CAMO Safety Reporting Considerations, Hazards, Risks & Mitigations

Sofema Aviation Services (SAS) www.sassofia.com considers the challenges of managing an effective CAMO Safety Management System.

To consider the interaction of the CAMO with the obligation to manage Safety Hazards.

- For the purpose of aviation safety risk management, hazards should be focused on those conditions that could cause or contribute to unsafe operation of aircraft or aviation safety-related equipment, product, and services.

Hazard Identification

- Proper hazard identification leads to an appropriate evaluation of their potential outcomes.
- Hazards should be differentiated from error, a normal and unavoidable component of human performance, which must be managed.
- Hazards exist at all levels in the organization and should be detectable through the use of reporting systems, inspections, or audits.
- Mishaps may occur when hazards interact with certain triggering factors. As a result, hazards should be identified before they lead to accidents, incidents, or other safety-related occurrences.

What Does EASA CAMO Require – (Regulation (EU) 2019/1383) - CAMO.A.202 Internal safety reporting scheme

(a) As part of its management system, the organisation shall establish an internal safety reporting scheme to enable the collection and evaluation of such occurrences to be reported under point CAMO.A.160.

(b) The scheme shall also enable the collection and evaluation of those errors, near misses, and hazards reported internally that do not fall under point (a).

(c) Through this scheme, the organisation shall:

- identify the causes of and contributing factors to any errors, near misses, and hazards reported and address them as part of safety risk management in accordance with point (a)(3) of point CAMO.A.200;
- ensure evaluation of all known, relevant information relating to errors, the inability to follow procedures, near misses, and hazards, and a method to circulate the information as necessary.

(d) The organisation shall provide access to its internal safety reporting scheme to any subcontracted organisation.

(e) The organisation shall cooperate on safety investigations with any other organisation having a significant contribution to the safety of its own continuing airworthiness management activities.

Consider - What Do We Mean by Hazards?

Well in simple terms it is potentially anything which impacts the role and responsibility of the CAMO which has the potential to cause harm – so could affect People / Equipment / The organisation or Financial Exposure, primarily in respect of safety with secondary exposure to support the "well-being" of the organisation.

- A hazard is something that can cause harm, e.g. electricity, chemicals, working up a ladder, noise, a keyboard, a bully at work, stress, etc. A risk is a chance, high or low, that any hazard will actually cause somebody harm.
- Hazard identification is a prerequisite to the safety risk management process. Any incorrect differentiation between hazards and safety risks can be a source of confusion.

What does the AMC Say? ED Decision 2020/002/R

- Each internal safety reporting scheme should be confidential and enable and encourage free and frank reporting of any potentially safety-related occurrence, including incidents such as errors or near misses, safety issues and hazards identified. This will be facilitated by the establishment of a just culture.
- The internal safety reporting scheme should contain the following elements:
  - (1) clearly identified aims and objectives with demonstrable corporate commitment;
  - (2)a just culture policy as part of the safety policy, and related just culture implementation procedures;
  - (3)a process to:

- (i) identify those reports which require further investigation; and
- (ii) when so identified, investigate all the causal and contributing factors, including any technical, organizational, managerial, or HF issues, and any other contributing factors related to the occurrence, incident, error or near miss that was identified;
- (iii) if adapted to the size and complexity of the organisation, analyse the collective data showing the trends and frequencies of the contributing factor;

- (4) appropriate corrective actions based on the findings of investigations;
- (5) initial and recurrent training for staff involved in internal investigations;
- (6) where relevant, the organisation should cooperate with the owner or operator on occurrence investigations by exchanging relevant information to improve aviation safety.

(c) The internal safety reporting scheme should:

- (1) ensure confidentiality to the reporter;
- (2) be closed-loop, to ensure that actions are taken internally to address any safety issues and hazards; and
- (3) feed into the recurrent training as defined in AMC2 CAMO.A.305(g) whilst maintaining appropriate confidentiality.

(d) Feedback should be given to staff both on an individual and a more general basis to ensure their continued support of the safety reporting scheme.

AMC General Comments CAMO.A.202 Internal safety reporting scheme (ED Decision 2020/002/R

GENERAL

(a) The overall purpose of the internal safety reporting scheme is to collect information reported by the organisation personnel and use this reported information to improve the level of compliance and safety performance of the organisation. The purpose is not to attribute blame.

(b) The objectives of the scheme are to:

- Enable an assessment to be made of the safety implications of each relevant incident (errors, near miss), safety issue and hazard reported, including previous similar issues, so that any necessary action can be initiated; and
- Ensure that knowledge of relevant incidents, safety issues and hazards is shared so that other persons and organisations may learn from them.

(c) The scheme is an essential part of the overall monitoring function and should be complementary to the normal day-to-day procedures and 'control' systems; it is not intended to duplicate or supersede any of them.

The scheme is a tool to identify those instances in which routine procedures have failed or may fail.

(d) All reports should be retained, as the significance of such reports may only become obvious at a later date.

(e) The collection and analysis of timely, appropriate and accurate data will allow the organisation to react to information that it receives, and apply the necessary action.

Understanding our Exposure (Understanding Hazards and Consequences)

- A clear understanding of hazards and their related consequences is essential to the implementation of sound safety risk management.
- Any hazard that can have an impact (whether directly or indirectly) on the operational safety of aircraft or aviation safety-related equipment, products, and services should be deemed to be pertinent to an aviation SMS.
- To be Clear a Hazard in itself is not necessarily a bad thing, in fact, it is a normal component of everyday aviation life.
- Our goal, therefore, has to be to capture all hazards in such a way that they can be analyzed and assessed, this is one of if not the most challenging part of the organization process.
- Whilst Hazards are an inevitable part of aviation activities, their manifestation, and possible consequences can be addressed through various mitigation strategies to contain the hazard‘s potential from resulting in unsafe aircraft or aviation equipment operations.
- There is a common tendency to confuse hazards with their consequences or outcomes.

Note - It may be noted that the consequences of a particular Hazard can be multi-layered, including as an intermediate unsafe event, before an ultimate consequence (accident).

Whilst the ultimate consequence could be an accident, the damaging potential of a hazard in fact materializes through one or many consequences.

How to Describe Consequences

- It is therefore important for safety assessments to include a comprehensive account of all likely consequences described accurately and in practical terms.
- The most extreme consequence, loss of human life, should be differentiated from those that involve the potential for lesser consequences such as increased flight crew workload, passenger discomfort, or reduction in safety margins.
- The description of consequences according to their plausible outcomes will facilitate the development and implementation of effective mitigation strategies through proper prioritization and allocation of limited resources.

Examples of Hazards within a CAMO Environment

- Incorrect assessment of the airworthiness status of the aircraft
- Changes to Operations (Routes)
- Inadequate Process & Procedures
- A/C introduction
- New approvals (e.g., ETOPS, PBN)
- Incorrect application of the MEL
- Missed maintenance task
- Incorrectly evaluated AD or SB
- Poor Communication with Maintenance, Flight Ops, Ground Ops
- Roles and responsibilities between CAMO and groups not sufficiently defined

- Sub-Contractor Management & Control
- Incorrect assessment of defect In-Adequate Defect Control / Task management
- Safety culture and ability to deliver positive change
- Shifts / Handover
- Manpower Job Description / Competence
- Poor Competence Assessment / Training
- Unqualified staff working without appropriate supervision

Next Steps

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