

Attributes and Safety Management Principles¹

Responsibility—*A clearly identifiable, qualified, and knowledgeable person who is accountable for the quality of a process.*

[§ 5.23] (a) The certificate holder must define accountability for safety within the organization's safety policy for...

(2) All members of management in regard to developing, implementing, and maintaining SMS processes within their area of responsibility, including, but not limited to:

- (i) Hazard identification and safety risk assessment.
- (ii) Assuring the effectiveness of safety risk controls.
- (iii) Promoting safety as required in subpart E of this part.
- (iv) Advising the accountable executive on the performance of the SMS and on any need for improvement.

Authority—*A clearly identifiable, qualified, and knowledgeable person who has the authority to set up and change a process.*

[§ 5.23] (b) The certificate holder must identify the levels of management with the authority to make decisions regarding safety risk acceptance.

Interfaces—*Interactions between processes that must be managed in order to ensure desired outcomes.*

[Interfaces are not specifically covered in the safety management principles, however, they would be considered in the system analysis in the SRM process]

[§ 5.53] (a) When applying safety risk management, the certificate holder must have [*design and perform*] a process to describe and analyze the system for use in identifying hazards under paragraph (c) of this section, and developing and implementing risk controls related to the system ...

(b) In conducting the system analysis, the following information must be considered:

- (1) Function and purpose of the system.
- (2) The system's operating environment.
- (3) An outline of the system's processes and procedures.
- (4) The personnel, equipment, and facilities necessary for operation of the system.

Procedures—*Documented methods to accomplish a process.*

[§ 5.51] A certificate holder must apply safety risk management to a system under any of the following conditions:

- (a) Implementation of new systems.
- (b) Revision of existing systems.
- (c) Development of operational procedures.

¹ Attributes from FAA Order 8900.1, Chapter 10; Safety Management Principles from 14 CFR part 5

(d) Identification of hazards or ineffective risk controls through the safety assurance processes [see “Process Measures”]

Controls—*Checks and restraints designed into a process to ensure a desired result.*

[§ 5.55] (c) The certificate holder must develop [*design*] and maintain [*perform*] processes to develop safety risk controls that are necessary as a result of the safety risk assessment process...

(d) The certificate holder must evaluate whether the risk will be acceptable with the proposed safety risk control applied, before the safety risk control is implemented.

Process Measures—*Used to validate a process and identify problems or potential problems in order to correct them.*

[§ 5.71] (a) The certificate holder must develop [*design*] and maintain [*perform*] processes and systems to acquire data with respect to its operations, products, and services to monitor the safety performance of the organization. These processes and systems must include, at a minimum, processes, and systems for the following:

- (1) Monitoring of operational processes.
- (2) Monitoring of the operational environment to detect changes.
- (3) Auditing of operational processes and systems.
- (4) Evaluations of the SMS and operational processes and systems.
- (5) Investigations of incidents and accidents.
- (6) Investigations of reports regarding potential non-compliance with regulatory standards or other safety risk controls established by the certificate holder through the safety risk management process...
- (7) A confidential employee reporting system in which employees can report hazards, issues, concerns, occurrences, incidents, as well as propose solutions and safety improvements.

(b) The certificate holder must develop [*design*] and maintain [*perform*] processes that analyze the data acquired through the processes and systems identified under paragraph (a) of this section and any other relevant data with respect to its operations, products, and services.

[§ 5.73] (a) The certificate holder must conduct assessments of its safety performance against its safety objectives, which include reviews by the accountable executive, to:

- (1) Ensure compliance with safety risk controls established by the certificate holder.
- (2) Evaluate the performance of the SMS.
- (3) Evaluate the effectiveness of the safety risk controls ... and identify any ineffective controls.
- (4) Identify changes in the operational environment that may introduce new hazards.
- (5) Identify new hazards.

(b) Upon completion of the assessment, if ineffective controls or new hazards, or potential hazards are identified ..., the certificate holder must use the safety risk management process

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