Hazards Within an EASA Part CAMO Organisation

Sofema Aviation Services (SAS) www.sassofia.com considers the interaction of the CAMO with the obligation to manage Safety Hazards.

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

Introduction

An important mechanism for proactive hazard identification is a voluntary hazard/ incident reporting system.

- (Information collected through such reporting systems may be supplemented by observations or findings recorded during routine site inspections or organization audits).
- Hazards can also be identified or extracted from a review of any in-process documentation or from investigation reports, especially those which are deemed to have indirect contributing factors and which may not have been adequately addressed by corrective actions resulting from the investigation process.

- Thus, a systematic procedure to review accident/ incident investigation reports for outstanding hazards is a good mechanism to enhance an organization‘s hazard identification system.

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 the 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.

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 its self 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 1 – A consequence is an outcome that could be triggered by a hazard. For example, a runway excursion (overrun) is a projected consequence in relation to the hazard of a contaminated runway.
By first defining the hazard clearly, one can then project the proper consequence or outcome.

Note 2 – It may be noted that the consequences of a particular Hazard can be multi-layered, including such 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.

Hazard Identification

- Proper hazard identification leads to 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 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.

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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