57th CONFERENCE OF DIRECTORS GENERAL OF CIVIL AVIATION ASIA AND PACIFIC REGION

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AGENDA ITEM 3:

AVIATION SAFETY

OCCURENCE REPORTING AND JUST CULTURE AS KEY ENABLERS TO SAFETY IMPROVEMENT

Presented by France

SUMMARY

Providing an environment ensuring the absence of punishment for unwilful reported incidents while taking appropriate disciplinary action for deliberate violations or reckless conducts permits building up trust between employees, notably but not only license holders, and employers on the one hand, between competent Authorities and operators on the other hand. Such an environment, which constitutes Just Culture, is key to a proactive improvement of aviation safety.

Relying on the constant senior management drive, implementation of Just Culture requires a long maturation process (only time allows developing confidence), progressive enactment of regulations, establishment of procedures and deployment of tools that will together enable relevant civil aviation safety information to be efficiently reported, collected, stored, exchanged, disseminated and analysed. All along any of these processes, data and occurrence reporters shall be efficiently protected.

This environment is key to achieve and maintain the GASP aspirational safety goal of zero fatalities in commercial operations by 2030 and beyond.

OCCURENCE REPORTING AND JUST CULTURE AS KEY ENABLERS TO SAFETY IMPROVEMENT

1. INTRODUCTION

1.1 Safety improvements in aviation derive from two main sources of feedback functions, accident investigations and incident reporting. The latter ensures a continuous level of awareness on the actual safety level, safety issues, threats and risk in the context of a comprehensive risk management approach. Without said awareness, such issues would remain unknown and may lead to an accident.

1.2 The effectiveness of safety occurrence reporting lies in promoting the benefits of a better knowledge of actual risks but also in establishing conditions for trust. Trust means that reporting will not lead to a disciplinary action on the reporter when an erroneous action at operational level occurs: it is instrumental in promoting the flow of information throughout the organization. On the opposite, when a deliberate violation is made, or a reckless conduct disproportionate to the level of skill, professionalism and experience of the author, proper sanction must be enforced. A balanced evaluation must be part of any such process.

1.3 Just culture is precisely providing this context of absence of punishment for an unwilful error and appropriate disciplinary action in other defined cases.

2. DISCUSSION

2.1 Historical occurrence reporting regulatory context – Current situation in figures

2.1.1 France has a long tradition of implementation of Just culture principles. The French Competent Authority supported the promotion of a reporting culture starting in the 1990s when accident analysis showed the need for access to more safety information in order to prevent reoccurrence of similar scenarios.

The principle was introduced in the accident investigation legal framework in 1999, recognizing the benefit of incident investigations where all evidence was accessible. It protected the reporter against any form of disciplinary or administrative action provided the notification was made spontaneously and promptly. However, to avoid excessive immunity, a barrier was introduced excluding "deliberate and repetitive violation" so as to make clear that non-professional behavior could not be tolerated. This is the landmark that identifies the transition from "non punitive culture" to "Just culture".

In 2004, a regulation mandated the reporting of ATM incidents to the Authority. Legal responsibility was also a question at the time, but the "do-nothing" option was deemed not acceptable.

In 2006 mandatory occurrence reporting to the French Authority widened its scope (airports, general aviation, Air transport...). The confidential use of information was guaranteed as a counterpart for notification so as to avoid undue sanction, misuse of the information or bad reputation. A complementary regulatory framework of mandatory and voluntary reporting system was promoted to all operators, and more specifically for pilots and air traffic controllers, via the European regulation, with the view to gradually standardizing the States reporting mechanisms. At the same time, to encourage reporting, specific Just culture safeguards were established to protect the reporter.

In 2014 the European union adopted a regulation on occurrence reporting addressing reporting, confidentiality and Just culture as a balance between incentive for a regular flow of information and penalty for gross misconduct. This regulation mandated also two unique complements: each member State had to designate a dedicated national body for monitoring the correct implementation of Just culture principles on the one hand and seek a national administrative arrangement with the ministry of

Justice on the other hand, introducing a balance between the safety benefit of reports kept from broad dissemination and the proper administration of Justice.

In France, such a body is known as "observatory for Just culture". It hosts a website to collect all claims <u>https://www.ecologie.gouv.fr/observatoire-culture-juste-laviation-civile</u>

The administrative arrangement between the ministry of Justice and Directorate General of Civil Aviation (DGAC) was signed for occurrence reporting and access to the database in addition to the preexisting one on accident investigations.

2.1.2 That evolving and adapting regulatory context and the progressive application of Just culture principles allowed building-up the trust within the aviation community, be it at the employer's (airport operators, airlines, ANSPs, maintenance operators...) or at the Authority's level.

As a consequence, the number of reports has continuously been increasing: there were 42 000 in 2014, 74 000 in 2019 in the pre-pandemic era¹. With the return to operations, the reporting rate is increasing again, even faster than the traffic, thus exceeding any previous year. Evidence shows that this increase of reporting allows a more precise appraisal of safety issues and does not mean a degradation of the level of safety.

2.2 Current policies and procedures to support just culture

The French DGAC includes both the competent Authority for safety (DSAC) and the French Air Navigation Service Provider (DSNA). Information and feedback from both are exposed below.

2.2.1 As one pillar of safety culture, a sound reporting culture is a major component of any Safety Management Systems elements.

The commitment of the CEO must explicitly support the principles of Just culture when establishing safety as the top priority of the organization. To support the claim, sufficient resources need to be provided so that the management system is efficient and fit for purpose. The commitment is therefore published and disseminated throughout the organization so that the personnel be aware and reminded of this orientation.

Focusing on DSNA, the process of incident reporting is based on feedback provided by all operational personnel, Air Traffic Control Officer (ATCO) and Air Traffic Safety Electronics Personnel (ATSEP). Any event that may have an impact on safety is reported and analyzed by dedicated resources in each operational unit. Based on international standards such as RAT (Risk Assessment Tool), the events are recorded and classified. Weekly safety reviews are performed to monitor the most important aspects including actions taken at a local level. For the most severe ones, after a thorough investigation including interviews of the persons present during the event, a local safety committee is convened so that the unit can collectively assess what led to the event and what can best prevent its reoccurrence. Likewise, some events are brought to the attention of the Corporate Safety Committee so that companywide lessons learnt can be developed and communicated. During this process, direct feedback is given to the reporter to inform him/her of the outcome of the analysis.

2.2.2 Efficient protection of safety data and of occurrence reporters are cornerstones of the Just culture.

In France, all reports are stored in a national database provided by the European Commission (Eccairs), then transferred to a European central repository. At each step, a strict protocol (on hardware, software

¹ It is worth noting DGAC produced a safety study on issues related to low activity during the pandemic, focusing on events that would never have been reported without credible policy of Just culture. This is a powerful tool for hazard / safety issues identification. See

 $[\]underline{https://www.ecologie.gouv.fr/sites/default/files/Assessment_analysis_of_civil_aviation_risks_2020_English.pdf$

and users control) is followed. Protection of safety information sources is paramount to the flow of reports, and the DSAC has always put a stress on building trust on confidentiality a protection of information against any misuse. In any case, if an investigation report is produced, it will be deidentified (no identification of the date, nor operators, nor individuals involved). The DSAC constantly applies this process on its safety promotion publications (<u>https://www.ecologie.gouv.fr/objectif-</u>securite).

It is noteworthy that the DSNA Just culture charter, widely communicated to all personnel, highlights a number of general principles but also defines how DSNA might share de-identified data, especially with DSAC in the framework of the European central repository. The usage of automatic recording of data such as DSNA version of the Automatic Safety Monitoring Tool (ASMT), radar tracks, flight plans and safety nets data that may be associated with a potential safety occurrence is also covered by the Just culture charter.

Protection of occurrence reporters may extend to judicial investigations. As mentioned above, a memorandum has been signed between the DGAC and the Ministry of Justice in 2019 in order to reach a balance between the protection of safety information and the administration of Justice. If a Justice officer deems it necessary to access some data during his proceedings, he forwards his request to the DGAC. The DGAC assesses whether the dissemination of the occurrences to the Justice constitutes a breach of the reporter's confidentiality and to which extent a breach would be proportionate to the alleged advantages. Following these exchanges, the Justice department may withdraw or maintain its request.

This whole context is essential to help build-up confidence and support good occurrence reporting.

2.2.3 A protective framework cannot however absolve personnel from their individual responsibility when their behavior does not meet the required professional obligations to maintain adequate safety levels.

If information or the analysis of a safety occurrence shows the need to restrict their professional activity, protective measures may be taken by the management in order to maintain the level of safety and also to protect the person whose activity could ultimately be detrimental to him/her.

For instance, should this case arise, DSNA has set up procedures and created ad hoc committees to issue opinions on the continued employment of its operational staff based on competence assessment and involving union representatives. Last but not least, regular meetings are organized with them so as to exchange on the conditions of the implementation of the Just culture policy. All personnel are also encouraged to promote and feedback information on how the Just culture principles are implemented. Specific e-learning and reminders are organized on a regular basis.

In the rare case where legal action is taken against DGAC personnel, such as in the event of accidents, the Administration provides legal support to that personnel.

2.3 **Short illustration**

A specific safety event was analyzed during a DSNA Corporate Safety Committee. The occurrence concerned an authorization to land on an occupied runway during an On-the-Job-Training session. The discussion uncovered a regular violation of a rule.

The initial reaction would have been to try and identify the instructor present during the training sequence and restore an apparent faulty reporting culture. However, the Operations Director and the Safety Director took the opportunity to understand specific local operational constraints leading to a non-compliance.

After training selected ATCOs to perform over-the-shoulder observations during normal operations, operational evidence was produced with regards to local airport configurations leading to various operational behaviors. In the end, ATCOs of that unit collectively understood that non-compliance

towards a specific procedure would carry more risk than operational benefit and the behavior disappeared gradually.

2.4 Conclusion

Adherence to relevant ICAO standards, recommended practices and guidance can contribute to the gradual spread of Just Culture. While this framework provides very useful grounds, it is not sufficient: Just culture, like any cultural evolution, is a rather long process that needs an adequate non punitive environment where confidence can develop between the Authority, each operator and its employees.

This progressive dissemination of Just Culture is as a powerful enabler for safety improvement and, as such, a fundamental aspect of the safety management system and State Safety Programs.

An increasing number of occurrence reports may be a counter intuitive indicator of its increasing maturity and a path to an aspirational safety goal to achieve and maintain zero fatalities in commercial operations by 2030 and beyond. It enables for more in-depth and detailed analysis and consequently provides a more accurate picture of risk.

3. ACTION BY THE CONFERENCE

- 3.1 The Conference is invited to:
 - a) Note the content of the discussion paper;
 - b) Agree on the relevance of Just Culture as a safety improvement enabler;
 - c) Share experience and best practices on the implementation of an environment that is conducive to occurrence reporting.

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