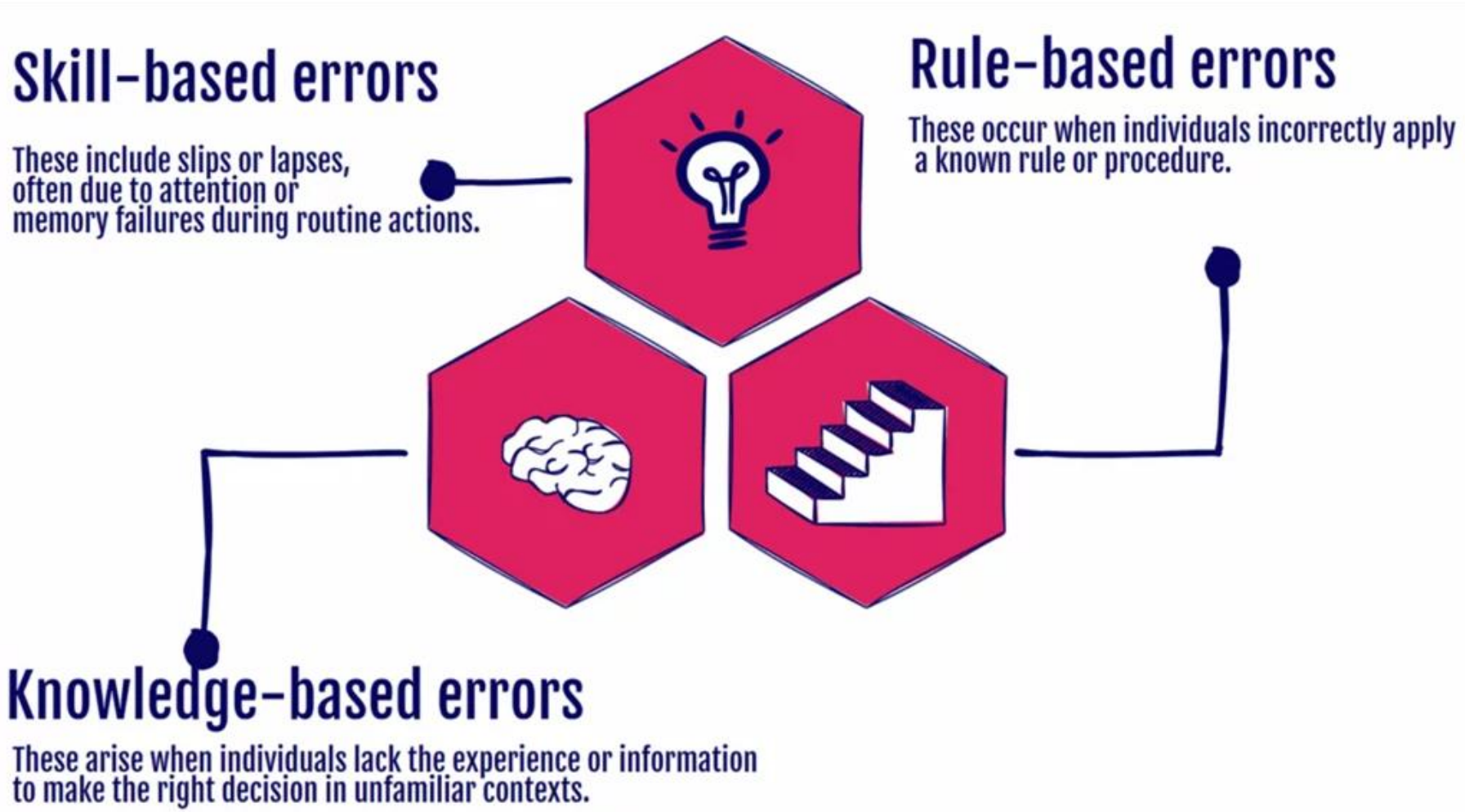
- Realistic Responses:
  Training, Protocols, Vigilance, Supervision

"We use humans out of necessity,
yet wish they would behave like machines"

Human Performance Variability vs. System Complexity

This gap is the core of problems occurring in almost all domains.

Human Errors 3 Main Categories



Human Performance is the Result of the Problem

1. User-Centered Design

Machines are designed, not people.
Design must fit the person.

2. Human as an Asset

Humans are an asset, not a liability.

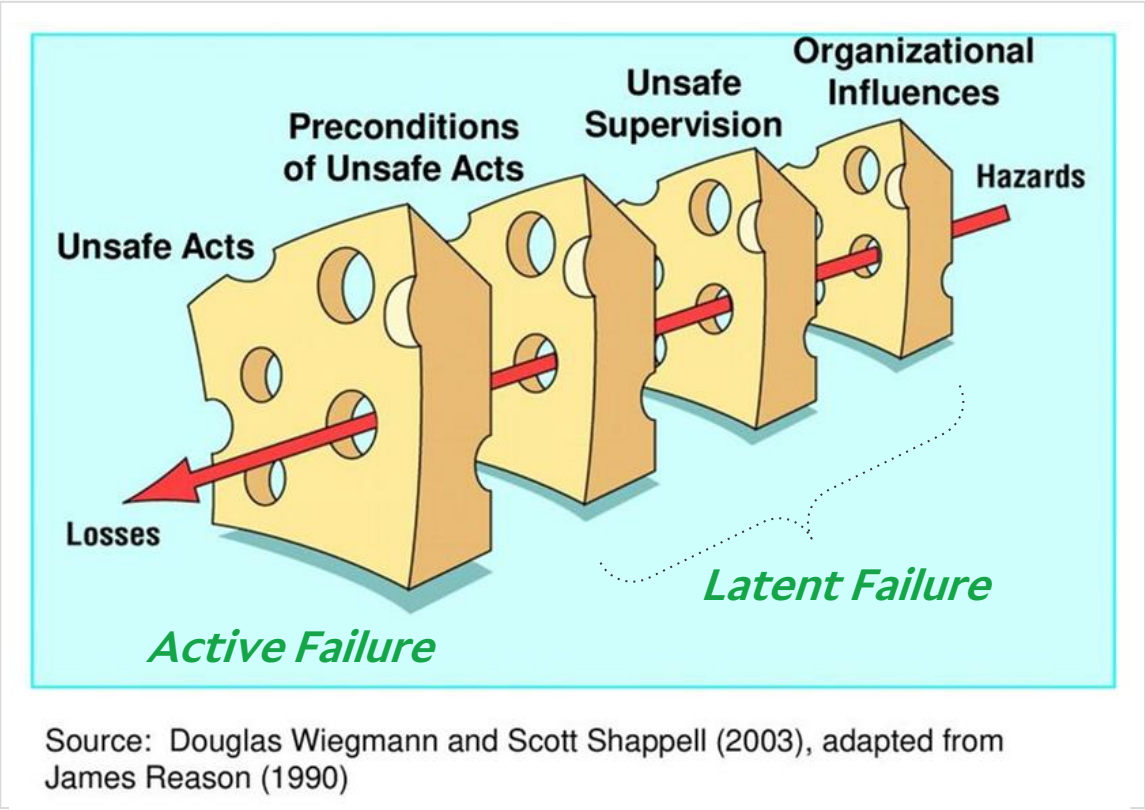
- We only look at humans when there's a problem.
- Humans have served as buffers, immune systems, and goalkeepers.

3. Deeper System Failure

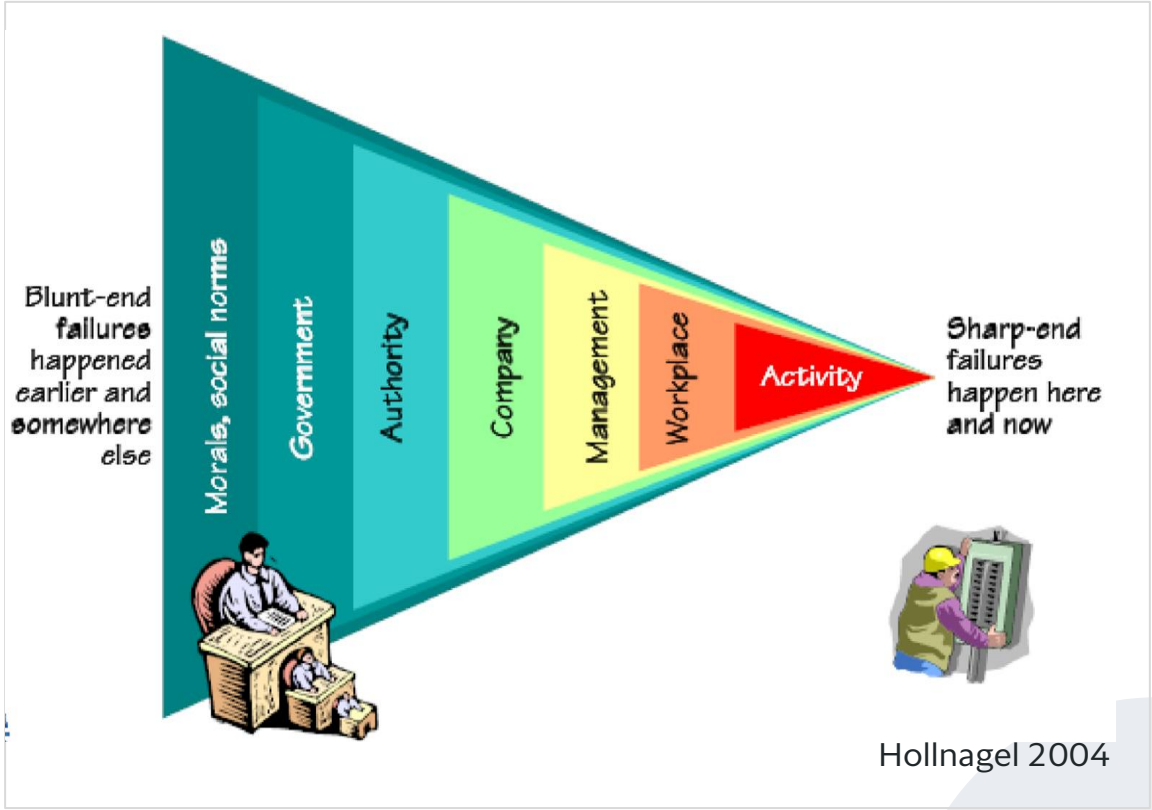
Human failure is the result of deeper system failures.

- Latent organizational faults are more common than individual ones.
- System failures are often hidden because of high human adaptability.
- Often, only those who have experienced the problem (or nearly have) are aware of it.

Swiss Cheese Model : Sharp & Blunt End



Source: Douglas Wiegmann and Scott Shappell (2003), adapted from James Reason (1990)



Hollnagel 2004

Accidents aren't caused by a single factor

They occur when holes in multiple layers of defense (cheese) align

Failures occur somewhere in the past ***(Active Error)***

and manifest after remaining latent *(Latent Error)*

Comparison of Two Failures

Fixing one latent failure can be better than fixing hundreds of human errors

settings_accessibili

Human Error (Active Failure)

ty

"Sharp End"

- **Actor :** Direct frontline workers (Pilot, Controller, Mechanic, etc)
- **Features :** Mistakes, Slips, Errors, Violations
- **Result :** Immediate and visible accident occurrence

account_tree

Latent Failure

"Blunt End"

- **Actor :** Manager, System Designer, Organization (Policy, System, Culture, etc)
- **Features :** Hidden within the system
- **Result :** Remains latent for a long time and causes failure when triggered

Dilemma : The Tendency for Latent Problems to Remain Latent

Latent problems are exposed in the details of the situation.

- When human flexibility is tested by coincidental compound factors (of all things...).
- Problems that even the person involved could not have foreseen.

Only the person involved truly knows the risk.

- It is a fragmented experience, but it is like discovering the entrance to a cave leading to a major latent problem.
- Their experience can help prevent countless repeated losses.

The person involved is someone who doesn't want to speak up.

- Blame, punishment, and prejudice are expected instead of understanding and support.
- "If I am just careful next time, it's as if nothing ever happened."

⇒ It becomes a hidden reef that no one knows about until a truly major accident occurs.

Analysis or Blame?

When a hidden reef is finally revealed

- Superficial accident analysis and a culture of blame
- Instead of cool-headed analysis, 'Whose fault is it?' takes precedence

To make matters worse...

- Hindsight, Representativeness, and Corresponding Bias combine

  ⇒ **Culture of 'Blaming'**

"In the end, analysis and understanding disappear,
leaving only the search for a culprit and the next accident"

02

How are things going so far?

ICAO Safety Management Framework

ICAO Global Aviation Safety Plan (GASP)

The strategic guide for worldwide aviation safety.

check_circle **Purpose:** Continually reduce fatalities and accident risks

check_circle Provides a global framework for safety improvement

check_circle Coordinates international efforts and resources

link

State Safety Programme (SSP)

The national implementation of safety management.

verified **Legal Basis:** Established under ICAO Annex 19

verified National-level framework for safety management

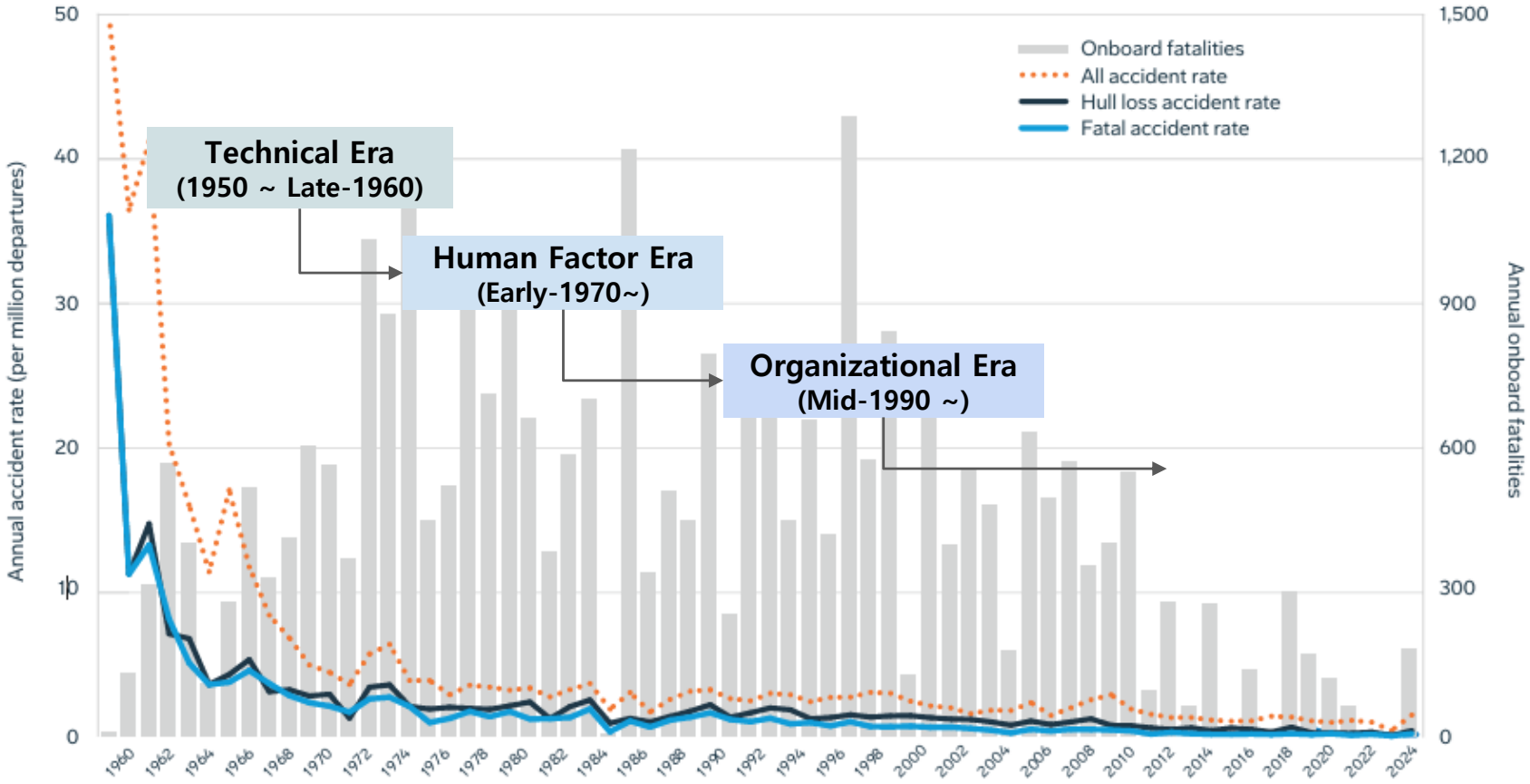
verified Integrates state regulation and safety oversight

Global Progress

Reactive Incident Response to Enterprise-Wide Safety Management

Accident Rates and Onboard Fatalities per One Million Departures

(Boeing Statistical Summary | Worldwide Commercial Jet Fleet 1959 through 2024)



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Safety Culture as the Foundation of Safety Performance

Safety Culture Matters (Doc. 9859)

Safety culture is one of the **strongest influences** on organizational safety performance.

ICAO Perspective (Doc. 9859)

- An organization may implement all formal safety management requirements
- **Without a positive culture, safety performance will likely underperform**

Why This Matters

A positive safety culture:

- Encourages open communication
- Builds employee trust
- Supports proactive hazard identification
- Strengthens risk management effectiveness

Key Message

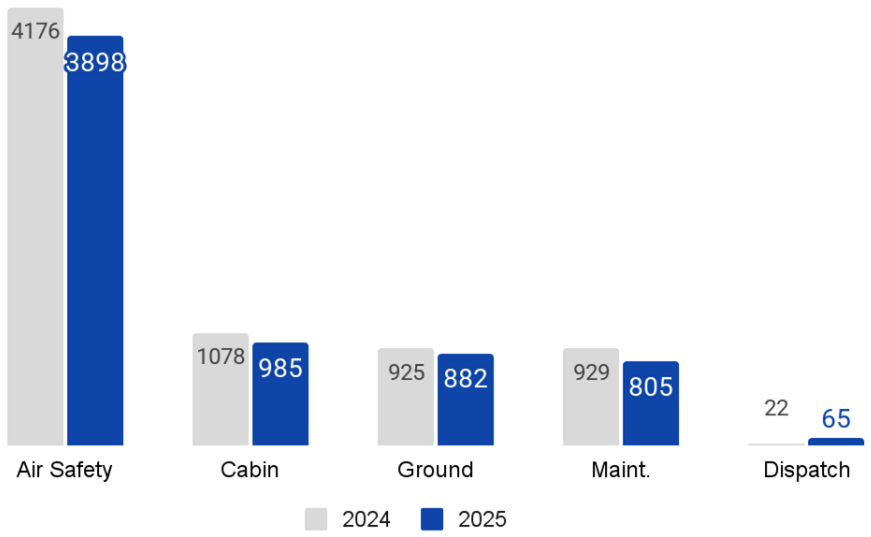
Safety management systems alone are not enough — **organizational culture ultimately determines** how effectively safety is managed.

One Metric of Positive Safety Culture is Proactive Reporting

SafeNet Reporting Trends

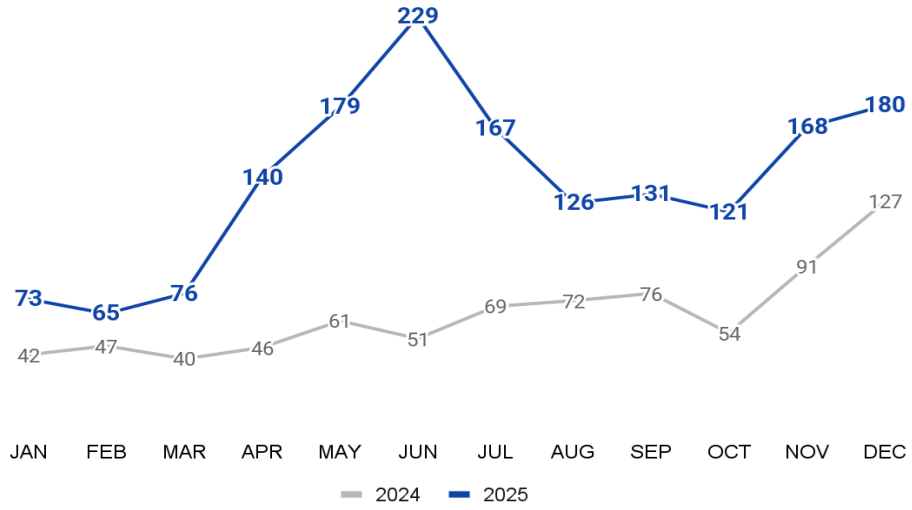
2025 Mandatory Report Status (YoY -6.9%)

- Total Received : 6,635 (2024 : 7,130)



2025 Voluntary Report Status (YoY +113.3%)

- Total Received : 1,655 (2024 : 776)
- Main Proposal Type : Facility 25% > Equipment 22% > Training Enhancement 12%



What is *Just Culture* and how does it increase *Voluntary Reports*

What is a Just Culture?

A balance between:

- Non-punitive reporting
- Personal accountability

Core Principle

Distinguishes between:

- Honest human error
- Willful negligence / Reckless behavior

Why It Works

Report without fear:

- Mistakes & Hazards
- Near-misses

Organizational Benefit

- Early identification of systemic flaws
- Corrective actions before accidents occur
- Improved organization-wide safety intelligence

Accountability Still Exists

Honest Mistakes : Coaching & system improvement

Reckless/Intentional : Disciplinary action

Just Culture vs. Blame-free Culture

Just Culture is **not** unconditional immunity from discipline.
It is a culture of continuous system improvement built strictly upon **Fair Accountability**.

Blame-free Culture

- ✗ **Overlooks all mistakes and violations**, completely failing to identify the root causes of problems.
- ✗ Even deliberate or **reckless behavior** is tolerated without any consequences.
- ✗ Leads to repeated accidents and a severe breakdown of organizational discipline.

Lack of Accountability

Just Culture

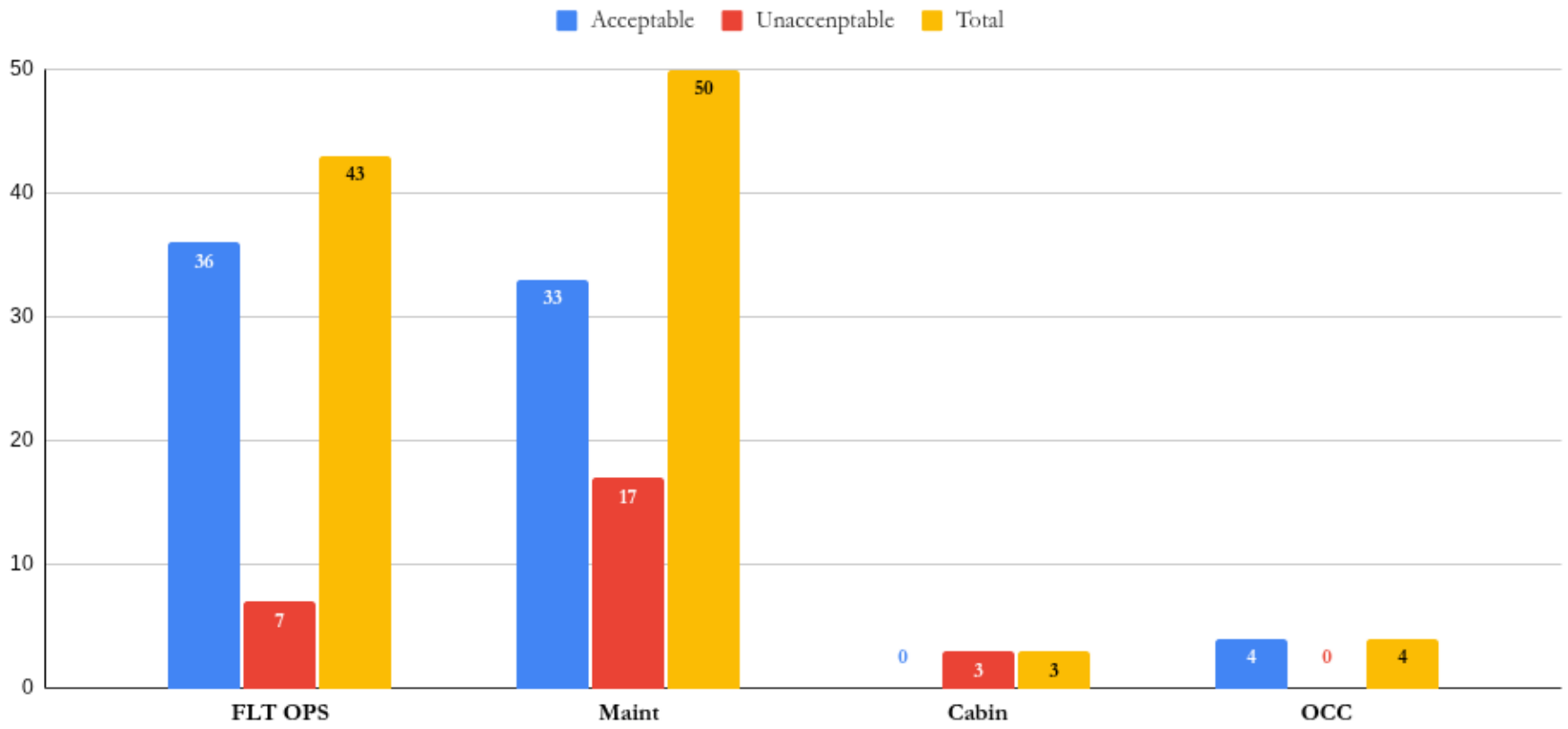
- ✓ Tolerates **honest mistakes**, utilizing them as valuable opportunities for system improvement.
- ✓ Takes strict, uncompromising action against **deliberate violations or sabotage**.
- ✓ Promotes transparent safety reporting and establishes strong, fair organizational discipline.

Fair Accountability

KE Just Culture Committee (JCC) Adjudications

KE JCC Implementation : From JAN 2024

6 Operational Divisions (FLT OPS, MAINT, CABIN, OCC, CABIN, PAX, CGO)



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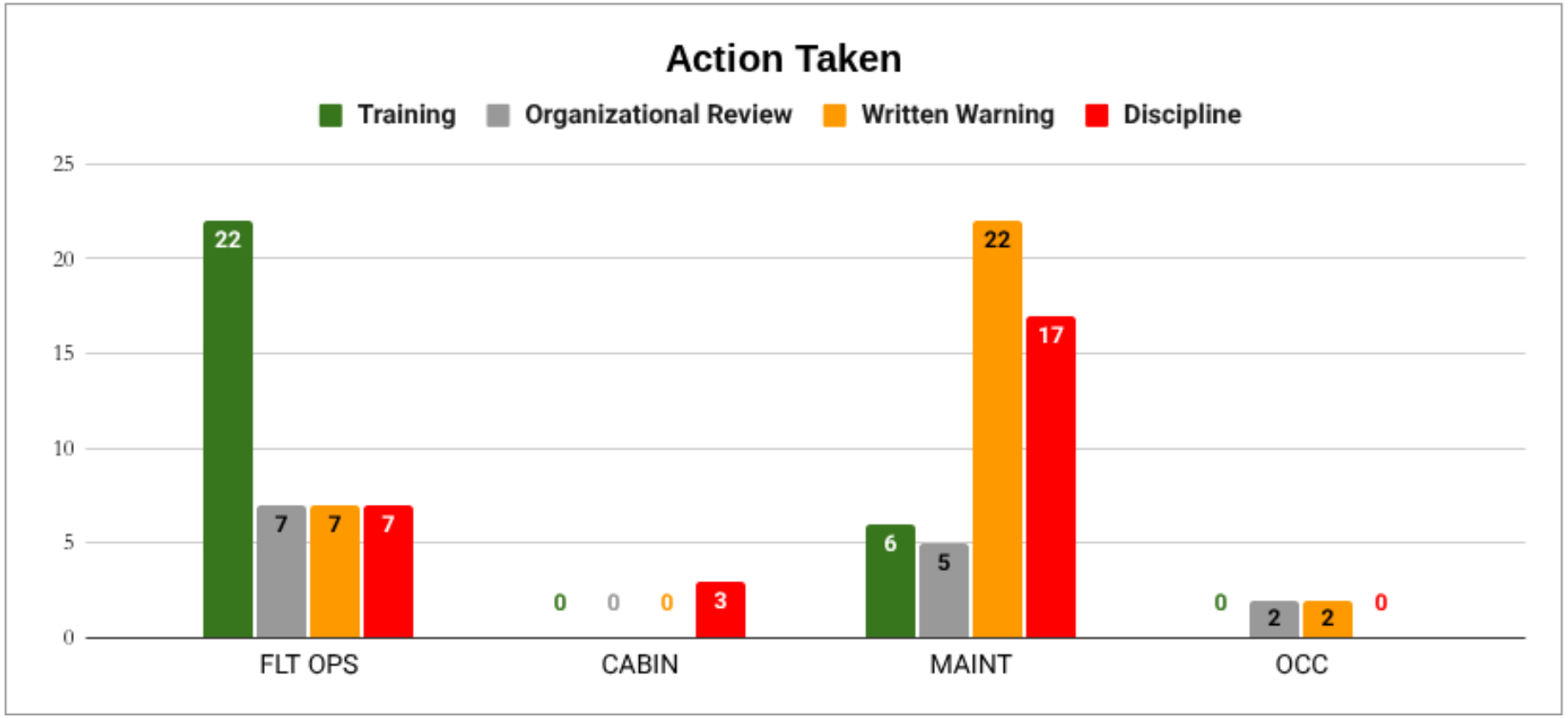
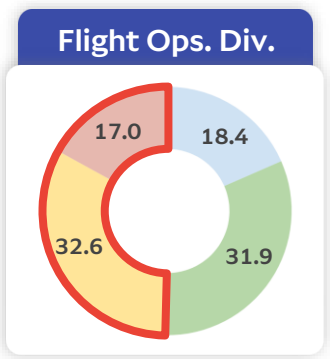
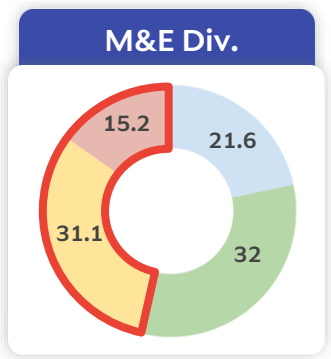


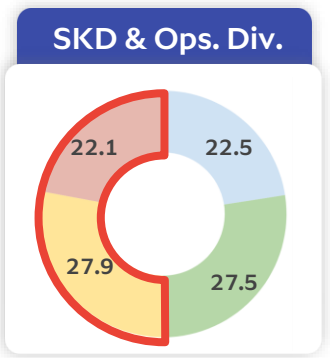
2025 KE/OZ Safety Week Survey Result

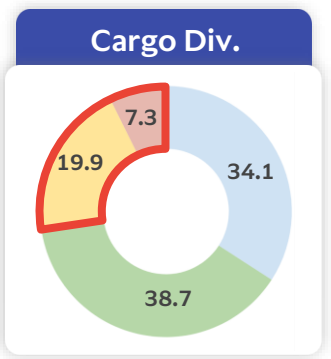
Q. What does '**reporting one's own errors**' mean to you? (Total respondents : 2,501)

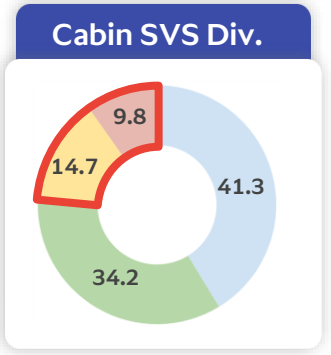
It's a great chance to fix errors and prevent recurrence.	It is a great opportunity to improve and move forward together with my team.	I hesitate to report because I fear potential negative repercussions for myself.	I feel ashamed because I feel like I am exposing my professional weaknesses.

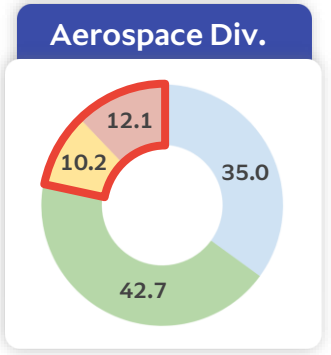


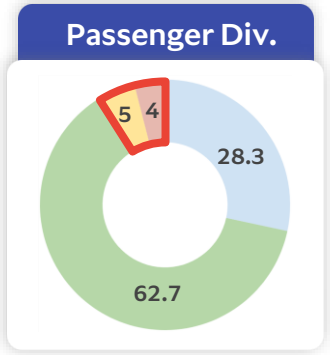


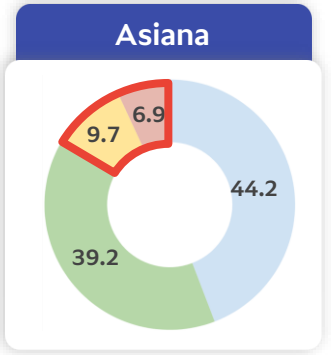












03

Why Use Voluntary Reporting Programs?

Global Aviation Governance

ICAO Aviation Safety Action Programme Initiative

International Civil Aviation Organization
Regional Aviation Safety Group - Pan America (RASG-PA)

WORKING PAPER

RASG-PA ESC/40 — WP/03
13/05/25

Fortieth Regional Aviation Safety Group — Pan America Executive Steering Committee Meeting (ESC/40)
Lima, Perú, 28 to 29 May 2025

Agenda Item 4: **RASG-PA Safety Management Process**

AVIATION SAFETY ACTION PROGRAMME INITIATIVE FOR THE PAN AMERICA REGION

(Presented by the PA-RAST)

EXECUTIVE SUMMARY

This paper is to request the ESC to approve PA-RAST's Aviation Safety Action Programme (ASAP) Initiative and implementation strategy for the Pan America Region.

Action:	The meeting is invited to: a) Take note of the information provided in this working paper b) Approve the proposed decision in 3.2.
Strategic Objectives:	• Safety
References:	• US FAA Aviation Safety Action Program Advisory Circular AC 120-66C

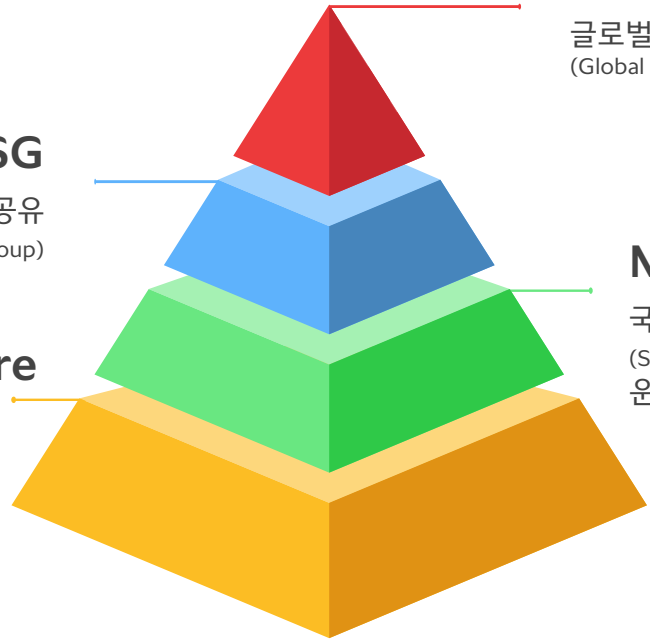
Participating Pan American States: Mexico, Brazil, (new - Columbia, Dominican Republic)

ICAO GASP
글로벌 항공 안전 계획
(Global Aviation Safety Plan)

RASG
지역별 협력 및 안전정보 공유
(Regional Aviation Safety Group)

MOLIT
국가 항공 안전 프로그램
(SSP, State Safety Program)
운영 및 법규화

항공사 / Just Culture
실행 기반



Regulatory Enablement and Industry Readiness

Observations from Pan America Region

- Industry interest preceded State enablement
- Main barrier was lack of *legal/regulatory infrastructure*
- Authorities need a "*non-punitive*" mechanism to accept Voluntary reports

Key Insight

- **Industry willingness already exists**
- **State action is the determining factor**

Strategic Implication

Once the regulatory framework exists, safety-intelligence benefits become immediately achievable.

State action is the critical catalyst for enabling industry-led safety reporting systems.

Why are Authorities and Operators interested?

AEROMEXICO

Cultivating System Trust through Group AeroMexico Safety Action Program (GAMSAP) - ***Voluntary Reporting Provides "non punitive" incentive to reporter and safety intelligence to the Authority and operator***

965 Single Source Reports

YTD 2026 VOLUME

99%

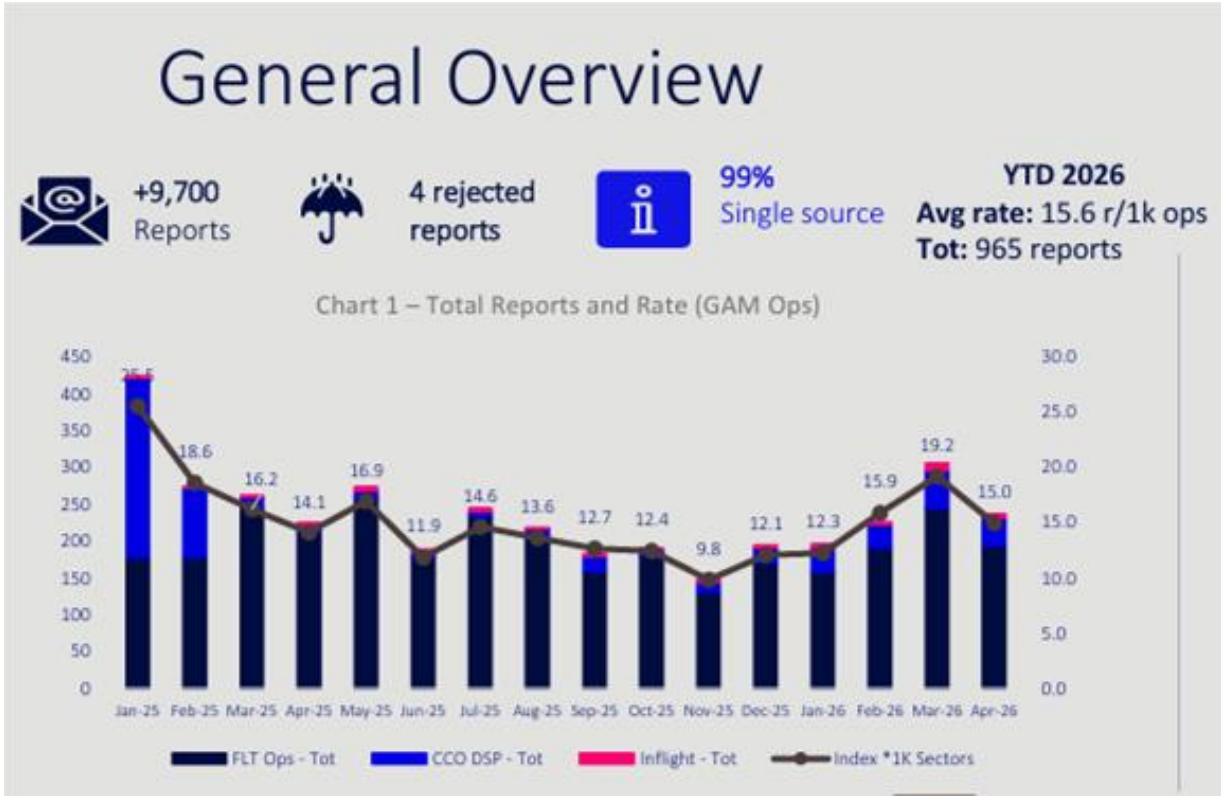
SINGLE VOLUNTARY SOURCE

Established Psychological Safety

High system integrity is evidenced by the 99% voluntary "single source" reporting rate and minimal rejection (4 cases).

Employees perceive the system as truly non-punitive, fostering a culture of openness and continuous improvement.

- Implemented GAMSAP in:
  - 2020 - Flight Operations
  - 2025 - Cabin and Dispatch



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Single-Source Events highlight Proactive Weak Signals

01

Single-Source Events

Events not visible through:

- Mandatory occurrence reporting
- Surveillance
- Traditional oversight mechanisms
- Only the singular reporter has knowledge of the event

02

Value of Voluntary Channel

Provides systematic visibility into:

- Precursor-level intelligence
- Weak operational signals
- Near-events and procedural deviations

03

Key Point

Mandatory systems often capture only higher-severity occurrences.

The non-punitive channel is essential for capturing precursor data that traditional mandatory reporting systems miss.

Protection of Safety Information and Individual Reporters

01

Essential Functions

- Protection of individual report content
- State access to resulting safety intelligence

02

Why Protection Matters

- Confidentiality enables employee participation
- Reporting volume and quality depend on trust

03

Result

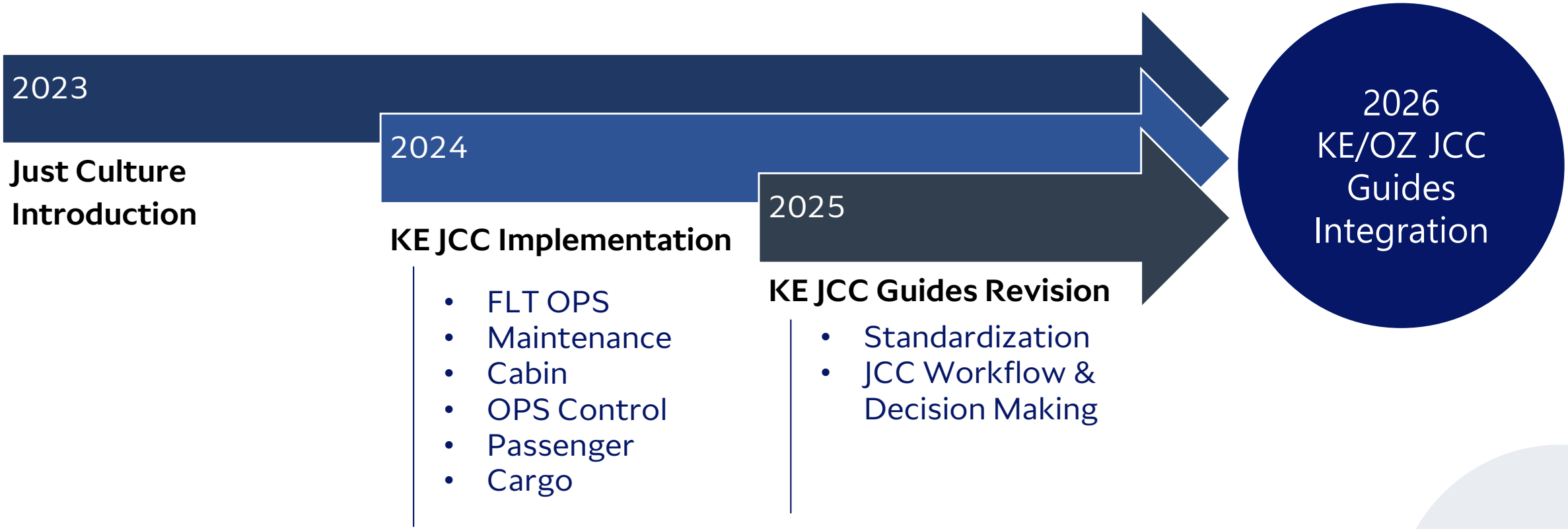
- Better visibility into operational risks
- Enhanced national-level safety intelligence

Securing safety information is the foundation for proactive risk management and intelligence.

04

JCC Implementation

KE Just Culture Implementation



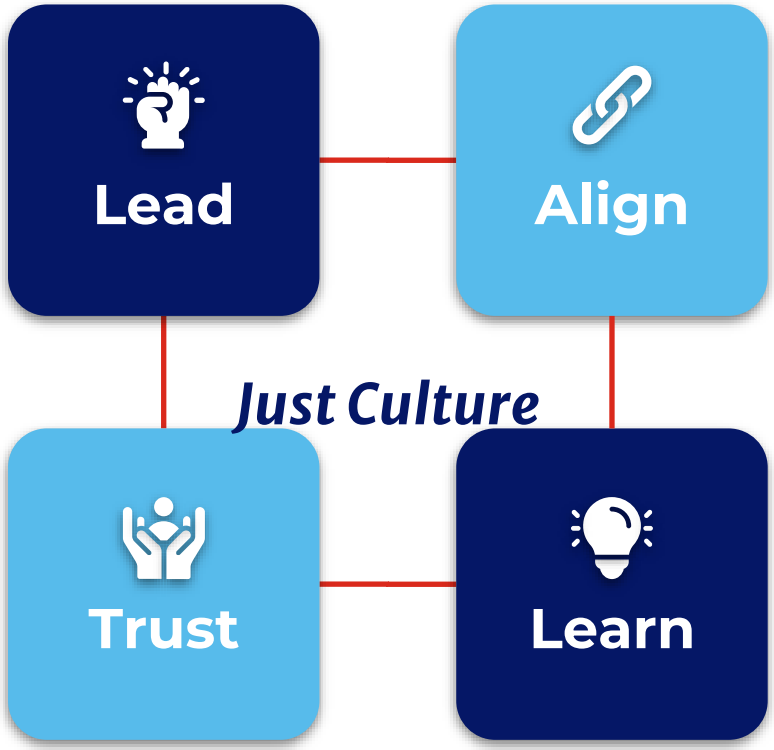
Korean Air's Just Culture and Non Punitive Strategy

Partnership with MOLIT

- Robust Just Culture for the integrated carrier.
- Proactive Influence on Safety Policies

Enhance JCC Trust

- Operating Transparent JCCs
- Driving Reporting & Organizational Reliability



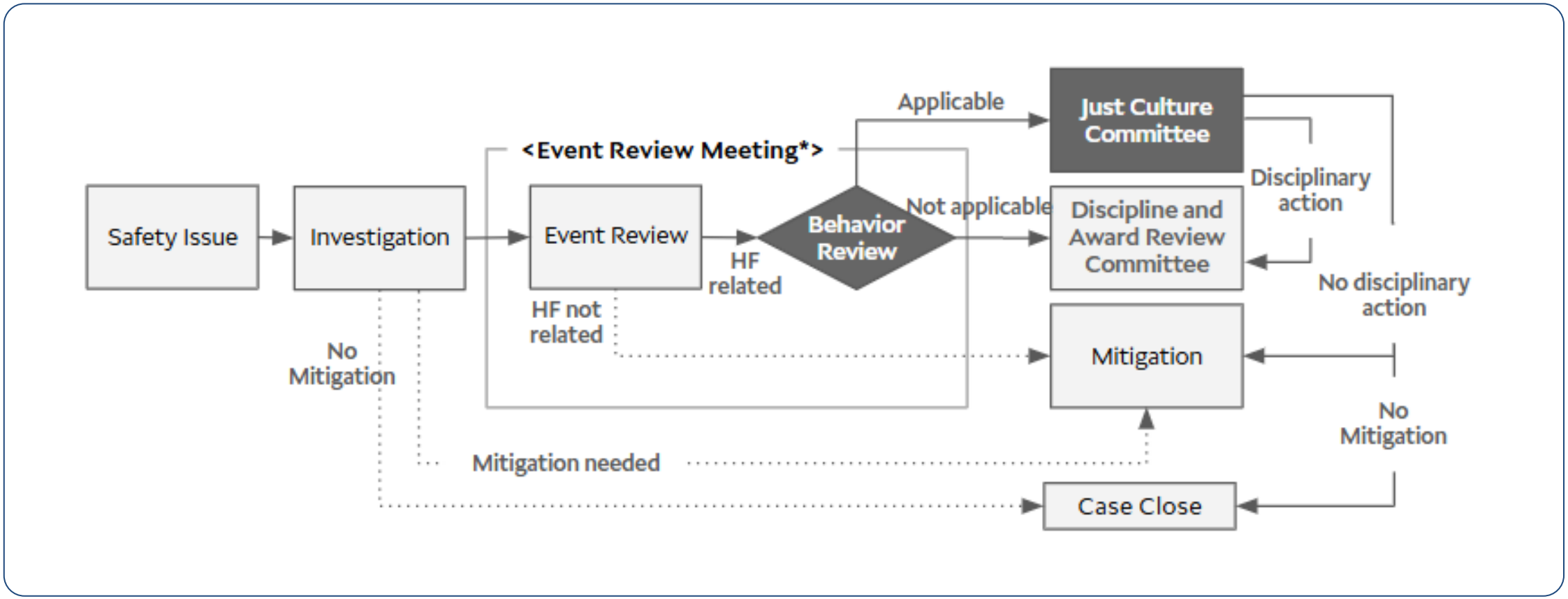
Global Alignment

- Promoting Voluntary Reporting (via ICAO guidelines)
- Adopting Global Standards for Just Culture

Strengthen JCC Role

- Driving Safety Learning via Fair Accountability
- Universal JCC Standards for Human Factors

Just Culture Committee(JCC) Workflow



(*) Event Review Meeting(ERM) : A meeting to review the relationship between the safety event and Human Factors, and to determine the direction of subsequent procedures.

Behavior Evaluation Criteria

Judgment Criteria	Type of Action
If an employee's act violated company policy and resulted in one or more of the following consequences: ● Violation of aviation safety laws related to alcohol/drugs ● Criminal acts such as intentional falsification, forgery of documents	Obvious Violation
The act was planned with obvious intention of violation, and the employee acted to seek personal gain (physical convenience, economic benefit) or to cause a loss to the company as a result of violation.	Sabotage
The act of non-compliance indicated in the investigation result or report was repeated more than once within an event, and despite the opportunity for correction at the time, non-compliance was consciously determined, and such repeated actions would result in a severe consequence in the future.	Reckless Behavior
The act or work was performed without justifiable reasons despite the fact that the employee had not obtained the qualifications and training required to perform the work at that time. (However, the evidence and facts established in the investigation must meet all of the following conditions.) ● It is in the interests of both the company and the employee not to tolerate such conduct. ● The employee was aware that he/she did not possess the necessary and valid qualifications to perform the job. ● The manager had fulfilled his/her responsibility to ensure the validity of the relevant qualifications. ● However, this should be distinguished from permissible assistance provided within the allowed scope.	

Decision-making Flowchart

Step	Question	Judgment Criteria	Y/N	Treatment
① (start)	Was the unsafe act intentional?	The determination is based on whether the violation was planned before performing the work(duty)	Yes	Go to ②
			No	Go to ③
②	Did the person intend the outcome of the act?	The determination is based on whether the individual gained or could have gained any benefit (including physical convenience) as a result of the violation, or whether there was intent to cause damage to the company.	Yes	Sabotage
			No	Go to ③
③	At the time of the violation, was the person aware of the procedures/ regulations and the risks involved in the act?	A) Was the person aware of the relevant procedures/regulations? B) Was the person aware that his/her actions could have a significant impact on safety (i.e., involve significant risk)? ※ Answer Yes if **BOTH** A) and B) apply. Answer No if only one or neither applies.	Yes	Go to ④
			No	Go to ⑦
④	Are the procedures/regulations clear and actionable?	The determination is based on whether the regulations are clear enough to eliminate confusion and whether there are no issues in applying them on-site.	Yes	Go to ⑤
			No	Go to ⑦
⑤	Did the person misjudge his/her act as low-risk and legitimate, and thereby commit a violation?	Focus on determining whether the violation occurred because the employee underestimated the impact of his/her actions on safety, misjudged them as insignificant, or mistakenly believed the act was justified due to unavoidable circumstances. (This assessment is intended to confirm whether there was any deliberate malicious intent.)	Yes	Go to ⑥
			No	Reckless Behavior

Decision-making Flowchart

Step	Question	Judgment Criteria	Y/N	Treatment
⑥	Is there a history of repeated instances of the act described in⑤?	Whether the act described in item ⑤ has been repeatedly committed two or more times within the past 12 months shall be the basis for judgment.	Yes	Reckless Behavior
			No	At Risk Behavior
⑦	Does the substitution test yield the same result?	Review by substituting employees with the same skill level under the same conditions.	Yes	Go to ⑧
			No	Go to ⑨
⑧	Were there systemic issues within the company?	Whether the characteristics influencing unsafe acts were induced by company systems (regulations/procedures, training systems/content/methods, schedule/fatigue management, personnel deployment, etc.)	Yes	Organiza -tional factors
			No	Go to ⑩
⑨	Has the similar type of unsafe behavior been repeated two or more times within the last 12 months?	Determination is based on whether there were two or more instances within the last 12 months of failing to take necessary corrective actions at the appropriate time when errors occurred during work performance, and repeatedly failing to follow procedures that could have corrected the errors.	Yes	Go to ⑧
			No	Human Error
⑩	Are there personal factors that repeatedly cause the similar type of unsafe behavior?	Review whether the similar type of unsafe act has been persistently repeated two or more times within the last 12 months due to personal factors such as individual habits, attitudes, tendencies, or lack of willingness to comply with regulations (based on investigation results such as interviews).	Yes	At Risk Behavior
			No	Human Error

Definition and Actions for Types of Conduct

Types of Action	Definition	Basic Measures	
		System	Individual
Sabotage	● Acts with the clear intent to disrupt aircraft operations or cause harm to others	● Organizational Element Review	Legal action or disciplinary action under company regulations
Reckless Behavior	● An act that recklessly disregard a significant/obvious risk despite being aware of it ● An act that intentionally disregard a significant/obvious risk despite being aware of it and deliberately take the risk ● An act that clearly deviates from the standards of reasonable person's behavior or virtually completely disregards a foreseeable and avoidable serious risk	● Organizational Element Review	Discipline and Award Review Committee
At Risk Behavior	● When a conscious act chosen due to failure to recognize the risk or a mistaken judgment of its justification unintentionally results in increased danger.	● Organizational Element Review	Written warning, Coaching and feedback, Training
Human Error	● Unintended actions that lead to undesired outcomes (slips, lapses, mistakes, etc.)	● Organizational Element Review	(*) None(Closure) or Coaching or Training (Competency enhancement)
Organizational Factor	● In cases where defects in the system, including the overall environment, regulations, and procedures, have resulted in errors or accidents.	● Organizational Element Review	None

Just Culture, it is Shared Accountability.

Employee Accountability

Compliance with procedures, transparent reporting of hazards, and receptiveness to feedback.

Organizational Accountability

Fair evaluation, identification and correction of systemic flaws, and fostering a learning culture over blame.

Thank you

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