

SAFETY NOTICE

SUBJECT: Guidance on Acceptable and Unacceptable Behaviour

GENERAL: Safety Notices (SNs) are issued by the Civil Aviation Authority – Macao, China to convey advisory information to Macao aviation entities to enhance safety. SNs contain safety-related recommendations, guidance and/or industrial best practices to specific subjects which may or may not have been addressed by established requirements and regulations.

RELATED REGULATIONS: AC/GEN/005 – Safety Management System Requirements

AC/GEN/009 – Macao Confidential Aviation Reporting System

APPLICABILITY: This SN applies to all service providers and individuals making reports under the Macao Confidential Aviation Reporting System (MACCARES).

CANCELLATION: This SN is the first SN issued on this subject.

REFERENCES: The following material was referred to for the development of this SN:

- Cooperative Development of Operational Safety & Continuing Airworthiness Programme – South East Asia (COSCAP-SEA) Advisory Circular CSEA 023

1. Introduction

1.1 This SN is issued to provide guidance to individuals making reports under MACCARES, and service providers and their employees regarding the importance of identifying the difference between acceptable and unacceptable employee behaviour in order to support an effective safety reporting system.

2. Background

2.1 The ICAO Safety Management Manual (DOC 9859) identifies that safety reporting is a key aspect of an effective safety management system. Effective safety reporting requires all employees to voluntarily report all hazards they may see, encounter or have knowledge of. In order to support this, service providers must create and maintain an environment that encourages reporting.

2.2 Safety reporting must be promoted, and not be discouraged in any way. It is essential to balance the need to encourage reporting with the need to have meaningful consequences for unacceptable behaviour. An effective safety reporting policy will actively encourage safety reporting and, by defining the line between acceptable behaviour and unacceptable behaviour, provide fair protection to reporters.

2.3 A hazard is a condition or an object with the potential of causing injuries to personnel, damage to equipment or structures, loss of material, or reduction of ability to perform a prescribed function. Hazards can be classified into one of two categories:

2.3.1 threat, which constitutes physical situations; or

2.3.2 error, which involves human factors.

Each of these categories needs to be addressed to achieve a safe environment. This SN will focus on error and the importance for a safety reporting policy to distinguish acceptable behaviour from unacceptable behaviour.

3. Human Error

3.1 Human error is an inadvertent action – people do not choose to make an error¹ – and it is a leading contributor to many large-scale system failures. Dr. James Reason (1990) revolutionized the understanding of the contribution of human error in accident investigation. Subsequently, Drs. Scott Shappell and Doug Wiegmann developed a systematic method of analysis – Human Factors Analysis Classification System (HFACS) – for exploring the causes of human error on four different levels: unsafe acts, preconditions for unsafe acts, unsafe supervision, and organizational factors².

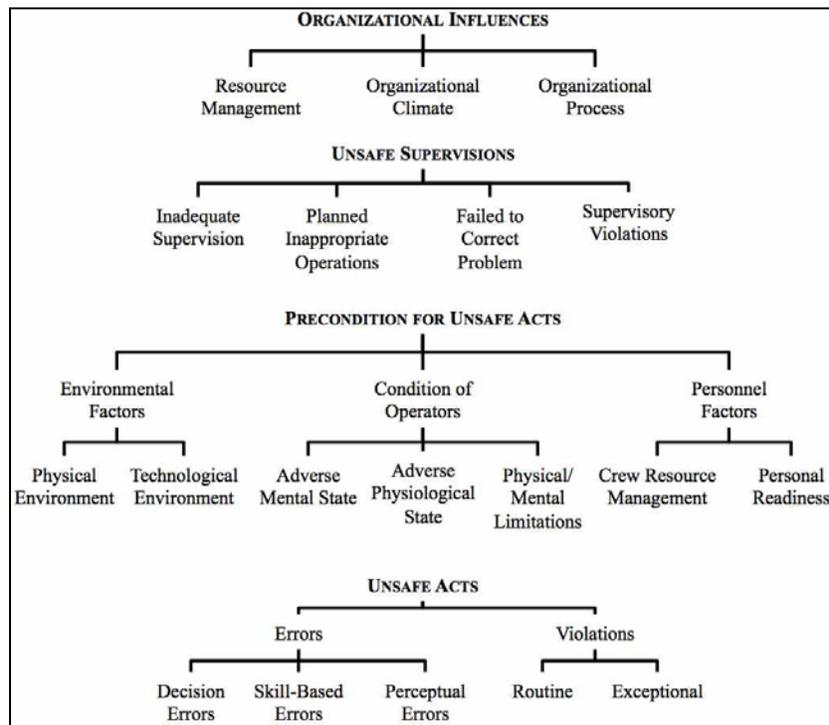


Figure 1: The Human Factors Analysis and Classification System

¹ Marx, David Whack a Mole: The Price We Pay for Expecting Perfection. Plano TX: By Your Side Studios, 2009

² A Human Error Approach to Aviation Accident Analysis, Wiegmann Douglas A and Shappell Scott A, Ashgate Publishing company, Burlington, VT, 2003.

3.2 Organizational influences include:

- 3.2.1 Organizational Climate: The atmosphere/vision within the organization including such things as policies, command structure, and culture.
- 3.2.2 Operational Processes: Formal processes including operations, procedures, and oversight.
- 3.2.3 Resource Management: Describes how human, financial, and equipment resources are managed.

3.3 Preconditions for unsafe acts include:

3.3.1 Environmental Factors

- 3.3.1.1 Technological Environment: Includes a variety of issues including the design of equipment and controls, display/interface characteristics, checklist layouts, task factors, and automation.
- 3.3.1.2 Physical Environment: Includes both the operational setting (e.g., weather, altitude, terrain) and the ambient environment, such as heat, vibration, lighting, toxins, etc.

3.3.2 Condition of the Individual (Employee)

- 3.3.2.1 Adverse Mental States: Acute psychological and/or mental conditions that negatively affect an employee's performance, such as mental fatigue, harmful attitudes, and misplaced motivation.
- 3.3.2.2 Adverse Physiological States: Acute medical and/or physiological conditions that preclude safe operations, such as illness, intoxication, and the myriad of pharmacological and medical abnormalities known to affect performance.
- 3.3.2.3 Physical/Mental Limitations: Permanent physical/mental disabilities that may adversely impact performance, such as poor vision, lack of physical strength, mental aptitude, general knowledge, and a variety of other chronic mental illnesses.

3.3.3 Personnel Factors

- 3.3.3.1 Communication, Coordination & Planning: Includes a variety of communication, coordination, and teamwork issues that impact performance.
- 3.3.3.2 Fitness for Duty: Off-duty activities required to perform optimally on-the-job such as adhering to crew rest requirements, alcohol restrictions, and other off-duty mandates.

3.4 Unsafe supervision includes:

- 3.4.1 Inadequate Supervision: Oversight and management of personnel and resources including training, professional guidance, and operational leadership, among other aspects.
- 3.4.2 Planned Inappropriate Operations: Management and assignment of work including aspects of risk management, crew pairing, operational tempo, etc.
- 3.4.3 Failure to Correct Known Problems: Those instances when deficiencies among individuals, equipment, training, or other related safety areas are known to the supervisor, yet are allowed to continue uncorrected.
- 3.4.4 Supervisory Violations: The willful disregard for existing rules, regulations, instructions, or standard operating procedures by management during the course of their duties.

4. Definitions

- 4.1 **Routine violations**³ are violations which have become the normal way of doing business. They occur in order to get the job done when the work group has difficulty following established procedures, perhaps due to practical workability issues or design deficiencies. This leads to the informal adoption of revised procedures which eventually become routine. This is the notion of the normalization of deviance discussed in the ICAO Safety Management Manual. In practice, routine violations are seldom considered to be violations by a work group. Instead, they are considered as an improvement, since they aim to save time and effort by simplifying a task to help get the job done - even if it involves unapproved shortcuts.
- 4.2 **Exceptional Violations**⁴ are isolated departures from authority, neither typical of the individual nor condoned by management.
- 4.3 **At-risk Behaviour** is the choice to deviate from a rule (e.g., taking a short cuts in procedures) because the individual believes he/she is still operating “safely”. Employees may choose the at-risk path because they feel the pressure of too many things to do, and under-estimate or undervalue the risks that they are taking. For new employees, many at-risk behaviours occur because they simply don’t have the experience to know what they’re doing is risky⁵.
- 4.4 **Reckless Behaviour** is the choice to consciously disregard a substantial and unjustifiable risk (e.g., substance abuse). It’s important to understand that a person who engages in reckless behaviour still does not intend to cause harm⁶.

³ ICAO Safety Management Manual (DOC 9859), and Wiegmann Douglas A and Shappell Scott A, A Human Error Approach to Aviation Accident Analysis, Ashgate Publishing company, Burlington, VT, 2003.

⁴ Wiegmann Douglas A and Shappell Scott A, A Human Error Approach to Aviation Accident Analysis, Ashgate Publishing company, Burlington, VT, 2003.

⁵ Marx, David Whack a Mole: The Price We Pay for Expecting Perfection. Plano TX: By Your Side Studios, 2009.

⁶ Marx, David Whack a Mole: The Price We Pay for Expecting Perfection. Plano TX: By Your Side Studios, 2009.

4.5 **Criminal Behaviour** is the choice to knowingly or purposely harm others (e.g., murder, theft, sabotage and arson)⁷.

5. Acceptable and Unacceptable Behaviours

5.1 Acceptable Behaviour

Acceptable behaviour requires that people operate to the best of their abilities, with the objective to comply with company requirements and regulatory rules. When a human error or at risk behaviour or routine violation occurs, despite the best intentions, it is important for everyone involved to report openly and to participate fully in a safety investigation with the objective to prevent the event or problem from happening again.

5.2 Unacceptable Behaviour

Unacceptable behaviour is reckless behaviour, exceptional violations and criminal behaviour. Failure to report a safety hazard, incident or accident is also unacceptable behaviour.

6. Response of Organization

6.1 Examination of the circumstances related to an event will be required, and classification of the behaviour will be made at the conclusion of the examination. Examination must consider the role of the individual, the preconditions, unsafe supervision as well as organizational influences that may have contributed to the event.

6.2 An organization must respond appropriately to each type of behaviour in order to effectively encourage acceptable behaviours while discouraging unacceptable behaviours. Effective response by the organization requires that the information be reported, investigated and safety action put in place, and that people are treated fairly.

6.3 Fairness requires that the treatment of people takes into account their individual behaviour. People who respect and demonstrate acceptable behaviour should be treated in a manner that encourages this, while those who engage in unacceptable behaviour should be treated in manner that will discourage them and others from future similar behaviour. People who behave acceptably should see clearly that unacceptable behaviour is not rewarded by favourable treatment. Unacceptable behaviour may be dealt with through a discipline process. This concept of fairness is sometimes described as a just culture⁸.

⁷ Marx, David *Whack a Mole: The Price We Pay for Expecting Perfection*. Plano TX: By Your Side Studios, 2009.

⁸ The difficulty of rationalizing fairness and just culture with the civil justice process was acknowledged by participants at the ICAO 2010 High Level Safety Conference. The HLSC concluded that it is important to protect safety data from inappropriate use, including retribution, and recommended the creation of a multidisciplinary group to consider, among other matters, the interaction between safety and judicial authorities. Reference: HLSC 2010 Conclusion 2/4 and Recommendation 2/4.

7. Employee Responsibilities and Safety Reporting Policy

7.1 An example of employee responsibilities and a related safety reporting policy illustrating the difference between acceptable and unacceptable behaviour is provided below.

Employees' Responsibilities

Employees are responsible to perform their duties in a safe manner in accordance with established health, safety and security policies and procedures with due consideration for their own safety and the safety of others.

Employees' responsibilities include:

- a) Following procedures and respecting rules.
- b) Reporting to the employer any hazards (threats or errors), safety related incidents, or accidents that have been experienced or witnessed.
- c) Reporting to the employer any condition or circumstance by an individual or organization external to the organization that may compromise safety.
- d) Taking all reasonable and necessary precautions, appropriate to the situation, to ensure the safety of all persons or property that may be affected by any acts or omissions.
- e) Participating in the organization's SMS program.

[Air Operator] Safety Reporting Policy

[Air Operator] is committed to safety. To support this commitment, [Air Operator] requires the reporting of hazards and occurrences that may cause illness, injury or damage. Employees are responsible to communicate promptly any information that may affect safety.

To foster this commitment [Air Operator] pledges:

No Reprisal for Acceptable behaviour

An employee who has committed a human error will be consoled (comforted in order to alleviate grief/anxiety) and/or coached to mitigate the reoccurrence of the errors (e.g., provided with training and/or check, additional practice, or experience).

An employee who has committed at-risk behaviour or routine violation will also be coached (non-punitively and constructively)

An employee who has demonstrated unacceptable behaviour will not be subject to punitive action or reprisal for the reporting of hazards and occurrences unless the person remains unresponsive to a particular line of coaching. In such an instance [Air Operator] response may include discussion, direction and, if warranted, discipline.

Unacceptable behaviour may be dealt with through coaching, counselling and, if warranted, punishment.

Unacceptable behaviour is:

- Reckless Behaviour (e.g., substance or alcohol abuse, including consumption of a substance, the possession or consumption of which is contrary to law, or the consumption of alcohol or a substance in circumstances such that the individual knows or should reasonably know that his or her professional abilities will be impaired as a result);
- Criminal Behaviour (including acts of criminal behaviour and sabotage);
- Non-compliance with Company hazard or event reporting procedures;
- Deliberate misrepresentation by an employee of the facts in a report.

Confidentiality

The identity or information revealing the identity of any employee who reports a hazard or occurrence in accordance with [Air Operator] requirements will not be disclosed unless agreed to by the employee or required by law.

8. Recommended Actions

- 8.1 Service providers are encouraged to note the information contained in this Safety Notice and to review their policies, procedures and training to support an effective safety reporting system.

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