It’s my pleasure to be here today to provide you with an overview of Transport Canada’s Implementation Plan for Safety Management Systems (SMS) in civil aviation.

Before I begin, I must thank Captain Brad Fowles for kindly allowing me to replace him on the agenda, today, so I could have the opportunity to introduce our SMS Implementation Plan to you. The SMS evaluation methodology developed by Aerodromes and Air Navigation Branch has served us well as a starting point for the development of the Civil Aviation SMS assessment process.

I will touch on this later in my presentation.
Presentation Overview

- Background
- Definition
- Implementation time frames
- Phases of implementation
- Phase requirements
- Assessment Protocol and criteria
- Final comments

This presentation will speak to the when and how of SMS implementation in the civil aviation industry.

- Background
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Background

- *Flight 2005*
- Commitment to SMS implementation
- Improve safety through pro-active management

By way of background, as you know, four years ago, in *Flight 2005: A Civil Aviation Safety Framework for Canada*, Transport Canada committed to the implementation of safety management systems in aviation organizations.

We’ve come along way from: concept to implementation. At the most fundamental level the aim is to improve safety through pro-active management rather than reactive compliance with regulatory requirements.
Definition

*A systematic, explicit, comprehensive and proactive process for managing safety risks that integrates operations and technical systems with financial and human resource management to achieve safe operations and compliance with the Canadian Aviation Regulations.*

To refresh your memory, Part I of the Civil Aviation Regulations (CARs) includes a basic definition of SMS, which is:

*A systematic, explicit, comprehensive and proactive process for managing safety risks that integrates operations and technical systems with financial and human resource management to achieve safe operations and compliance with the Canadian Aviation Regulations.*
More simply, the six basic components of an SMS as defined by Transport Canada are:

- A safety management plan;
- Documentation;
- Safety oversight, including reactive and proactive processes;
- Training;
- Quality assurance; and
- Emergency preparedness.

The most pressing question is when?
Our vision is that SMS will be implemented in all regulated civil aviation organizations by 2007.

That said, SMS implementation depends on the date regulations come into force and following which, will be phased in over three years.

This slide depicts the planned in-force dates.

**Areas Highlighted in Blue – Indicate activities that have already been completed.**

The Parts of the Canadian aviation regulations highlighted in blue on the left, have already had SMS Notice of Proposed Amendments (NPA) accepted by the respective CARAC Technical Committee, while those in white have not.

**Areas Highlighted in Gold – Indicate dates that are currently forecasted for the specified activity.**

The planned In-Force dates on the far right are predicated on:
- the timely acceptance of NPAs by CARAC Technical Committees, and
- meeting the Gazette I and II timings as indicated on the two center columns.
- Delays in acceptance of NPAs by the CARAC Technical Committee or delays in the Gazette I or II activities may require that the In-Force dates for specific CAR Part regulations be revised to a later date.
- As you can see from the slide, a number of NPAs have not as yet been submitted to the CARAC process and none of the NPAs have completed the Gazette I or II process.

As such, all of these In-Force dates are subject to change.

Following the regulations coming into force, there are four phases of implementation.
The implementation of SMS involves a progressive development. That said, Transport Canada is taking a phased-in approach to implementation.

The four phases extend over 3 years.

Phase 1: Initial Certification
Phase 2: One Year Follow-up
Phase 3: Two Year Follow-up
Phase 4: Three Year Follow-up
Phase 1: Initial Certification

Transport Canada requires:
- Name of the accountable executive
- Name of person responsible for implementation
- Statement of commitment to the implementation
- Documentation of gap analysis
- Organization’s implementation project plan

Within 3 months of the publication of the SMS regulation, initial certification requires that applicants provide Transport Canada:

a) the name of the accountable executive;

b) the name of the person responsible for implementing the SMS;

c) a statement of commitment to the implementation of SMS (signed by the accountable executive);

d) documentation of a gap analysis between the organization’s existing system and the SMS regulatory requirements; and

e) the organization’s implementation project plan, based on the requirements of the exemption and the certificate holders internal gap analysis.
Phase 2: One Year Follow-up

Required components:
- Documented safety management plan
- Documented policies and procedures
- Process for reactive occurrence reporting

The 1-year follow-up!

At one-year, certificate holders will demonstrate that their system includes the following components:

a) a documented safety management plan;

b) documented policies and procedures relating to the required SMS components;

c) a process for reactive occurrence reporting with the associated supportive elements such as a method of collecting, storing and distributing data, and a risk management process.
Phase 3: Two Year Follow-up

Required components:

- Documented safety management plan
- Documented policies and procedures
- Process for reactive occurrence reporting
- Process for proactive identification of hazards

Two years after initial certification, the certificate holder will demonstrate that, in addition to the components already demonstrated during Phase 2, they also have a process for the **proactive** identification of hazards and associated methods of collecting, storing and distributing data and a risk management process.
Phase 4: Three Year Follow-up

Required components:
- Documented safety management plan
- Documented policies and procedures
- Process for reactive occurrence reporting
- Process for proactive identification of hazards
- Training
- Quality assurance
- Emergency preparedness

1 year following phase 3, certificate holders will demonstrate that, in addition to the components already demonstrated during phases two and three, they have also addressed:

• Training;

• Quality Assurance; and

• Emergency preparedness.

All the components demonstrated will be assessed by Transport Canada at each phase using the Safety Management System Assessment Protocol.
The Safety Management System Assessment Protocol looks at the six components I mentioned earlier and their defined associated elements.

For each element there are expectations. These expectations define what we expect to see or what we expect an organization to do with regards to each specific element.

It is important that the expectations be verified using a set of relevant, pre-determined and well-designed questions.

Each element is then scored from 1 to 5 using a criteria specific to it.

The criteria works as follows:

A score of (1) is considered to be not documented and not implemented;

A score of (3) is considered as meeting the minimum acceptable standard of assessment. A score of (3) in all criteria would indicate meeting the minimum requirements of the regulations.

A score above (3) is considered to exceed the minimum acceptable standard of assessment.

To achieve a score of (5) an organization will have to meet the regulatory requirements as well as demonstrate industry best practices at a very high level.

The implementation plan identifies what components are required at each phase. As safety management systems are progressive in their development, we expect to see continuous improvement in the system.
Final Comments

- http://www.tc.gc.ca/CivilAviation/SMS/menu.htm

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This presentation is the first of many to communicate Transport Canada’s Implementation Plan for SMS.

As well, we have recently begun to centralize and update our SMS information on the Transport Canada Civil Aviation website. I encourage you to visit regularly as we will be continually updating the information.

During the question and answer period, I will be available to respond to your questions.