



# Agile Safety Leadership and Change Management for Advanced Aviation Safety



**Presented by Rudi Rademan** 

Discover the agile principles in the context of aviation safety management

## My Journey in Aviation Safety



- Family Legacy: Born into a family deeply ingrained in aviation, inherited a legacy of commitment to flight safety.
- ➤ Over 25 Years of Experience: Accumulated extensive experience spanning more than two decades in aviation industry.
- ➤ Global Advocate for Safety: Led initiatives worldwide aimed at elevating safety standards and fostering continuous improvement.
- Passionate Aviation Advisor: Dedicated to advancing flight safety practices globally through speaking engagements and writing.
- ➤ Multifaceted Expertise: Holds certifications in aircraft maintenance, mechanical engineering training, pilot training, human factors, aircraft accident investigation training and advanced safety management training.
- ➤ Certified Global Flight Safety Auditor: Skilled in ensuring compliance with global safety standards, crucial for maintaining safety excellence.
- Agile Methodologies Champion: Utilizes agile principles to drive impactful safety initiatives, leveraging experience from leading aviation and software teams.
- Commitment to Innovation: Sees opportunities for innovation in aviation safety through technology and data-driven insights.
- ➤ Partnership with Vietnam Airlines: Committed to collaborating with Vietnam Airlines and the aviation community to enhance safety culture and embrace future trends.

#### What we'll cover today:

#### **Introduction (5 min)**

#### Overview (120 min)

- Overview of Aviation Safety (09:10 09:30)
- Safety Data (09:30 10:00)
- Tea Break (10:00 10:15)
- Agile Flight Safety (10:15 10:30)
- Change Management (10:30 10:45)
- Commitment of Top Executives (10:45 11:00)

**Interactive Session & Closing (20 min)** 



#### DECLARATION /

By signing the Charter, Executives pledge their commitment to continuously evolve safety culture at their airlines by

## 1 EMBEDDING CHARTER PRINCIPLES INTO THEIR ORGANIZATION(S)

through measurable, practical actions, and, to the extent possible, sharing with IATA and industry information on progress, including opportunities and challenges, to deliver these actions.





#### INSPIRING ATTITUDES 2

in teams at every level to delive continuous improvement in safet performance and operational resilience

3 NURTURING AN ENVIRONMENT OF TRUST

where people are willing to share safety-related information within the organization.





GROWING
COLLABORATION WITH
INDUSTRY,
GOVERNMENT AND
OTHER STAKEHOLDERS

hat may assist the eviation industry in achieving safer operation and strengthening its safety DNA.



## SAFETY LEADERSHIP CHARTER

#### 8 GUIDING PRINCIPLES









CREATE AN ATMOSPHERE OF TRUST, WHERE EMPLOYEES ARE ENCOURAGED AND CONFIDENT TO REPORT SAFETY-RELATED INFORMATION.

ESTABLISH A WORKING ENVIRONMENT IN WHICH CLEAR EXPECTATIONS OF ACCEPTABLE AND UNACCEPTABLE BEHAVIORS ARE COMMUNICATED AND UNDERSTOOD.

CREATE AN ENVIRONMENT WHERE ALL EMPLOYEES FEEL RESPONSIBILITY FOR SAFETY.

REGULARLY ASSESS AND IMPROVE ORGANIZATIONAL SAFETY CULTURE.





## Elevating Safety Excellence: The Benefits of Embracing the IATA Safety Leadership Charter

➤ By adopting the IATA Safety Leadership Charter Vietnam Airlines committed to Elevating Safety Excellence.

### **Safety Leadership Guiding Principles**

- ➤ Leading the obligation to safety through both words and actions.
- Fostering safety awareness among employees, the leadership team, and the board.
- ➤ Creating an atmosphere of trust, where all employees feel responsible for safety and are encouraged and expected to report safety-related information.
- Guiding the integration of safety into business strategies, processes, and performance measures and creating the internal capacity to manage and achieve organizational safety goals.
- Regularly assessing and improving organizational Safety Culture.







## SAFETY CULTURE AIMING GENERATIVE LEVEL 5.0 BY 2025

Safety Digital Transformation
Safety Communication
Safety Culture Training
Safety Culture Survey
Knowledge Management

**Reporting Culture** 

**Continuous Learning Culture** 

**Just Culture** 

### Why Safety Culture Matters: Learning from the past

The term 'safety culture' originated in the aftermath of significant incidents such as the:

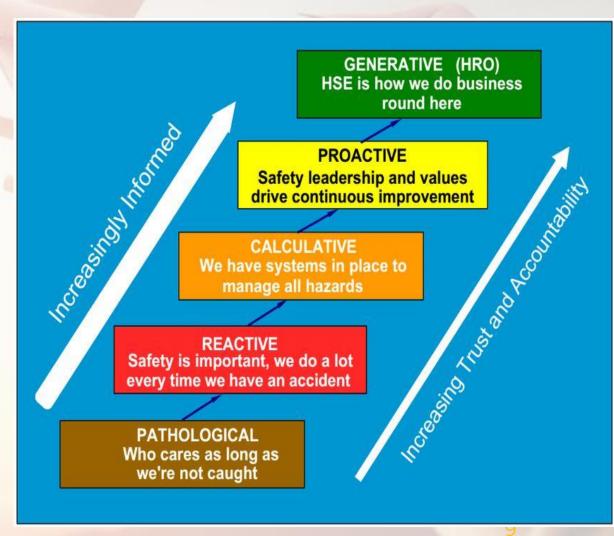
- Chernobyl Disaster (1986)
- King's Cross fire (1988)
- Piper Alpha (1990)

The Advisory Committee on the Safety of Nuclear Installations emphasized its importance, as did subsequent studies by regulatory bodies like the HSE.

### Why Are We Here Today?



#### Vietnam Airlines Achieving 6.2 / 7







## Agile in-Flight Safety (AiFS®)

**Presented by Rudi Rademan** 

**Empowering Excellence: Navigating Safety Challenges with Agile Precision** 

### **Understanding VUCA and Agile in-Flight Safety (AiFS®)**

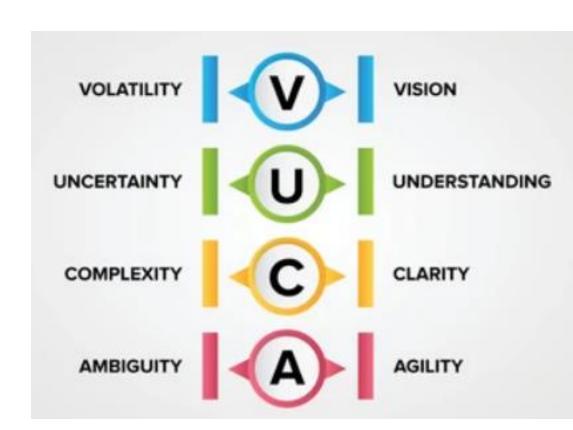
#### Understanding VUCA and Agile in-Flight Safety (AiFS©)

#### > VUCA:

- Volatility
- Uncertainty
- Complexity
- Ambiguity

#### Agile in-Flight Safety (AiFS©):

- Definition: A forward-thinking approach emphasizing adaptability, responsiveness, and continuous improvement in aviation safety practices.
- Key Principles:
  - Adaptability
  - Responsiveness
  - Continuous Improvement
- Application: Real-time data analysis, proactive risk management, and adaptive decision-making.
- Objective: Enhancing safety outcomes in flight operations.



### Importance of Agile in-Flight Safety (AiFS<sup>©</sup>)

- Safety is paramount in aviation.
- Agile in-Flight Safety (AiFS) enhances safety through realtime data analysis and adaptive decision-making.
- ➤ AiFS enables proactive identification and mitigation of safety risks during flight operations.
- Implementation of AiFS can contribute to a culture of continuous safety improvement within Vietnam Airlines.



## Agile-in-Flight Safety © by Rudi Rademan

## Foundational Principles:

**Adaptability:** AiFS© prioritizes adaptability, enabling airlines to swiftly respond to evolving safety risks and operational conditions.

**Responsiveness:** AiFS© focuses on real-time data and feedback to proactively identify and address safety hazards during flight operations.

**Continuous Improvement:** AiFS© fosters a culture of ongoing improvement, refining safety processes based on insights from operations and safety incidents.

#### **Key Components:**

Real-time Data Analysis: AiFS© relies on advanced data analytics techniques to monitor and analyze safety-related data in real-time, including flight data, maintenance records, and safety reports.

Proactive Risk Management:
AiFS© incorporates proactive risk management strategies, such as risk assessment, risk mitigation, and risk communication, to identify and address potential safety hazards before they escalate.

Adaptive Decision-making:
AiFS© encourages adaptive decision-making processes, allowing airlines to quickly adjust operational plans and procedures in response to changing safety conditions or emerging risks.

## Implementation Framework:

Real-time Data Analysis: AiFS© uses advanced analytics to monitor safety data in real-time, including flight data, maintenance records, and safety reports.

Proactive Risk Management: AiFS© implements proactive risk strategies, like assessment, mitigation, and communication, to tackle safety hazards early.

Adaptive Decision-making:
AiFS© promotes agile decision-making, enabling quick adjustments to operational plans in response to safety changes or emerging risks.

#### Continuous Evaluation and Improvement:

Performance Metrics: AiFS© sets KPIs to gauge safety initiative effectiveness and pinpoint improvement opportunities.

**Feedback Loops:** AiFS© gathers insights from frontline staff, passengers, and stakeholders via feedback loops for ongoing safety process enhancement.

Iterative Refinement: AiFS© continuously refines safety procedures based on lessons learned from incidents, near misses, and operational experience.

#### **Leadership and Governance:**

**Executive Leadership:** AiFS© requires strong executive leadership and commitment to safety excellence, with senior management actively championing safety initiatives and providing the necessary resources and support.

**Safety Governance Structure:** AiFS© establishes a robust safety governance structure within the organization, with clearly defined roles and responsibilities for safety management, oversight, and accountability.







## **Aviation Safety Data from ICAO and IATA**

## **Aviation Safety Data**

- Importance of Safety Data, Safety Data Governance and Data Analysis
- ➤ Introduction to Data-AI Driven Safety Behavior
- ➤ Just Culture in Aviation Safety



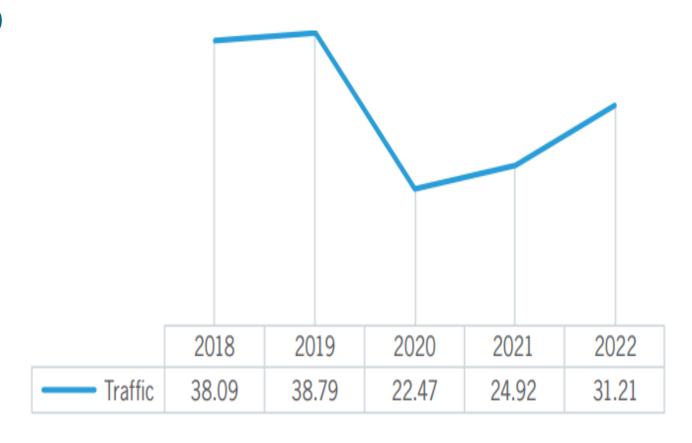
## **Global and Regional Aviation Safety Data**

- Specific safety data from IATA and ICAO provides insights into global and regional safety trends.
- ➤ Data includes accident rates, incident trends, safety protocols, and regulatory compliance.
- ➤ Crucial for benchmarking safety performance, identifying areas for improvement, and implementing effective safety measures.



## Global Traffic Departures [ICAO Safety Report | 2023 Edition]

- Chart 1 illustrates the significant increase in global passenger traffic and flight departures for scheduled commercial operations between 2021 and 2022.
- These statistics highlight the recovery trend in air travel following the pandemic-induced downturn, with notable growth in both passenger numbers and flight operations.



**Chart 1.** | Global traffic of flight departures (million)

## Yearly Accident Statistics: 2018 – 2022 [ICAO Safety Report | 2023 Edition]

- Accident statistics from 2018 to 2022 for scheduled commercial operations involving aircraft with a certified maximum take-off weight (MTOW) over 5,700 kg.
- Visual representation of the trends in accidents over the fiveyear period.

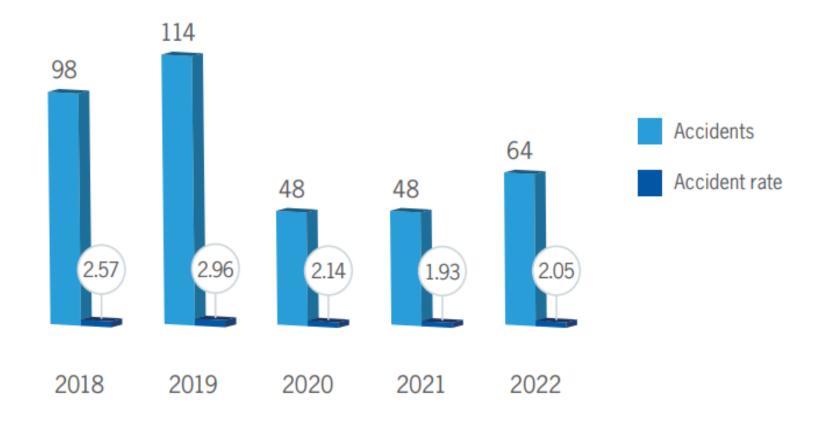


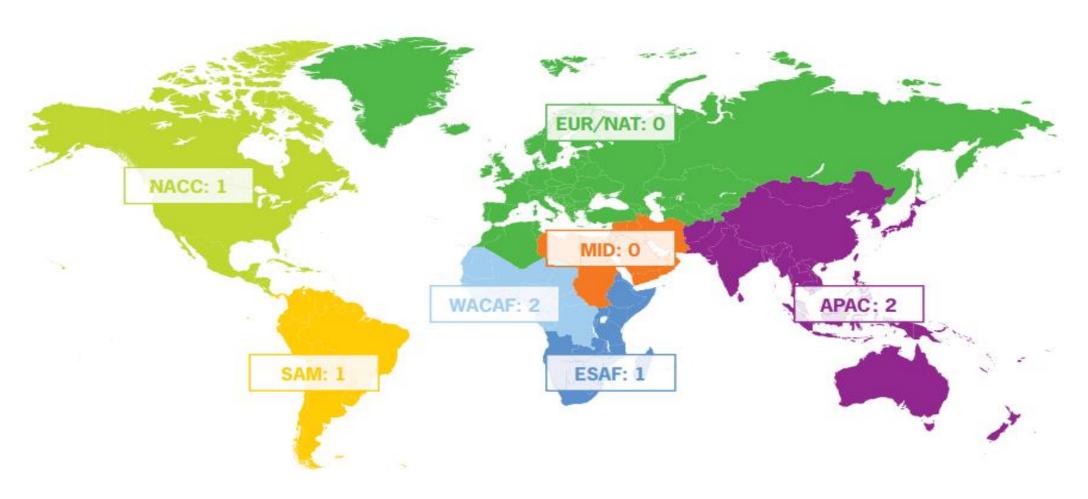
Chart 2. | Accident records: 2018–2022 scheduled commercial operations

## Number of fatal accidents and total fatalities by ICAO region in 2022

- ➤ Table 1 and Figure 1 provide a breakdown of fatal accidents and total fatalities in 2022.
- Distribution of fatal accidents and fatalities across different regions, providing insights into regional safety performance.

| ICAO Region   | Number of fatal accidents | Total fatalities |
|---|---------------------------|------------------|
| Asia and Pacific (APAC)                             | 2                         | 133              |
| Eastern and Southern Africa (ESAF)                  | 1                         | 19               |
| Europe and North Atlantic (EUR/NAT)                 | Nil                       | Nil              |
| Middle East (MID)                                   | Nil                       | Nil              |
| North America, Central America and Caribbean (NACC) | 1                         | 1                |
| South America (SAM)                                 | 1                         | 2                |
| Western and Central Africa (WACAF)                  | 2                         | 5                |

## Number of fatal accidents by ICAO region in 2022

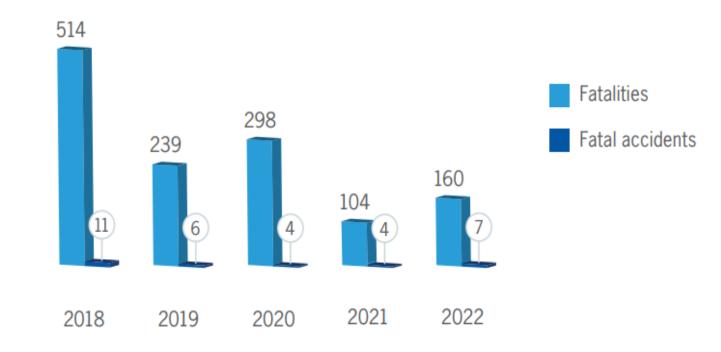


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Figure 1

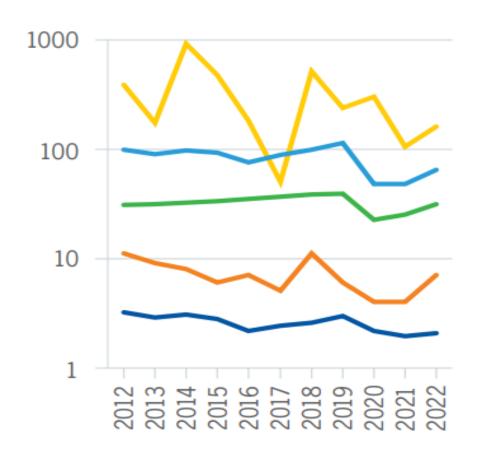
## Fatal accident records: 2018–2022 scheduled commercial operations

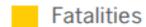
- ➤ 41st Session of the ICAO Assembly
- ➤ The Assembly endorsed the 2023–2025 edition of the Global Aviation Safety Plan (GASP), setting the global strategic direction for aviation safety initiatives and improvements.
- ➤ ICAO, in collaboration with the international aviation community, aims to enhance safety performance, reduce operational safety risks, and support standardization, implementation, and monitoring efforts.



**Chart 3** 

## Historical trends for scheduled commercial operations





- Accidents
- Departures (million)
- Fatal Accidents
- Accident Rate

## Accident Statistics and Analysis – Scheduled Commercial Air Transport

ICAO's GASP aims to reduce operational safety risks, focusing on global high-risk categories of occurrences (G-HRCs) with Target 1.1 to decrease the global accident rate for commercial operations.

The global accident rate reflects safety performance based on fixed-wing aircraft with a certified MTOW over 5,700 kg and is validated by OVSG using Annex 13 definitions.

Data on departures is collected by ICAO's Air Transport Bureau, incorporating operations involving passengers, cargo, and mail, with slight rate adjustments annually.

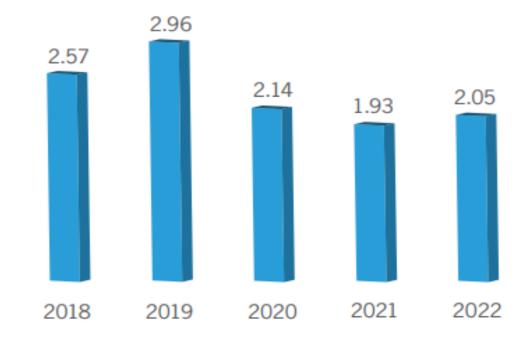
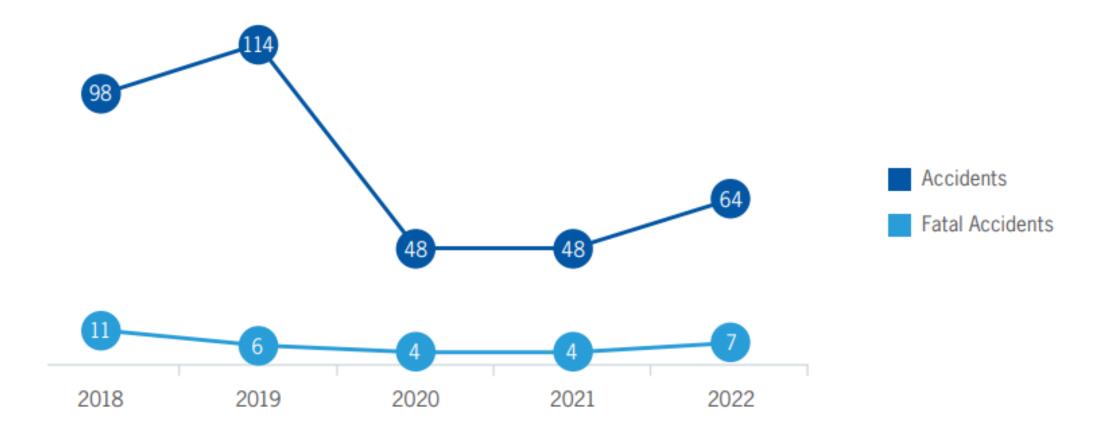


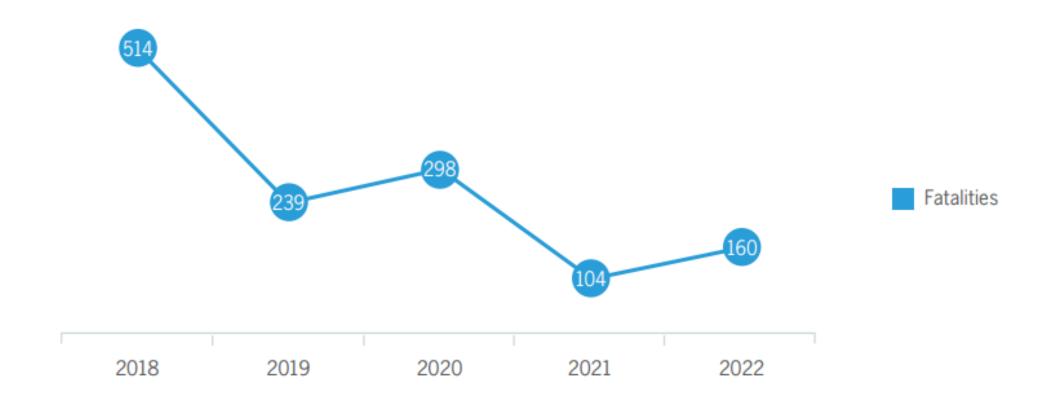
Chart 5. | Global accident rates (accidents per million departures)

### **Accident and Fatality Trend**

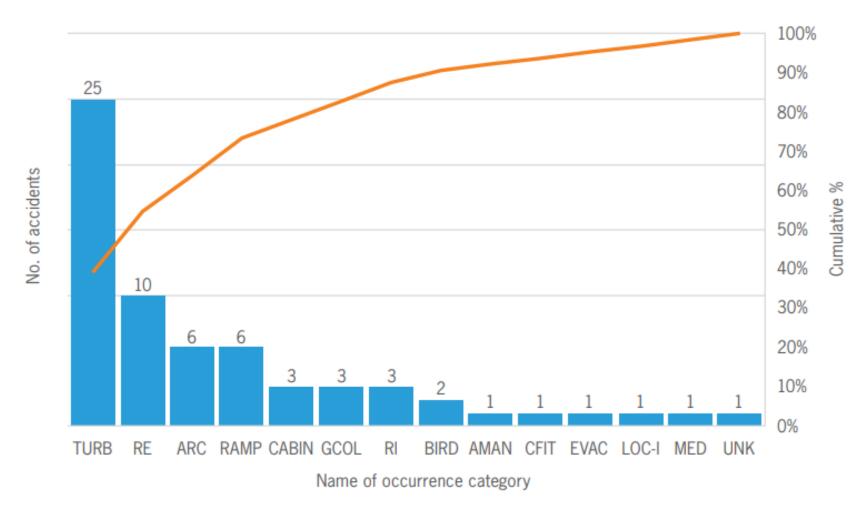


**Chart 6. | Accident trend (2018–2022)** 

### Chart 7. | Fatalities trend (2018–2022)

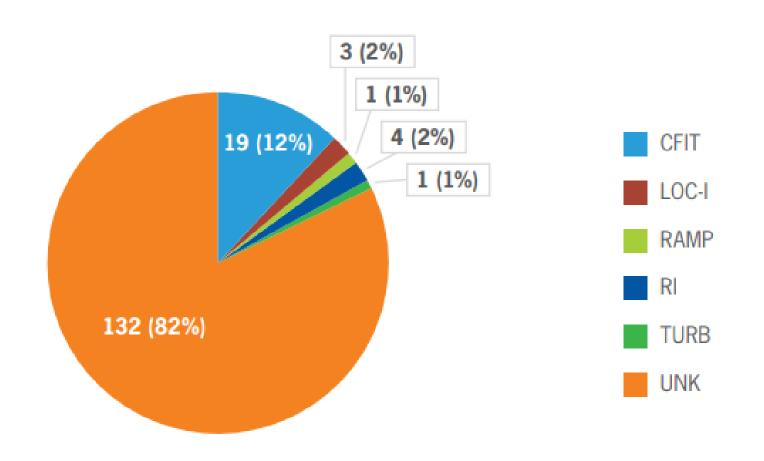


### **Accidents Overview by Occurrence Category**

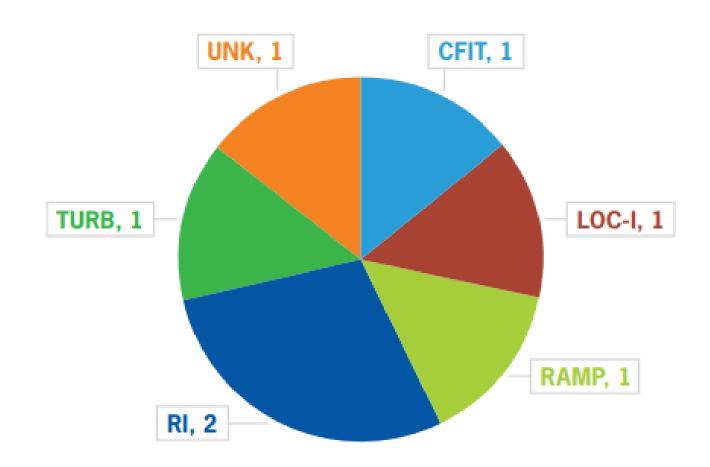


**Chart 8.** | Total accidents by occurrence category in 2022

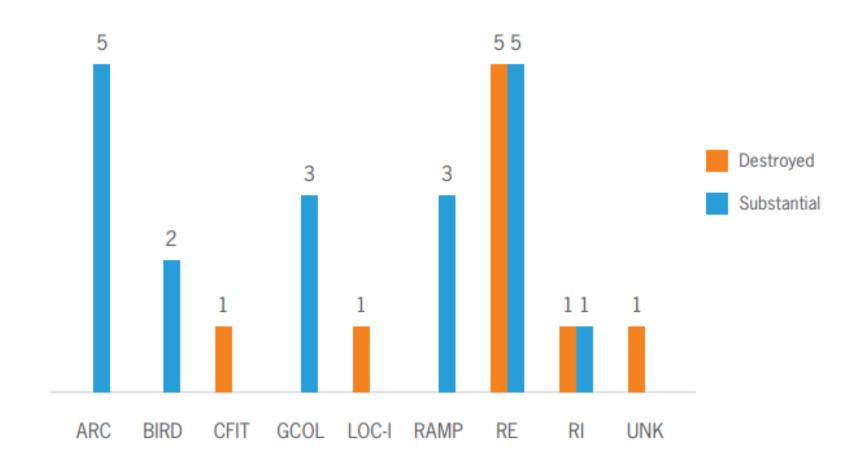
### Chart 9. | Total fatalities by occurrence category in 2022



## Chart 10. | Total fatal accidents by occurrence category in 2022

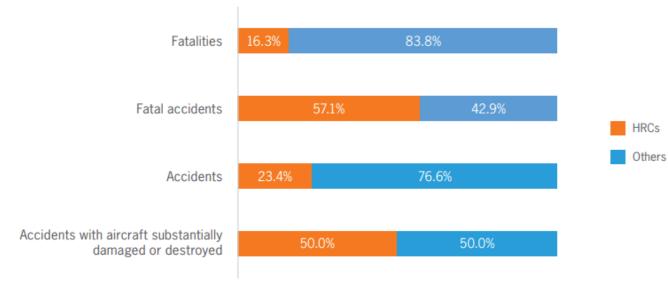


### Chart 11. | Aircraft damage by occurrence category in 2022

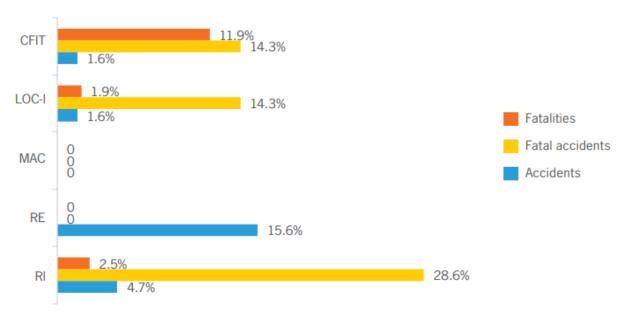


## **Global High-risk Categories of Occurrence**

- ➤ ICAO's Global Aviation Safety Plan (GASP) identifies five global high-risk categories of occurrences (G-HRCs) that pose significant risks and need mitigation strategies to reduce fatalities and accidents.
- > The five G-HRCs are:
  - 1. Controlled Flight Into Terrain (CFIT)
  - 2. Loss of Control In-Flight (LOC-I)
  - 3. Mid-Air Collision (MAC)
  - 4. Runway Excursion (RE)
  - 5. Runway Incursion (RI) These categories are based on actual fatalities, fatality risk per accident, number of accidents, and safety data analysis from ICAO and other organizations.



G-HRCs accident distribution in 2022



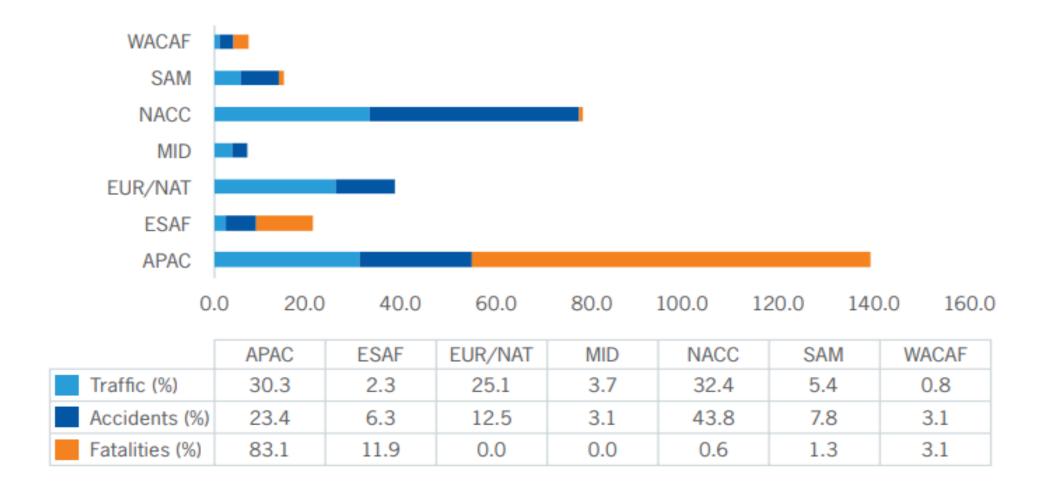
**G-HRCs accident overview for 2022** 

### **Regional Aviation Safety Data**

| ICAO Region | Estimated<br>departures | Number of accidents | Accident rate (per million departures) | Fatal accidents | Fatalities |
|-------------|-------------------------|---------------------|--|-----------------|------------|
| APAC        | 9 445 233               | 15                  | 1.59                                   | 2               | 133        |
| ESAF        | 710 630                 | 4                   | 5.63                                   | 1               | 19         |
| EUR/NAT     | 7 838 023               | 8                   | 1.02                                   | -               | -          |
| MID         | 1 163 085               | 2                   | 1.72                                   | -               | -          |
| NACC        | 10 100 395              | 28                  | 2.77                                   | 1               | 1          |
| SAM         | 1 687 796               | 5                   | 2.96                                   | 1               | 2          |
| WACAF       | 261 169                 | 2                   | 7.66                                   | 2               | 5          |
| World       | 31 206 331              | 64                  | 2.05                                   | 7               | 160        |

Departures, accidents and fatalities by ICAO region based on State of Occurrence in 2022

### **Regional Aviation Safety Data [Continue]**







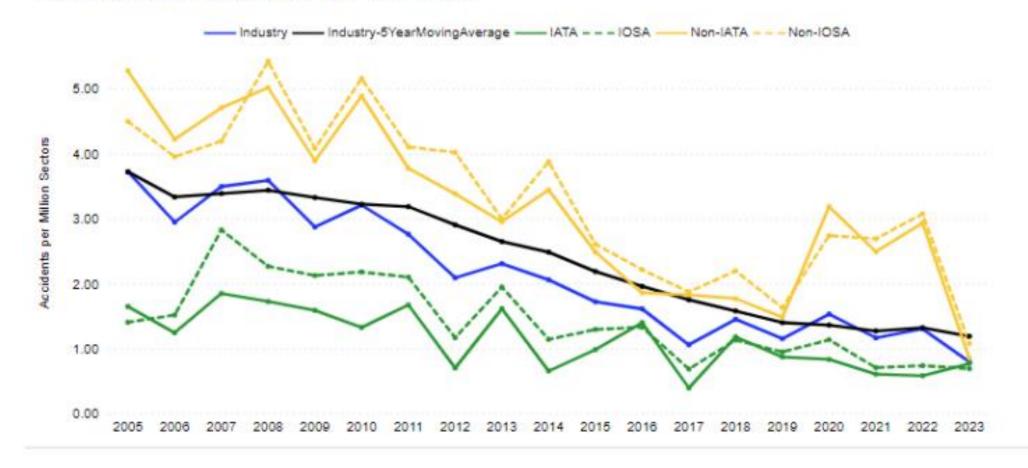
## IATA Annual Safety Overview [2023]

"Fostering a positive safety culture is critical"

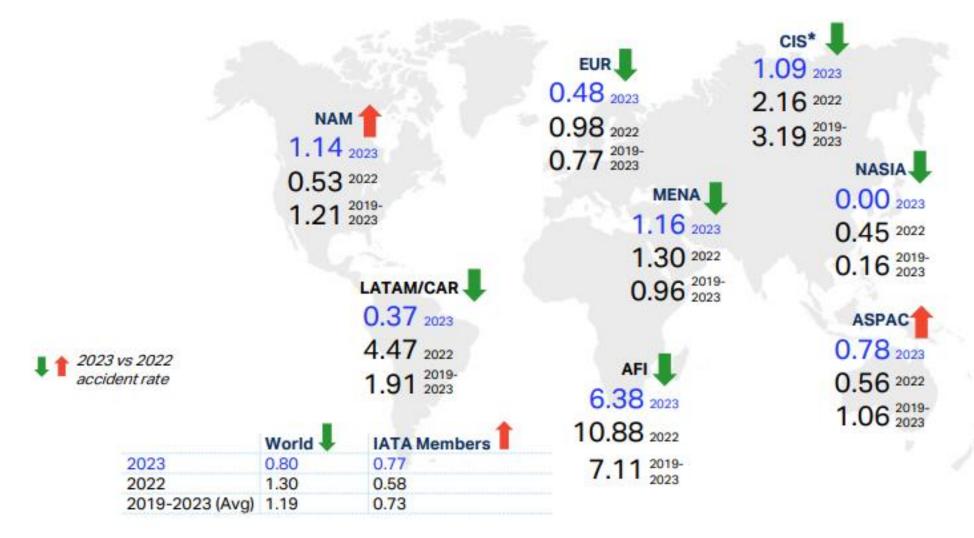
#### **Accident Rate Per Year from 2005 -2023**

| Accidents | Fatal Accidents | Fatalities Onboard | Other Fatalities | Jet | Turboprop | Passenger | Cargo | IATA | IOSA |
|-----------|-----------------|--------------------|------------------|-----|-----------|-----------|-------|------|------|
| 1,407     | 237             | 7,791              | 256              | 825 | 582       | 1,051     | 315   | 380  | 591  |

Accident Rate (per Million Sectors) by Year \* Data source IATA



#### All Accident Rate per Region of Operator



6 regions saw an improvement in the accident rate per million sectors

## IATA Safety Audit for Ground Operations ISAGO - Top ISAGO findings for 2023

- ➤ 196 GHSPs registered in ISAGO at 336 accredited stations across 209 airports worldwide.
- ➤ 304 audits completed by Dec 2023, with 250 expected in 2024.
- Average of 13 findings per audit, focusing on training, SMS, GSE maintenance, and management of outsourced services.

| No | ISAGO Organisation and Management - Top 10 Findings   |
|----|---|
| 1  | SMS – integrated and implemented throughout the organization to manage ground ops safety      |
|    | risks   |
| 2  | SMS – Safety risk assessment and mitigation program throughout the organization               |
| 3  | Management and control of external and internal documentation                                 |
| 4  | Training program – Initial training prior to operational duties                               |
| 5  | GSE Maintenance program   |
| 6  | QMS and Oversight program to evaluate management system and operations at all stations        |
| 7  | SMS – Safety assurance program  |
| 8  | Setting performance objectives and measures   |
| 9  | Operational documentation communicated, distributed and accessible at all stations and in all |
|    | operational areas   |
| 10 | Training program – ensure that trained and competent staff performs basic, advanced, and      |
|    | specific SMS duties   |

#### Safety Performance Overview 2023

- ➤ Total accidents in commercial aviation decreased in 2023, marking a positive trend in safety.
- ➤ Passenger flights were involved in 77% of the accidents, highlighting the need for continued focus on safety measures.
- ➤ The "All Accident" rate per million sectors decreased from 1.30 in 2022 to 0.80 in 2023, indicating improved safety performance.
- Despite the increase in flights (37.7 million in 2023), safety metrics improved, showcasing advancements in safety management.



## Fatal Accident Analysis and Prevention in 2023

- ➤ No fatal accidents or hull losses for jet aircraft, resulting in a record-low fatality risk rate of 0.03 per million sectors.
- One accident in 2023 resulted in 72 fatalities, emphasizing the need for continuous learning and safety improvement.
- ➤ The investigation into the fatal accident in Nepal revealed critical insights into the causal factors, highlighting the importance of thorough accident investigations.
- Challenges persist in critical flight phases, with landing and take-off being key areas of focus for safety enhancement.



### Safety Risks in Vietnam and Southeast Asia

- Vietnam and Southeast Asia face unique safety risks due to factors such as rapid growth in air traffic, diverse airspace conditions, and emerging aviation infrastructure.
- Safety risks in this region may include weather-related challenges, airspace congestion, infrastructure limitations, human factors and regulatory compliance complexities.
- Understanding and mitigating these safety risks are essential for ensuring safe and efficient operations in Vietnam and the broader Southeast Asia region.



## Impact of Aviation Accidents on Global Safety

- Aviation accidents such as the Boeing NXS incident, JAL516, and others have had profound impacts on global safety and industry regulations.
- ➤ These incidents highlight the importance of continuous safety improvement, effective incident response protocols, and collaboration among stakeholders to enhance aviation safety.
- Analyzing the impacts of past accidents informs proactive safety measures and contributes to a culture of continuous learning and improvement.







### **Overview of Aviation Safety**

09:10 - 09:30 am

### **Overview of Aviation Safety**



- ➤ Global Aviation Safety Trends in 2023
- ➤ Global Aviation Safety Trends in 2024
- Overview of the IATA Safety Leadership Charter

## A Look into Global Aviation Safety Trends in 2023 and 2024

- Advanced Safety Management Systems (SMS)
- Focus on Human Factors
- ➤ Integration of Digital Technologies
- Cybersecurity Measures
- Remote Monitoring and Diagnostics
- Collaborative Safety Initiatives
- Regulatory Compliance and Standardization
- > Environmental Sustainability and Safety
- Resilience and Crisis Management
- Continuous Training and Education





## Advanced Safety Management Systems (SMS)

- Integration of Advanced Data Analytics
- ➤ AI-Driven Risk Assessment Tools
- Enhanced Safety Performance Metrics
- Emphasis on Proactive Safety Measures
- Collaboration and Information Sharing





# The Future of Aviation Safety: Digital Technologies Leading the Way

How to improve safety monitoring, maintenance processes, and communication between stakeholders:

- > Blockchain
- ➤ IoT (Internet of Things)
- ➤ Real-time data analytics

**Unveiling the Potential of Blockchain for Aviation Safety** 

What is Blockchain and how can it be used in Aviation Safety?

- ➤ Secure and Transparent Data Sharing: Blockchain creates a tamper-proof record of aircraft maintenance, parts history, and safety reports.
- ➤ Enhanced Collaboration: Streamlines communication between airlines, regulators, and manufacturers regarding safety issues.
- ➤ Improved Incident Reporting: Anonymously reported safety incidents on a blockchain can lead to faster identification and mitigation of industrywide risks.





# Harnessing Internet of Things (IoT) and Real-Time Data Monitoring for Aviation Safety

- ➤ Introduction to IoT in Aviation Safety
- ➤ IoT Components: Devices, Sensors, Connectivity, Data Processing, Action/Insight
- Applications in Aviation Safety: Real-time Monitoring, Predictive Maintenance, Environmental Monitoring
- Benefits: Enhanced Safety, Improved Efficiency, Proactive Maintenance
- Challenges: Security, Privacy, Standardization
- Real-Time Data Monitoring in Aviation Safety: Sensor Data, Potential Issue Detection, Predictive Maintenance, Cabin Safety

**Cybersecurity Measures** in Aviation Safety 2023-2024

> Importance of cybersecurity in aviation safety

➤ Increasing reliance on digital systems

Robust cybersecurity measures to protect safety-critical systems





### Advancing Environmental Sustainability and Safety in Aviation

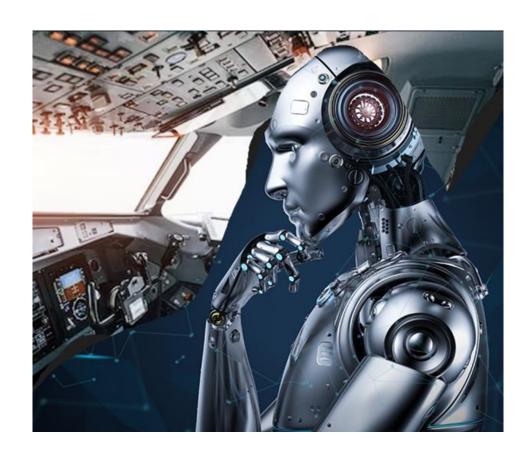
- ➤ Alignment of safety efforts with environmental sustainability goals
- Safety measures to minimize environmental impact
- Optimization of flight paths for fuel efficiency and emission reduction

## Importance of Safety Data, Governance, and Data Analysis in Aviation Safety

- > Safety data encompasses incident reports, maintenance records, flight data, safety audits, and more.
- > Data analysis provides insights into safety trends, potential risks, and areas for improvement.
- ➤ Harnessing data analysis enables proactive identification of safety issues and targeted interventions.
- Continuous data analysis contributes to ongoing improvement in safety performance.
- > Safety Data Governance ensures the accuracy, reliability, and integrity of safety data.
- ➤ Data analysis underpins effective safety decision-making and risk management.
- > Safety Data Governance establishes protocols for data collection, storage, and sharing.
- ➤ Effective data governance enhances safety reporting, incident investigation, and corrective actions.



#### Introduction to Data-Al Driven Aviation Safety Behavior



- ➤ Data-driven approach: Analyzing safety trends from various sources using AI and machine learning.
- ➤ Al integration: Processing large datasets to predict safety risks and prevent incidents.
- Predictive analytics: Anticipating safety issues and implementing proactive measures.
- Behavior analysis: Understanding and improving safety behaviors and decision-making.
- Continuous monitoring: Detecting safety deviations and ensuring ongoing compliance.
- Feedback loop: Using insights to inform safety policies and operational improvements.
- ➤ Cultural transformation: Fostering a safety-first culture through data-driven initiatives.



## IATA Global Aviation Data Management (GADM) Program

- IATA is the leading source of aviation safety and operational data.
- The Global Aviation Data Management (GADM) program
- Three main pillars:
  - > FDX Flight Data Exchange
  - > IDX Incident Data Exchange
  - > ADX Accident data



## **Airlines Leading Data-Driven Safety Initiatives**

- ➤ Singapore Airlines: Actively participates in FDX (Flight Data Exchange) to share flight data and enhance safety collaboration.
- ➤ **Delta Air Lines:** Implements advanced data analytics and IDX (Incident Data Exchange) to identify safety risks and improve safety outcomes.
- ➤ Qantas Airways: Leverages safety data analytics and is involved in GADM (Global Aviation Data Management) for continuous safety enhancement.
- **Emirates:** Focuses on data-driven safety practices and participates in data exchange initiatives for safety monitoring and improvement.

# **Utilizing Safety Data for Enhanced Safety Practices in Airlines**

- Singapore Airlines: Implemented a robust safety data management system
- Delta Air Lines: Adopted a datadriven approach.
- Qantas Airways: Leveraged safety data analytics to optimize operational processes.



#### **Just Culture in Aviation Safety**

- ➤ Transparent reporting: Encouraging open reporting of safety concerns without fear of retribution.
- ➤ Learning culture: Emphasizing learning from mistakes to prevent future incidents.
- Collective responsibility: Fostering a sense of shared responsibility for safety outcomes.
- Improvement mindset: Viewing safety incidents as opportunities for continuous improvement.
- Non-punitive approach: Avoiding blame and punishment, focusing on systemic improvements.
- Accountability: Holding individuals accountable for their actions while considering systemic factors.







### Agile in-Flight Safety (AiFS®)

**Presented by Rudi Rademan** 

**Empowering Excellence: Navigating Safety Challenges with Agile Precision** 



#### **Agile in Flight Safety**

- Understanding Agile Principles in Aviation Safety
- ➤ Importance of Safety Leadership in Agile Environments
- Overview of the IATA Safety Leadership Charter signed by VNA

#### Agile methodologies

- Originally developed for software development, are founded on four key principles:
- Individuals and interactions over processes and tools.
- Working solutions over comprehensive documentation.
- Customer collaboration over contract negotiation.
- Responding to change over following a plan.





## Implementing Agile in-Flight Safety and Quality

- Cross-functional Teams
- > Iterative Approach
- Prioritized Backlog
- Continuous Feedback
- ➤ Rapid Response to Change



#### **Case Study – Southwest Airlines**

- Agile approach in software development, marketing, operations, and customer service.
- Implementation of agile principles like cross-functional teams, iterative development, and continuous improvement.



#### **Case Study Air Asia**

#### **Key Points:**

- Agile practices in project management, product development, and customer service.
- Benefits include faster time-tomarket, increased customer satisfaction, and optimized resource utilization



#### **Case Study: Delta Air Lines**

#### **Key Points:**

- Integration of agile principles into organizational culture and operations.
- Adoption of agile frameworks like Scrum and Kanban for project management.



#### **Case Study: JetBlue Airways**

#### •Key Points:

- Agile practices across IT, marketing, and operations.
- Benefits include faster innovation, improved project delivery, and enhanced customer experiences.









## **Change Management** in Aviation Safety

10:30 - 10:45 am



## **Change Management** in Aviation Safety

- Strategies for Effective Change Management in Aviation Safety Practices
- Balancing Aviation Safety with Operational and Business Perspectives
- Case Studies on Successful Change Management Initiatives

Change Management in Safety Strategies for Effective Change Management in Safety Practices

#### **Key Strategies for Effective Change Management:**

- ➤ Clear Vision and Objectives
- > Stakeholder Engagement and Communication
- ➤ Risk Assessment and Mitigation
- ➤ Change Planning and Implementation
- ➤ Continuous Monitoring and Evaluation
- ➤ Conclusion

#### **Balancing Aviation Safety with Operational** and Business Perspectives



- ➤ Why Balance is Crucial?
- > Key Considerations:
- > Safety Measures Effectiveness
- > Operational Efficiency
- Business Sustainability
- Conclusion and Takeaways

# Case Studies on Successful Change Management Initiatives

Case Study: Safety Management System (SMS) Implementation at Air France-KLM



#### **Case Study – Delta Air Lines**

Al Software and Change Management for Flight Safety Key Points:

- Implementation of AI software system for data analysis.
- Involvement of pilots, engineers, and safety officers in change management.
- Training sessions and emphasis on data-driven decision-making.
- Reduction in safety incidents and improved safety performance.



# **Case Study – Quantas Airways**

Al Systems and Safety Management Innovation

### **Key Points:**

- Integration of AI algorithms into safety reporting and analysis tools.
- Establishment of cross-functional teams for safety innovation.
- Culture of transparency and open communication on safety issues.
- Measurable increase in safety performance and proactive risk mitigation.

#### Quantas made substantial investment into:

- Investment in Al-driven predictive maintenance software.
- Reduction in flight delays and improved fleet reliability.



# **Case Study: Lufthansa**

### •Key Points:

- Adoption of Al-based fatigue management systems.
- Improved crew alertness and reduced fatigue-related incidents.



# **Case Study: Lufthansa Technik**

### •Key Points:

- Development of AI-based maintenance and repair solutions.
- Enhanced reliability and availability of aircraft systems.



# **Case Study: Cathay Pacific Airways**

### •Key Points:

- Utilization of AI in safety management systems.
- Proactive risk identification and mitigation strategies.



# Integration of Agile Principles in Aviation Safety and Change Management [Continue]

# **Agile in Aviation Safety**

- Focuses on enhancing safety protocols, incident response, and safety culture.
- ➤ Emphasizes iterative improvement and continuous evaluation of safety strategies.
- ➤ Promotes collaboration, open communication, and crossfunctional teamwork among safety teams.

## **Agile in Change Management**

- Focuses on managing organizational changes, implementing new processes or systems, and driving continuous improvement.
- ➤ Emphasizes iterative improvement and continuous evaluation of organizational changes and strategies.
- Promotes collaboration, open communication, and crossfunctional teamwork among change management teams, operational teams, and stakeholders.

# Integration of Agile Principles in Aviation Safety and Change Management

## **Agile in Aviation Safety**

- Advocates for data-driven decision-making and use of analytics for informed safety strategies.
- ➤ Encourages proactive and adaptive approaches to safety management, responding quickly to safety concerns.
- ➤ Enables integration of safety enhancements into operational processes seamlessly.

## **Agile in Change Management**

- Advocates for data-driven decision-making and use of analytics for informed decision-making in change initiatives.
- > Supports quick adjustments based on data insights, ensuring proactive and adaptive responses to organizational changes.
- Facilitates the integration of organizational changes and new processes into existing workflows with minimal disruption.





# Commitment of Top Executives

10:45 - 11:00 am

# **Commitment of Top Executives**

- Importance of Executive Commitment to Safety
- VNA signed on the IATA Safety Leadership Charter as a commitment
- Demonstrating Commitment Through Action, Data, and Results
- Real-life Examples of Top Executives' Involvement in Safety Culture







Recap Proactive



**Next Steps** 



**Executive Summary of the Safety Seminar** 

As we conclude our Safety Seminar, let's summarize the key insights and proactive approaches to safety discussed throughout our sessions.

### **Recapping Key Insights:**

- We've explored critical aspects of aviation safety, including safety leadership, Agile methodologies, change management, and the integration of safety into business strategies.
- Emphasized the importance of a proactive safety culture, data-driven decision-making, and continuous improvement in achieving safety excellence.

### **Being Proactive in Safety:**

- Proactivity is essential for safety excellence, involving anticipating risks, implementing preventive measures, and fostering a culture of shared responsibility for safety.
- By being proactive, we can identify potential hazards early, mitigate risks effectively, and ensure the safety of our passengers, personnel, and assets.



**Executive Summary of the Safety Seminar** 

### **Explaining the Next Step:**

- Our next step is to translate the insights gained from this seminar into actionable strategies and initiatives.
- We will collaborate, innovate, and strengthen our safety practices, leveraging Agile principles, safety leadership, and industry best practices to enhance safety resilience and performance.

#### **Key Action Points:**

- Implement Agile methodologies in safety management to enhance adaptability and responsiveness.
- Strengthen safety leadership at all levels to drive a culture of safety excellence and continuous improvement.

### **2025 - Vision**

- Integrate safety into business strategies, processes, and performance measures to align safety goals with organizational objectives.
- Foster collaboration, communication, and data-driven decision-making to proactively identify and mitigate safety risks.
- Engage stakeholders, promote safety awareness, and empower employees to contribute to a safer aviation environment.





# Thank You For Joining Me Today