*International Civil Aviation Organization*

**MIDANPIRG/20 and RASG-MID/10 Meetings**

***(Muscat, Oman, 14-17 May 2023)***

**Agenda Item 5.2: Outcomes of the SEIG**

# SAFETY CULTURE AND EFFECTIVE MANAGEMENT OF RISK

*(Presented by the United States)*

**SUMMARY**

The ICAO High-level Conference on COVID-19 (HLCC) recently reaffirmed the continued importance of a robust Reporting culture in its Recommendation 1/2. This paper provides an overview of the Federal Aviation Administration's (FAA) Safety Management Systems (SMS) best practices in establishing and maintaining a Positive Safety Culture.

**REFERENCES**

– References: RASG-APAC/12 presented by the United States

## 1. INTRODUCTION

1.1 The United States operates the safest, most efficient aerospace system and the FAA, as the aviation regulator and principal air navigation services provider, is on a journey to refine its safety management practices and strengthen its culture in order to make its oversight system more effective. To that end, the FAA has developed multiple initiatives to influence a Positive Safety Culture, leveraging identified opportunities and common priorities across the agency. Safety Culture efforts focus on evolving the FAA's current values, behaviors, and attitudes regarding safety to an even more positive and effective level. The U.S. Department of Transportation's (DOT) Safety Culture initiative across all transportation modes has proven to be effective, and national safety performance metrics reflect that success.

1.2 Prior to the U.S. DOT Safety Culture initiatives, our efforts focused on safety data collection, protection, analysis, and sharing, as well as understanding risks before accidents or incidents occur. Voluntarily shared safety data in a nonpunitive setting (e.g., U.S. Aviation Safety Reporting System, the Aviation Safety Action Program, Air Traffic Safety Action Program, Flight Operations Quality Assurance, and the Voluntary Disclosure Reporting Program, among others) were controversial at their inception. Now ICAO recommends these programs and approaches to aviation regulation and safety as best practices in the ICAO Safety Management Manual (see Doc 9859, Section 3.2.5 "Safety Culture and its influence on safety reporting"). The success of these and other U.S. voluntary safety programs has demonstrated that a collaborative approach, with the eight critical elements of safety oversight supported

by a Positive Safety Culture, provides the highest levels of compliance with regulations, the most effective identification of hazards, and the most efficient management of risk.

## 2. DISCUSSION

2.1 Safety Culture is defined as the shared values, actions, and behaviors that demonstrate a commitment to safety over competing goals and demands. An organizational culture is influenced by a set of commonly shared beliefs, expectations, and values that guide the thinking and behavior of organization members. This culture is influenced from the top through the actions and behaviors of the senior management team, which permeate the workforce. In simple terms, Safety Culture is how people behave towards safety when no one is watching.

2.2 The latest in the FAA Safety Culture enhancement journey is the development of sub-components of Safety Culture, discussed in detail below. Throughout this journey, the definitions have evolved to add more clarity and align with the complexity in air transportation. All organizations have a basic culture, which could be negative or positive. A Positive Safety Culture is the shared attitudes, values, and beliefs of the people within your business, as they relate to safety. A Positive Safety Culture, where you promote safety and involve everyone in your business, is an essential part of an effective SMS. Developing a Positive Safety Culture ensures the people in a business can make a difference and positively influence the level of safety. It creates an openness that encourages front-line employees to report safety issues. This in turn will help executive leadership make informed decisions.

2.3 There are five inter-connecting components that co-exist to make up a Positive Safety Culture:

a) Just culture, employees trust that they can admit honest mistakes without fear of punishment or blame, and clear lines are drawn between acceptable and unacceptable behavior.

b) Reporting culture, employees are encouraged to report safety information and they trust that what they report will be acted upon and their confidentiality maintained.

c) Learning culture, employees trust that we will treat safety events as opportunities to learn and changes will be made based on lessons learned from safety data.

d) Flexible culture, trusting conditions exist that allow the organization to adapt effectively and quickly to changing demands.

e) Informed culture is where the organization collects and analyses data and makes decisions after healthy dialogue that incorporates all points of view, and employees trust that any dissenting opinions will be met with curiosity and listening to understand.

***Just*** and ***Reporting Culture Components of a Positive Safety Culture***

2.4 A Negative Safety Culture is where management investigates operational errors to determine problem areas and identify sub-standard personnel. The investigations that occur in a Negative Safety Culture environment are typically used to assign blame to lower-level employees and do not examine other problems, i.e., systemic deficiencies, latent conditions, etc. This results in investigations failing to uncover underlying problems, preventing implementation of an effective investigative process, leading to the persistence of a blame culture and continued reoccurrence of errors.

2.5 Just Culture is one in which reporting is actively encouraged with an emphasis on learning from these reports versus blaming those involved. Just Culture is characterized by an organization that values addressing risks in a holistic manner, to include but not limited to, latent conditions, systemic deficiencies, and organizational issues and policies, as well as personnel competencies and individual actions. Just Culture values a systemic approach to identifying and mitigating root causes versus a focus on assigning blame to individuals.

2.6 A Just Culture is not a "no-accountability" culture. Individuals are still responsible for their actions, but organizations should look to the entirety of potential root causes to effectively address risks in a systemic and fair way with a primary focus of learning from the reports to prevent reoccurrence. The organization must indicate which types of behaviours are unacceptable relative to activities and include the circumstances under which disciplinary action would not apply. In cases where risks are attributed primarily to unacceptable repetitive at-risk behaviors, intentional deviation, conscious disregard for safety, taking unjustifiable risk, etc., these must be dealt with using a documented process to take appropriate action and may include enforcement. A healthy Reporting Culture (noted below) is built on the foundation of a Just Culture, which aims to differentiate between intentional and unintentional deviations, and determines the best course of action for both the system and the individuals involved. Employees must feel empowered and safe in reporting faults in the larger system and that the information they submit will be acted upon. Otherwise, they will determine there is little or no perceived benefit to the employee in submitting a report. Simultaneously, employees must understand the clear consequences that could result from unacceptable behavior.

2.7 An organization that embraces a Just Culture understands the importance of establishing an atmosphere of trust, where its employees are encouraged to report essential safety-related information and issues. This approach fosters the resolution of safety issues through corrective action rather than through punishment or discipline. Employees also need to understand that wilful violations and gross negligence are unacceptable behaviors and will not be tolerated. It is important that employees are informed about what is acceptable and unacceptable behavior. After observing an occurrence, regardless of intentional or unintentional behavior, participants in a Just Culture feel comfortable to report potential safety issues without fear of retribution. Conducting independent investigations of the report, focusing on the context of the event and systemic factors that are present, rather than what an individual did wrong, will better support prevention of the same type of event across the system, not just for the individual who committed the error. In this way, the entire system can learn from the experience of the individual.

2.8 Reporting Culture is characterized by an organization where employees feel empowered and safe in reporting faults and that the information they submit will be acted upon to mitigate root causes. The presence of a Just Culture in an organization is necessary to enable an effective Reporting Culture. Employees must believe they should submit reports of all occurrences where management will not punish those who report; instead, employees are supported and the report is addressed. Organizations that have a strong Reporting Culture will not only have a reporting system in place but also foster a culture where their employees openly report hazards, issues, incidents, near misses, and other safety concerns to prevent reoccurrence. This results in an organization where occurrences are reported freely and they are promptly addressed, demonstrating a level of trust. If the organization ignores reported safety concerns and blame is the initial response to honest mistakes and errors, people will be reluctant to report in the future. Positive Safety Culture relies on trust between employees (organization) and management (leadership) and is driven from the top down and the bottom up.

2.9 Organizations that do not support Positive or Reporting Cultures will have employees that are less likely to report near-misses, fearing that they may be blamed for what went wrong. A lack of reported events is not indicative of a safe operation, and likewise, an increase in reported events is not indicative of a decrease in safety. Event reporting illuminates potential safety concerns, and any increase in such reporting should be seen as a healthy safety indicator.

2.10 The following is a brief description of the remaining three sub-components of Safety Culture:

- Learning Culture: Organizations with a Learning Culture have a willingness to improve safety based on reported (new and better) information. They collect and measure safety-related data with the specific aim to continually improve their safety management and performance.
- Flexible Culture: Organizations with a Flexible Culture have the ability to adapt to change and not be deterred by challenges and issues that appear unexpectedly. They prepare for change and plan to involve people with the necessary expertise to deal with whatever challenges arise.
- Informed Culture: Organizations with an Informed Culture want to understand their safety systems, use the data they collect to better influence their safety management, and be better informed so they can actively improve safety outcomes.

2.11 The key to continuous improvements in aviation safety is to create a sustainable culture of safety through an open and transparent exchange of safety information and data between employees and management, and subsequently, between the State and the aviation community. Positive Safety Culture is not just a set of programs, cannot simply be "established" or "implemented," and requires open and transparent exchange of information, mutual-cooperation, and trust enabled by Just Culture. This promotes a strong Reporting Culture where employees are encouraged to report safety hazards and concerns. The organization learns from these mistakes and makes appropriate changes, resulting in a Flexible Culture by adapting effectively to those changes, and progresses to an Informed Culture where the organization continuously collects and analyses relevant data, and actively disseminates safety information. This work that is carried out is driven by our SMS and its four components—Safety Policy, Safety Promotion, Safety Assurance, and Safety Risk Management—advancing our Safety Management System from reactive to proactive to a predictive organization. The FAA will continue to share tactical initiatives and progress on our Safety Culture journey in future working papers.

## 3. ACTION BY THE MEETING

3.1 The meeting is invited to note the information provided in this information paper.

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