

# A Businesslike Approach to Safety: How Canada Is Leading the Way

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Canada has been one of the world leaders in aviation safety management systems (SMS). All operators in the country, including airborne law enforcement, are required to have an SMS. In 2005, the country identified six “evolving directions,” which represent the principle adjustments that we need to make over the next few years:

- Adopt a data-driven approach to enhancing aviation safety. This includes collecting and making more accessible the data that will support a proactive approach to safety.
- Use a risk-based approach to resource allocation to support those activities which will achieve the greatest safety benefit.
- Foster and strengthen partnerships to put into effect the concept that responsibility for safety is shared by the regulator (Transport Canada, Canada’s equivalent to the Federal Aviation Administration) and the aviation community.
- Implement an SMS in aviation organizations.
- Take into account human and organizational factors in safety management practices.
- Communicate effectively with the aviation community on safety.

SMS implementation is the cornerstone of the evolving direction of aviation safety in Canada. All other directions will evolve within an SMS environment. SMSs are based on the fact that there will always be hazards and risks, so proactive management is needed to identify and control these threats to safety before they lead to mishaps.

## **Why Safety Management Systems?**

In recent years, a great deal of effort has been devoted to understanding how accidents happen in aviation and other industries. It now is generally accepted that most accidents result from human error. It would be easy to conclude that these human errors indicate carelessness or incompetence on the job, but that would not be accurate. Investigators are finding that the human is only the last link in the chain of events that lead to an accident. We will not prevent accidents by changing people; we will only prevent accidents when we address the underlying causal factors.

In the 1990s, the phrase “organizational accident” was coined because most of the links in the accident chain are under the control of the organization. Since the greatest threats to aviation safety originate in organizational issues, making the system safe will require action by the organization. After extensive research and consulting with world leaders in safety, Transport Canada Civil Aviation has concluded that the most efficient way to make the Canadian aviation system safer will be to adopt a systems approach to safety management. Transport Canada supports the SMS adoption by undertaking:

- extensive discussion and consultation with all segments of the aviation industry.
- a comprehensive educational and promotional campaign.

- changes to Canadian aviation regulations.

### **What is an SMS?**

An SMS is a businesslike approach to safety. It is a systematic, explicit and comprehensive process for the measuring of performance. An SMS is woven into the fabric of an organization. It becomes part of the culture and the way people do their jobs.

The organizational structures and activities that make up an SMS are found throughout an organization. Every employee contributes to the safety health of the organization. In larger organizations, safety management activity will be more visible in some departments than in others, but the system must be integrated into the way things are done throughout the organization.

### **What Does It Take to Build an SMS?**

**Commitment:** In the face of operational pressures, organization leaders must make safety management tools work effectively.

**Cognizance:** Organization leaders must understand the nature and principles of managing for safety.

**Competence:** Safety management policy and procedures must be understood and properly applied at all levels of the organization.

### **What Is a Safety Culture?**

An organization's culture is defined by what people do. The decisions people make tell us something about the values of the organization. The extent to which managers and employees act on commitments to safety illustrates what values motivate their actions. A safety culture may be slow to mature, but with management support and leadership, it can be accomplished. A safety culture leads to:

#### *An Informed Culture –*

- People understand the hazards and risks involved in their own operation.
- People work continuously to identify and overcome threats to safety.

#### *A Just Culture –*

- Errors by employees are understood, but willful violations of organization standards are not tolerated.
- The workforce knows and agrees on what is acceptable and what is unacceptable.

#### *A Reporting Culture –*

- People are encouraged to voice safety concerns
- When safety concerns are reported, they are analyzed, appropriate action is taken and feedback is always given to the reporting person.

#### *A Learning Culture –*

- People are encouraged to develop and apply their own skills and knowledge to enhance organizational safety.
- Management updates employees on safety issues.
- Safety reports are given to all employees so everyone can learn from lessons.

### **How Do You Encourage a Positive Safety Culture?**

- Management must practice what it preaches regarding safety.
- Management allocates adequate resources to maintain an operation that is safe and efficient.
- Management acknowledges safety concerns and suggestions.
- Management gives feedback on decisions. If no action is contemplated, that decision is explained.
- Feedback is timely, relevant and clear.

### **What Does a Safety Management System Do for an Organization?**

There are two ways of thinking about safety. Traditionally, safety has been about avoiding costs. Many organizations have been bankrupted by the cost of a major accident. This makes a strong case for safety, but the cost of occurrences is only part of the story. Research shows that safety and efficiency are positively linked. Safety pays off in reduced losses and enhanced productivity.

An SMS provides the organization with the capacity to anticipate and address safety issues before they lead to an incident or accident. An SMS provides management with the ability to deal effectively with accidents and near misses so that valuable lessons are applied to improve safety and efficiency. The SMS approach reduces losses and improves productivity.

Implementing an SMS does not involve a regulatory agency imposing an additional layer of regulatory and safety oversight on the industry. An SMS incorporates the basic safety process into the management of the organization using them. The traditional safety approach depended on a safety officer, independent from operations and management, reporting to the chief executive officer of the organization. But the safety officer had no authority to make changes that would enhance safety. He or she depended on the ability to persuade management to act.

The SMS holds managers and supervisors accountable for safety related performance, and the SMS approach ensures that authority and accountability coexist. For additional information on Canada's Safety Management System, visit its website at [www.tc.gc.ca/aviation](http://www.tc.gc.ca/aviation).