



Six Attributes for Your SMS

By Russ Lawton

Developing the documentation for your Safety Management System (SMS) requires considerable sweat equity to ensure it meets the SMS standard in FAA Advisory Circular (AC) 120-92 and that the documentation accurately reflects your company's way of doing business. Your SMS documentation must provide enough detail so every employee understands how safety is managed in your company and what is expected of them.

How much detail should your documentation include? There are six specific areas, or attributes, that form the basis for the expectations of your SMS program. These attributes, which are derived from the FAA's Air Transportation Oversight System (ATOS), should also be applied to your company's manuals and other documents. Let's start by defining the six attributes, and then we'll briefly discuss their role in your SMS program documentation.

- **Responsibility**—Who is accountable for management of the process (planning, organizing, directing, controlling) and its ultimate accomplishment?
- **Authority**—Who can direct, control, or change the process, and who can make key decisions, such as risk acceptance? This attribute also includes the concept of empowerment.
- **Procedures**—As specified ways to carry out an activity or a process, procedures translate the “what” in goals and objectives into “how” in practical activities.
- **Controls**—These are elements of the system that include hardware, software, special procedures or procedural steps, and supervisory practices designed to keep processes on track.
- **Interfaces**—Examples include items such as lines of authority between departments, lines of communication between employees, consistency of procedures, and clear delineation of responsibility between organizations, work units, and employees.

- **Process Measures**—These are means of providing feedback to responsible parties that required actions are taking place, required outputs are being produced, and expected outcomes are being achieved.

Next we discuss how each attribute fits into your SMS program.

Responsibility and Authority

Management and individual employee accountability, responsibility, and authority are fundamental to safety management. These concepts must be integrated into your SMS program. The SMS standard in AC120-92 establishes expectations for top management, other company managers, and all employees of the organization.

The SMS standard requires a person of responsibility to oversee SMS development, implementation, and operation. The following is an example of an accountability statement for a senior executive: “The president/CEO, as the accountable executive, has the authority and responsibility to ensure the development, implementation, and operation of a viable safety management program.”

Note that the president does not bear the principal responsibility for safety management. The managers of the line operational functions (e.g., top, middle, and frontline managers) are the ones who actually manage the operations in which risk is incurred. As a result, these managers are the “owners” of the SMS.

The documentation must specify those people or levels of management that can make safety risk acceptance decisions.

Procedures

Procedures are instructions that provide a clear understanding of how to perform a process or task. A well-written procedure should include the four “Ws” (who, what, when, where) plus “H” (how). The

following procedure for updating a manual incorporates the four Ws plus H:

- Each person that has been issued a manual (who) shall complete the following steps whenever a revision (what) to that manual is issued:
- Remove existing pages listed on the revision notice (how and where).
- Insert new pages listed on the revision notice (how and where).
- Log the revision on the Record of Revision Page, reflecting the revision number and effective date (how and where).
- Sign and return the revision acknowledgement form to the director of operations (how and where).
- The revision should be made as soon as practical after receipt, but in no case later than the effective date (when)."

Controls

Organizational process controls usually consist of special procedures and supervisory and management practices and processes. For example, an FBO might require a line service supervisor to be present whenever an aircraft above a certain size is moved, or it might have procedures that designate specific tug operators who have been trained and certified to conduct the towing.

In another example, a charter operator uses a risk assessment tool before each flight. When the risk exceeds a predetermined value, either the chief pilot or the director of operations must review and either accept or mitigate the risk before the flight is released. This example illustrates a process that specifies those people or levels of management that can make safety risk acceptance decisions and specifies a threshold for when this must be accomplished.

Practices such as continuous monitoring, internal audits, internal evaluations, and management reviews (which are all parts of the safety assurance process) are also considered forms of control.

Interfaces

This can be as simple as providing each employee with an organizational diagram that depicts the company reporting structure. It should include the safety manager and safety committee shown as independent functions that report directly to top management.

Process Measures

"What gets measured gets done" is the favorite expression of a long-time colleague of mine in system safety. If you don't track events and activities, how will you know how well things are working? You have financial measures of success in your company, and similar measures should apply to safety. It's not good enough to say, "We must be safe because we haven't had an accident lately."

An active safety committee and reporting program will help get feedback from employees as to how they view safety throughout the company. Internal and external audits also provide valuable feedback.

While we haven't been able to go into great detail in each area, you can see how incorporating each attribute into your documentation will make it sound like a working document that people actually use and not a bunch of policy statements that look impressive but can't be put into practice. ■

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