

Study of Positive Safety Culture and Just Culture

Presented by PLC

SUMMARY

PLC has been tasked to study and investigate the relationship between Positive Safety Culture and Just Culture.

ICAO uses the term Positive Safety Culture but there is no definition for it. IFATCA does have a definition for Just Culture, but only a few sentences for Positive Safety Culture. This paper will consider the creation of a new definition of Positive Safety Culture for the IFATCA TPM manual.

1. INTRODUCTION

- 1.1. The Professional and Legal Committee (PLC) has been tasked to investigate the connection between Positive Safety Culture (PSC) and Just Culture (JC) and consider creating a new definition of Positive Safety Culture to be incorporated in the IFATCA TPM.
- 1.2. A positive safety culture (PSC) represents the priority given to safety at all levels in the organisation and reflects the real commitment to safety. It is the way that safety is perceived, valued and prioritised in an organisation.
- 1.3. This paper will investigate how a PSC and JC work together and identify any differences or similarities there may be. Ultimately this paper will give a detailed overview of what the two cultures are for those who may not be aware of them.

2. DISCUSSION

- 2.1. The SMS, Safety Management System, is a systematic and proactive approach to safety risk management that includes organizational structures, policies, processes and procedures. Risk management activities are at the heart of the SMS, including the hazards identification that may affect safety. These activities are supported by safety assurance processes that verify the effectiveness of mitigations, monitor safety performance and change management.

- 2.2. The key processes of a safety management system are hazard identification, occurrence reporting, risk management, performance measurement, and quality assurance.
- 2.3. Safety management, as described by Skybrary, is commonly understood by Air Traffic Controllers as:-

Applying a set of principles, framework, processes and/or measures to prevent accidents, injuries and other adverse consequences. Safety management implies a systematic approach to managing safety, including the necessary organisational structure, accountabilities, policies and procedures. Safety management is an organisational function, which ensures that all safety risks have been identified, assessed and satisfactorily mitigated”¹.

- 2.4. Safety management is often an invisible part of the ATM system that only becomes visible when a safety incident has occurred. Safety management is integral to the safe operation of airspace and airports and the management, structure and accountabilities, while not apparent to the Air Traffic Controller, must be in place for when an incident has occurred. Without this structure the process following an incident or accident would be chaotic and there would be no confidence in the safety system.
- 2.5. While the Safety Management Manual 2.1.2 states that

“Safety is the state in which risks associated with aviation activities, related to, or in direct support of the operation of aircraft, are reduced and controlled to an acceptable level.”

- 2.6. Safety therefore is dynamic, as in it will continually shift as technology progresses and airspace and aircraft change. New safety hazards and risks continuously emerge and must be continually mitigated also by the Safety Management Systems in place.
- 2.7. Therefore, to create a Positive Safety Culture, there must be proactive management methods that involves the identification, through the analysis of information from the aviation system (safety analysis), of potential critical issues (unsafe conditions) before they can ever materialise into serious events. A positive safety culture is not something you can get or buy, it must be built by trust and cooperation. It has also been described as: -

How an organisation behaves when no one is watching.

Skybrary: Safety Culture

- 2.8. This proactive approach, which integrates and completes the traditional surveillance activity, is realised through the development of specific programs at global, regional

¹ Skybrary: Safety Management.

and national levels and uses specific methodologies, such as Safety Risk Management, Safety Analysis and Safety Performance Indicators.

- 2.9. All of these factors are required to create a positive safety culture. Any failure in the integrity of the safety system would create distrust and a lack of expectation and confidence. Positive safety cultures are hugely fragile by nature. The positive safety culture is built on a high degree of mutual trust between the ATM workforce and the senior management level.
- 2.10. There are multiple elements that influence the safety culture of an organisation. The most influential cultural components are **organisational, professional and national cultures**.
- 2.11. **Organisational culture** reflects factors like values, beliefs, attitudes, systems and rules that outline and influence employee behaviour. Staff concerns about workload, understanding their role in the process, job security and access to training are associated with significant change in organizations and can have a negative impact on safety culture. This is visible to employees and possibly customers and is often decided by management as to where their priorities lie. Safety vs efficiency, for example.²
- 2.12. **Professional culture** differentiates the characteristics of particular professional groups from multiple cultural backgrounds which may be defined by their nationality, ethnicity, religion, and gender. Safety relies on effective interaction between different professional groups, each with its own professional culture.³
- 2.13. **National culture** represents a specific characteristic of nations, including the role of the individual within society, the manner in which authority is distributed, and national priorities with respect to resources, accountabilities, morality, ethics, objectives and different legal systems.⁴ This is very difficult to influence or change.
- 2.14. The mix and influence of these cultures will vary greatly among organisations and States and influences the overall safety culture of any organisation. The relationship between the national and organisation culture is significant. They can both have a large influence on the perspective of safety and the behaviours of individuals within the organisation. Managers should be capable of shaping and mold their culturally-diverse workforce into effective teams.⁵
- 2.15. Continuous improvement in safety performance is possible when safety becomes a value within an organisation as well as a priority at the national or professional level.

Reporting Culture

- 2.16. A key element of a positive safety culture is a seamless, friction-free reporting system. The effectiveness of such a system relies on the consistent flow of

² ICAO DOC9859 - SMM Safety Management Manual 3.2.7 - fourth edition

³ ICAO DOC9859 SMM Safety Management Manual 3.2.6.3 - fourth edition

⁴ ICAO DOC9859 SMM Safety Management Manual 3.2.6.1 - fourth edition

⁵ ICAO DOC9859 SMM Safety Management Manual 3.2.6.4 - fourth edition

information from front-line personnel, such as air traffic controllers (ATCOs). One of the main objectives of the reporting system is to distinguish between intentional misconduct (wilful acts) and unintentional mistakes, allowing the organisation to determine the most appropriate course of action for everyone involved—typically the organisation itself and the individuals who were part of the situation.⁶

- 2.17. It is imperative that ATCOs feel safe to report issues of safety and other matters openly and for this a just reporting culture is important. A reporting culture means cultivating an atmosphere where people have confidence to report safety concerns without fear of punishment. Employees must know that confidentiality 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 and valuable safety data could be lost and inherent risk within the operation will remain.⁷
- 2.18. The advantages are that often Air Traffic Controllers are the most exposed to the everyday risks of air traffic control, therefore best placed to identify potential hazardous situations, and the reporting system should allow them to actively identify these risks. At the same time, management can gather and analyse information on safety hazards (producing statistics from those) and also build a relationship of trust with its staff.
- 2.19. For each event or area of activity it is therefore necessary to carry out a precise cause/effect analysis, using all risk assessment tools. The cornerstone of the methodology is safety reporting, that is the collection of data on accidents and incidents.

Perception

- 2.20. A Safety Culture can be positive, negative or even neutral. Its essence is in what people believe about the importance of safety, including what they think that their peers, superiors and leaders really believe about safety as a priority.
- 2.21. A positive safety culture is the way safety is perceived, valued and prioritised in an organisation. It reflects the real commitment to safety at all levels in the organisation. A positive safety culture is not something you get or buy; it is something an organisation acquires as a product of the combined effects of Organisational Culture, Professional Culture and, often, National Culture.
- 2.22. Safety Culture can have a direct impact on safe performance. If safety is not prioritised within any organisation, even temporarily, then workarounds, cutting corners, or making unsafe decisions or judgements will be the result, especially when there is a small perceived risk rather than an obvious danger.
- 2.23. A Safety Management System (SMS) represents an organisation's competence in the area of safety, and it is important to have an SMS and competent safety staff to execute it. But such rules and processes may not always be followed, particularly if

⁶ ICAO DOC9859 SMM Safety Management Manual 3.2.5 - fourth edition

⁷ ICAO DOC9859 SMM Safety Management Manual 3.2.5.2 - fourth edition

people in the organisation believe that, for example, 'moving traffic' is the real overriding priority, even if risks are occasionally taken. Where would people get such an idea? The answer, ultimately, is from their peers and includes their superiors. To ensure that safety is and remains the top priority, organisational leaders must continually show that safety remains their top priority.

- 2.24. So, organisations need both a SMS combined with a positive safety culture to achieve acceptable safety performance. But with aviation, there is the problem that it is generally very safe, with serious accident outcomes occurring only rarely. Air Traffic Control can be defined as a High Reliability Organisation (HRO). An HRO is defined as an organisation that consistently achieves desired outcomes in high-risk, complex environments while experiencing fewer accidents than expected.
- 2.25. This means that almost all organisations will assume they are already safe. There may be few incident reports, and these may be of low severity; safety cases may be well in hand for current operations and future changes. Real aircraft accidents are usually complex and multiple causes can be identified, so it is not always easy to see them coming. Even harder to see are contributing situations which affect an organisation's 'forward vision' in safety. For example, under-reporting of incidents due to fears of recrimination or prosecution; people running risks because they believe that is what they are supposed to do to ensure an expeditious flow of traffic; different sub-groups not sharing information due to a lack of mutual trust; etc.

<p>A safety culture reflects individual, group and organisational attitudes, norms and behaviours. Safety culture is not just a reflection of the individuals that make up an organisation; an organisation's safety culture is more than the sum of its parts.</p>

CANSO - Civil Air Navigation Service Organization

- 2.26. A safety culture definition must recognise that any safety culture is reflected in the value of, priority of and commitment to safety. An organisation with a strong safety culture values the importance of safety; it recognises that safety is a business imperative. Safety is also afforded the highest priority over commercial, operating, environmental and social pressures. And finally, there is a commitment to safety; safety issues receive the attention warranted by their significance.
- 2.27. A safety culture definition should also address the fact that a safety culture is demonstrated through attitudes, accepted norms and behaviours. It is about how things work and "the way things are done around here."
- 2.28. The safety culture definition should be related directly to the safe provision of air navigation. On the other hand, it should not include worker safety which comes under the purview of occupational health and safety, which is not in the scope of the CANSO Safety Culture Working Group (CSCWG). However, it can be assumed that a good safety culture focused on service provision also has a positive effect on occupational health and safety.
- 2.29. CANSO defines a Safety Culture as:

Safety culture refers to the enduring value, priority and commitment placed on safety by every individual and every group at every level of the organisation. Safety culture reflects the individual, group and organisational attitudes, norms and behaviours related to the safe provision of air navigation services.

2.30. As well as a definition, the CSCWG is proposing that safety culture may be further defined by few key elements; some of them are:

- Informed Culture - people are knowledgeable about the human, technical, organisational and environmental factors that determine the safety of the system as a whole.
- Reporting Culture – People can report freely without repercussions and without any hindrance.
- Just Culture - people are encouraged (even rewarded) for providing essential safety-related information. However, there is a clear line that differentiates between acceptable and unacceptable behaviour
- Learning Culture - people have the willingness and the competence to draw conclusions from safety information systems and the will to implement major reforms.
- Flexible Culture – People can adapt organisational processes when facing high temporary operations or certain kinds of danger, shifting from the conventional hierarchical mode to a flatter mode.

2.31. These elements were chosen as they reflect work by James Reason and add three elements that were identified previously by the CANSO safety culture working group. It is important considering the connections and dependencies among these elements, as well as the role of management in establishing policies and procedures to support them and fostering these interrelationships to achieve effective and sustainable outcomes. With these, an organisation can achieve a strong, positive safety culture.⁸

2.32. At the APAC Webinar on ATM Safety Culture held in 2021, ICAO has suggested the following statement of a safety culture

Safety culture is the set of enduring values, behaviours and attitudes regarding safety issues, shared by every member at every level of an organisation. A healthy and positive safety culture reflects a real commitment to safety in the organisation.

Introduction to ATM SAFETY CULTURE - ICAO APAC Webinar on ATM Safety Culture

2.33. In the same meeting held for the APAC Webinar on ATM Safety Culture⁹ some features of a positive safety culture were identified. These features are: -

- Managers and employees, individually and collectively, want to make decisions and take actions that promote safety.
- Individuals and groups continually critique their behaviours and processes and welcome the critique of others searching for opportunities to change and improve as their environment changes.

⁸ Safety Culture Definition and Enhancement Process - CANSO

⁹ ICAO APAC Webinar on ATM Safety Culture - October 2021

- Management and staff share a common awareness of the hazards and risks faced by the organization and its activities, and the need to manage risks.
- Individuals act and make decisions according to a common belief that safety is part of the way they do business.
- Individuals value being informed, and informing others, about safety.
- Individuals trust their colleagues and managers with information about their experiences, and the reporting of errors and mistakes is encouraged to improve how things are done in the future.

2.34. An organisation with a Positive safety culture,

- Recognises that safety is a business imperative,
- Prioritises safety over other pressures and requirements (economic, societal, etc.)
- Believes that safety is everyone's responsibility.

2.35. And conversely, an organisation with a negative safety culture:

- Does not address staff concerns about safety.
- Does not learn from safety events.
- Does not include safety management in decision-making.
- Believes that safety is someone else's responsibility.

2.36. And the impact of a negative safety culture on operational staff

- Investigations are used to assign blame
- Does not examine the root cause
- Refuses to cooperate fully with investigators.

2.37. ICAO has committed to the concept of a positive safety culture as part of a robust safety culture and incorporated it into ICAO Annex 19 and the ICAO Safety Management Manual. States should ensure that legislation is passed that enforces the non-punitive philosophy. Companies and operators should ensure that policies promoting a positive safety culture are endorsed by their executive officers, and that those policies are honoured with documented agreements and procedures for front-line employees.

2.38. Global definition of safety culture was stated by EUROCONTROL:

Safety culture is the enduring value and priority placed on worker and public safety by everyone in every group at every level of an organisation. It refers to the extent to which individuals and groups will commit to personal responsibility for safety, act to preserve, enhance and communicate safety concerns, strive to actively learn, adapt and modify (both individual and organisational) behaviour based on lessons learned from mistakes, and be rewarded in a manner consistent with these values.

Understanding Safety Culture in Air Traffic Management - EEC Note No. 11/06

2.39. This definition suggests that there is a sliding scale of safety culture from bad to excellent. This corresponds with current experience in the European ATM industry

where, for example, initial safety culture measures have utilised a scale of maturity of safety culture between different ANSPs.

Just Culture

- 2.40. It may be apparent from reading the paper so far that a Just Culture is an important element of a positive safety culture. Without a Just Culture, the framework of a positive safety culture falls down. The Just Culture is the 'beating heart' of a positive safety culture.
- 2.41. Everything hinges on non-punitive reporting by employees who are faced with a situation that impacted safety, even if they were personally involved. Without this element the whole safety system will fall down as there will be sporadic or incomplete data for the safety management system to work with. The organisational, national and professional cultures that affect this must be managed from the senior management team all the way to the work floor.
- 2.42. The IFATCA Technical and Professional Manual (LM7.2.1 Just Culture and Mutual Respect) contains the following policy with a definition of Just Culture: -

IFATCA's definition of Just Culture is "a culture in which front line operators and others are not punished for actions, omissions or decisions taken by them which are commensurate with their experience and training, but where gross negligence, wilful violations and destructive acts are not tolerated".

Those Member Associations under national legal frameworks where mandatory and/or voluntary incident reporting systems are not yet compulsory, are encouraged to create one provided it is based on confidential reporting; the reported data shall be protected and never be used against the reporting person nor any other person mentioned in the report and it is compliant with ICAO Doc 9859 – Safety Management Manual, 4th Ed. (2018).

Just Culture shall be in the service of safety and by no ways a means of social control or disciplinary mechanism.

IFATCA shall encourage Member Associations to urge their aviation organisations to develop a Just Culture Policy as part of a mature safety culture.[...]

IFATCA. (2022). IFATCA Technical and Professional Manual (TPM). Ver. 66 - October 2023 Ed. Montréal, Canada: International Federation of Air Traffic Controllers' Associations

- 2.43. EUROCONTROL defines a Just Culture as: -

Just Culture is a culture in which front-line operators and others are not punished for actions, omissions or decisions taken by them which are commensurate with their experience and training, but where gross negligence, wilful violations and destructive acts are not tolerated.

Skybrary: Just Culture Manifesto

- 2.44. What is needed is an atmosphere of trust in which people are encouraged, even rewarded, for providing essential safety-related information - but in which they are also clear about where the line must be drawn between acceptable and unacceptable behaviour.¹⁰
- 2.45. Under “Just Culture” conditions, individuals are not blamed for ‘honest errors’, but are held accountable for wilful violations and gross negligence.
- 2.46. People are less willing to inform the organisation about their own errors and other safety problems or hazards if they are afraid of being punished or prosecuted. Such lack of trust of employees prevents the management from being properly informed of the actual risks. Managers are then unable to make the right decisions in order to improve safety. However, a totally “no-blame” culture is neither feasible nor desirable.
- 2.47. Hence, a Just Culture supports learning from unsafe acts or omissions, but as well from what went right, in order to improve the level of safety awareness through the improved recognition of safety situations and helps to develop conscious articulation and sharing of safety information. Consequently, a Just Culture can be regarded as an enabler, and even indicator of a positive safety culture.
- 2.48. CANSO has a similar definition for JC but adds that,

In order to receive as many safety reports as possible, organisations must foster a culture in which staff feel secure that the organisation will treat them justly and fairly when they do report.

- 2.49. The EU Regulation 376/2014(37) states that

A ‘just culture’ should encourage individuals to report safety-related information. It should not, however, absolve individuals of their normal responsibilities. In this context, employees and contracted personnel should not be subject to any prejudice on the basis of information provided pursuant to this Regulation, except in cases of wilful misconduct or where there has been manifest, severe and serious disregard with respect to an obvious risk and profound failure of professional responsibility to take such care as is evidently required in the circumstances, causing foreseeable damage to a person or to property, or seriously compromising the level of aviation safety.

EU Reg 376/2014 (37)

- 2.50. A strong Just Culture in an organisation is foundational for a Positive Safety Culture. Having Just Culture enables operators and service providers to create a positive environment where the employees feel comfortable to report and share safety information without subjecting to any punitive actions. Therefore, a strong Just Culture is a key enabler to foster and support the other components of safety culture.

¹⁰ Skybrary: Just Culture

3. CONCLUSION

- 3.1. A positive safety culture, including the associated non-punitive safety reporting and data collection systems, along with unbiased safety investigations, is an essential component of a Safety Management System. It values the philosophy that errors, mistakes, or unintentional actions, when reported, and used only for safety improvements, is the key to identifying and managing emerging hazards.
- 3.2. A positive safety culture does not come in one size or shape. It is a reflection of the people and organization that make it happen every day. It is not a manual or a certificate. PSC lives in a company's daily work activity.
- 3.3. A positive safety culture embodies an organisation's collective commitment to safety excellence, it goes beyond mere compliance with rules and regulations, reflecting a shared belief that safety is a fundamental and integral aspect of every operation, individuals at all levels actively engage in safety-related initiatives, communicate openly about safety concerns, and recognise the interconnectedness of their actions to the overall safety fabric of the organisation, it includes, just culture, continuous learning, proactive risk mitigation, and shared responsibility for safety, fostering an environment where safety is not just a priority but an ingrained value that guides decisions, behaviours, and interactions.

4. DRAFT RECOMMENDATIONS

PLC recommends that: -

- 4.1. The definition of Just Culture within LM 7.2.1, is removed and placed within the definition section of TPM.
- 4.2. The following text is added to the preamble of the IFATCA policy LM 7.2.1:

A strong Just Culture is a fundamental part for a Positive Safety Culture. Having Just Culture enables operators and service providers to create a positive environment where the employees feel comfortable to report and share safety information without subjecting to any punitive actions. Therefore, a strong Just Culture is a key enabler to foster and support the other components of safety culture.
- 4.3. The following amendments within the policy LM 7.2.1 are made to enforce IFATCA's stance on embracing a positive safety culture.

IFATCA TPM (2025), LM 7.2.1 – JUST CULTURE, TRUST AND MUTUAL RESPECT

Proposal:

~~IFATCA's definition of Just Culture is "a culture in which front line operators and others are not punished for actions, omissions or decisions taken by them which are commensurate with their experience and training, but where gross negligence, wilful violations and destructive acts are not tolerated".~~

A Just Culture is an essential element of a positive safety culture, which fosters open communication, learning from mistakes, and a shared commitment to continuous improvement.

Those Member Associations under national legal frameworks where mandatory and/or voluntary incident reporting systems are not yet compulsory, are encouraged to create one provided it is based on confidential reporting; the reported data shall be protected and never be used against the reporting person nor any other person mentioned in the report and it is compliant with ICAO Doc 9859 – Safety Management Manual, 4th Ed. (2018).

Just Culture shall be in the service of safety, fostering a positive safety culture where individuals feel able to identify and report potential hazards without fear. ~~and~~ It is by no means a means of social control or disciplinary mechanism.

A strong Just Culture is a fundamental part for a Positive Safety Culture. Having Just Culture enables operators and service providers to create a positive environment where the employees feel comfortable to report and share safety information without subjecting to any punitive actions. Therefore, a strong Just Culture is a key enabler to foster and support the other components of safety culture.

Adhering to a Just Culture, and fostering a Positive Safety Culture, Air Navigation Service Providers can move to align with the characteristics of a High Reliability Organisation, minimising risks and maximising safety performance.

IFATCA shall encourage Member Associations to urge their aviation organisations to develop a Just Culture Policy as ~~part of a mature safety culture~~ a key component of a positive safety culture. This policy, supported by the highest organisational level and visibly endorsed by workforce level, should include the following elements:

- Just Culture principles ensuring fair treatment of staff at all levels (managers and employees)
- Recognition of staff at all levels for the role they play in delivering a safe service.
- Compromise to provide with the appropriate tools, training and procedures required to perform their job and guaranteeing that they would not be put in situations where safety is compromised because of organisational factors. Anyhow, systemic factors outside the scope of individuals in case of unwanted outcomes are to be considered.
- Means to constantly measure maturity and effectiveness of Just Culture within the organisation.

Any incident reporting system shall be based on the following principles:

- a) Cooperation: with all those having a legitimate and appropriate interest
- b) Dissemination: distribution of safety-related data to all those with appropriate interest.
- c) Confidentiality: for the whole procedure, guaranteed by law.
- d) Protection: for those involved or mentioned in the report, the provision of which be within the remit of an independent body.
- e) Trust and mutual respect.

Air Navigation Service Providers and their respective employee groups shall develop mechanisms that foster an environment of trust and mutual respect in order to improve the capability to compile, assess and disseminate safety-related information with each other, as well as with other national and international aviation organizations.

- 4.4. Add the definition of Positive Safety Culture to the definition section of the IFATCA TPM as below: -

IFATCA TPM (20XX), Definitions – Positive Safety Culture

Proposal:

A positive safety culture is defined by values, attitudes and behaviour that are committed to the organisation's safety efforts and is achieved through the combination of technical competence that is continually enhanced through training and education, effective communications and information sharing.

5. REFERENCES

- 5.1. IFATCA TPM Manual
- 5.2. Skybrary: Safety Culture
- 5.3. Skybrary: Just Culture
- 5.4. Skybrary: Just Culture Manifesto
- 5.5. 2016-07-08 Just Culture Introduction – Nairobi
- 5.6. Safety Culture Definition and Enhancement Process – CANSO
- 5.7. SMS Safety Management Manual – Component 4 par. 5.3.83

- 5.8. Understanding Safety Culture in Air Traffic Management - EEC Note No. 11/06
- 5.9. ICAO Doc. 9859 - SMS Safety Management System - Fourth edition
- 5.10. This resistance to change is a function of any 'culture', but ideally an organisation is 'flexible' and therefore can be adaptive in its safety approach when necessary.
- 5.11. CANSO Guidelines on Just Culture – Transforming Global ATM Performance (at ICAO Safety Management Workshop)
- 5.12. EU Reg 376/2014
- 5.13. ICAO APAC Webinar on ATM Safety Culture - October 2021
- 5.14. TWELFTH MEETING OF THE ASIA PACIFIC REGIONAL AVIATION SAFETY TEAM (APRAST/12)
- 5.15. Safety Management System and Safety Culture Working Group (SMS WG) - SAFETY CULTURE FRAMEWORK FOR THE ECAST SMS-WG
- 5.16. Example and Indicators of a Positive Safety Culture - Twenty-First Meeting of the Asia Pacific Regional Aviation Safety Team (APRAST/21)

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