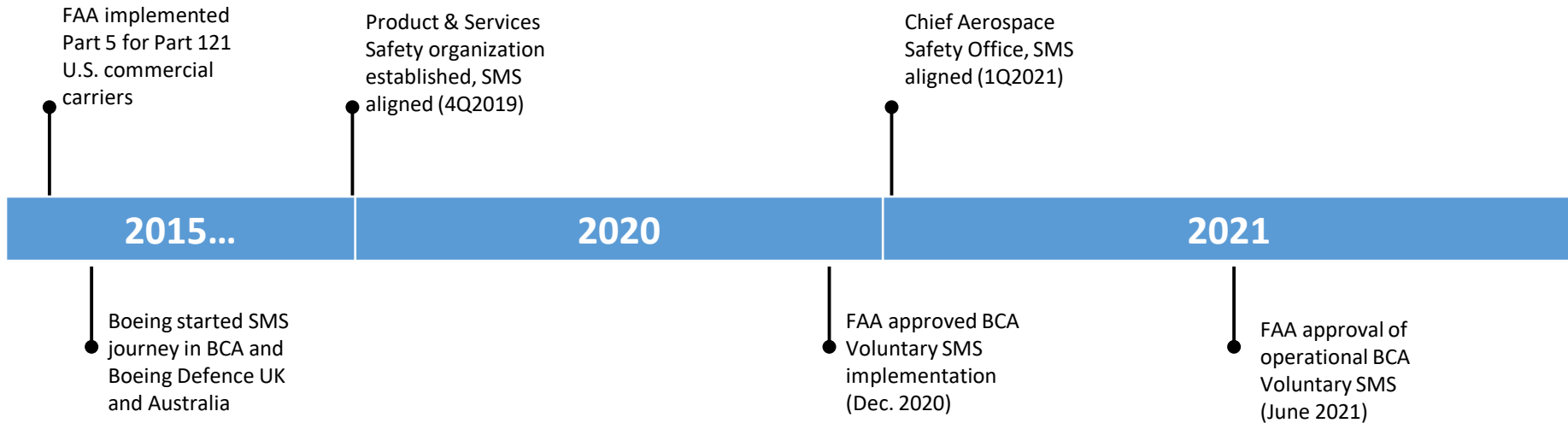




Boeing Safety Management System

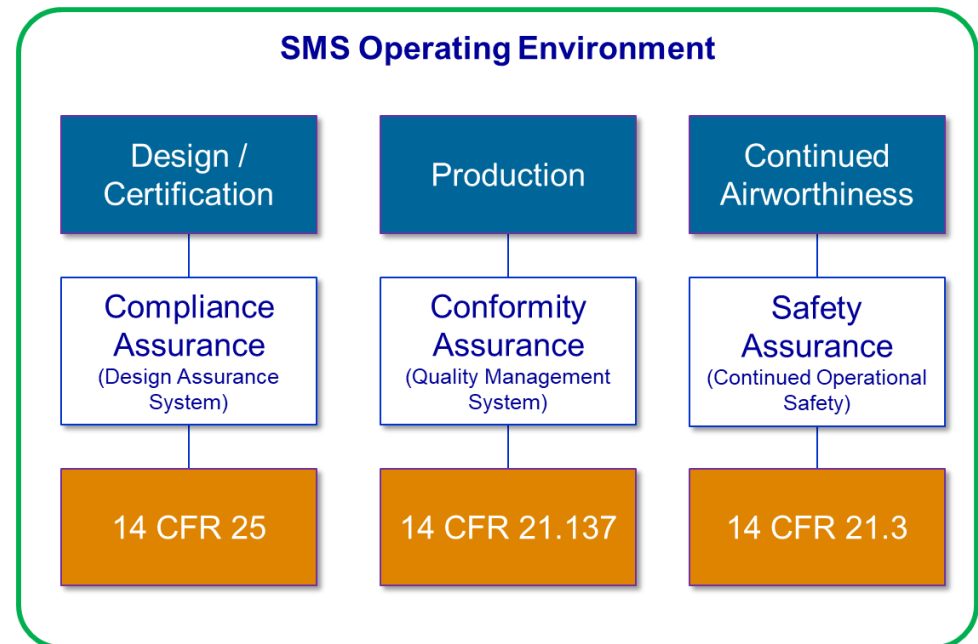
Dan Freeman, Vice President
Chief Aerospace Safety Office, Safety Management System

Boeing SMS Timeline



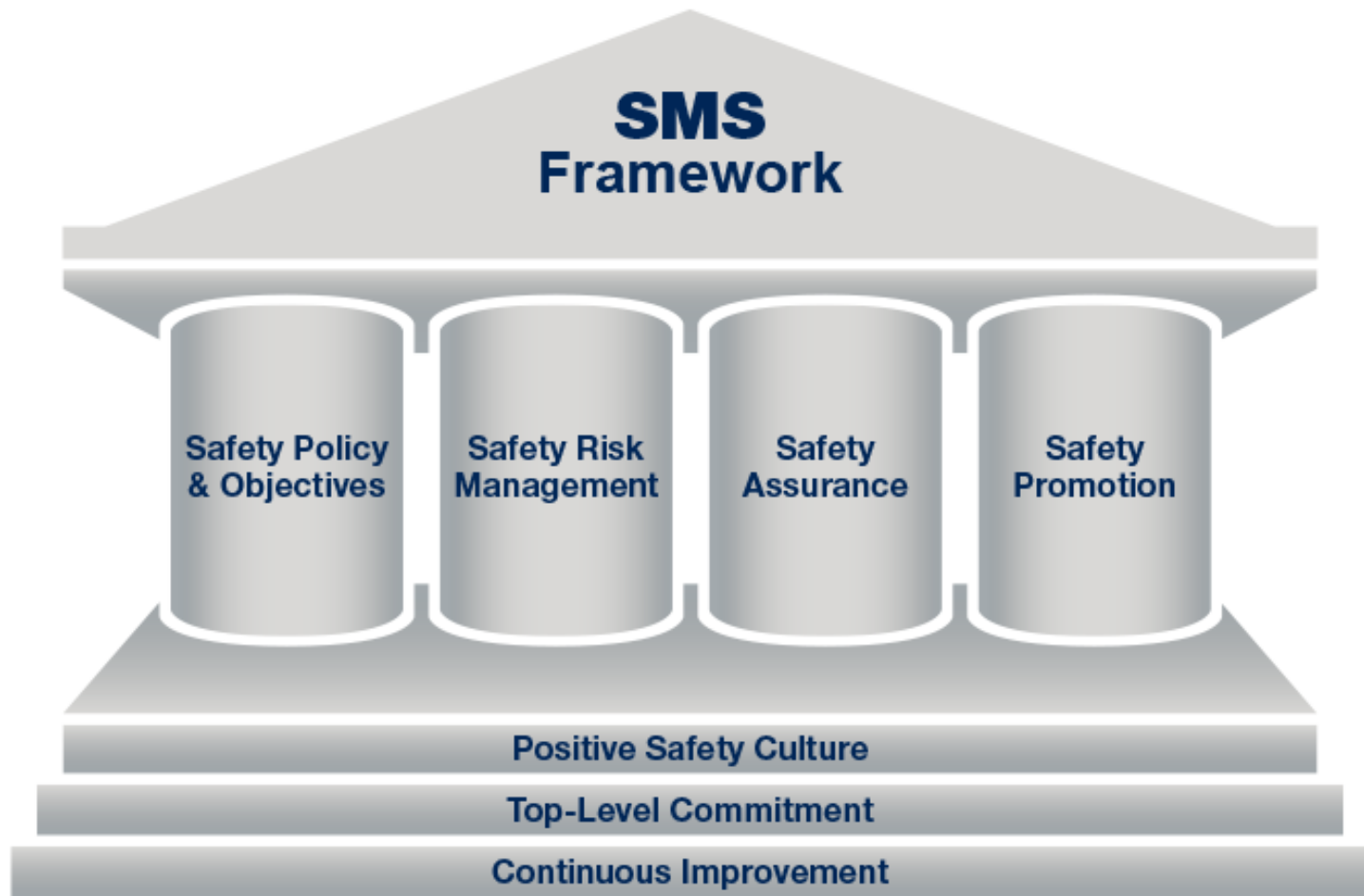
SMS Operating Environment

- SMS is built upon existing safety processes:
 - Design / Compliance
 - Production / Quality (QMS)
 - Continued Airworthiness (COSP)
- SMS Triggers are an additional layer of protection:
 - Implementation of new systems
 - Change of existing systems
 - Development of operational procedures
 - Identification of hazards or ineffective risk controls



NAS 9927 Figure 1

Boeing SMS – based on FAA Part 5 aligned to ICAO Annex 19




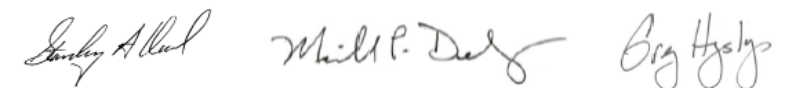


Boeing Safety Management System Policy

In everything we do and in all aspects of our business, we make safety our top priority, strive for first-time quality, and hold ourselves to the highest ethical standards. Our Safety Management System ensures the safety, quality and compliance of our products and services for the people who entrust us with their lives when they operate, maintain and fly on our products.

This requires our unyielding commitment to the following:

- We will commit to a **Safety Management System** to advance our goals for safety, quality and compliance.
- We will ensure all employees understand the **requirement to report** any safety hazard, incident, or concern.
- We will **promote a positive safety culture** that protects and treats people fairly when they openly report safety, quality and compliance concerns.
- We will **openly communicate safety actions** being taken while appropriately protecting the safety data and safety information driving those actions.
- We will **clearly define the responsibilities** of all employees so that everyone understands their roles in ensuring the safety, quality and compliance of our products and services.
- We will **eliminate or mitigate potential safety, quality and compliance risks** associated with our products and services which must include meeting all applicable requirements and regulations.
- We will **use actionable key performance metrics and targets** that drive continuous improvement of our Safety Management System.
- We will **ensure sufficient resources** (people, processes, tools and training) are committed to supporting this safety policy.
- We will **ensure that all employees understand** that we all have a daily obligation to pursue safety, quality and compliance as described in this safety policy.

SMS Is How We Work

Boeing's Safety Risk Management Process

BOEING Safety Risk Management

HOME SRM WORKFLOW SEARCH REPORT REFERENCE MATERIAL REQUEST ACCESS HELP/FEEDBACK DEMO

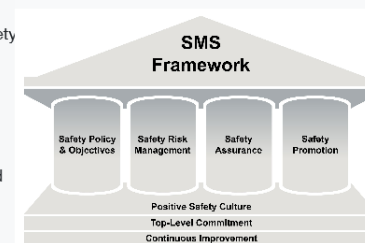
Welcome to the Safety Risk Management (SRM) Tool!

Safety Risk Management is one element of the Safety Management System (SMS). SRM is a disciplined structured process for proactively managing safety quality or compliance risk associated with our products and services. It is initiated when one of the following "Triggers" occurs:

1. Implementation of new systems
2. Revision of existing systems
3. Development of operational procedures
4. Identification of hazards or ineffective risk controls through the safety assurance processes

The SRM process should be applied to substantive new or changed aspects of an organization's operating environment. A "substantive" new or changed system in the organization's operating environment is a condition or hazard that could foreseeably lead to an unacceptable safety risk.

Currently, the SRM Tool is only available for those users who have been directed to initiate SRM activity for a specific situation, or are actively working on an existing SRM. If you wish to visit the tool for evaluation purposes, please access the DEMO tool from the main menu.



Safety Risk Management is a 5-step process:

System Description (Analysis)	Hazard Identification	Risk Analysis	Risk Assessment	Risk Control
<p>Describing a system and its impacted organizations, documentation, and interfaces.</p> <p>A system is made up of People, Processes, Procedures, Equipment, Facilities and Services.</p> <p>Search SRM Record</p> <p>Create SRM Record</p>	<p>Identifying potential safety hazards in the described system.</p> <p>Examine systems, operations, processes, and the operational environment in order to identify potential safety hazards.</p> <p>Search Hazard Id</p>	<p>Determine how likely an event is to occur and what are the impacts.</p> <p>Estimate the severity and likelihood of an accident event due to exposure to an identified hazard..</p> <p>Search Risk</p>	<p>Determine the acceptability of a safety risk.</p> <p>Based on the severity of the outcome and its likelihood, does the safety risk require risk reduction through mitigation?</p>	<p>Develop a Risk reduction plan.</p> <p>Develop the steps/tasks necessary to reduce the identified safety risk to an acceptable level.</p>

Safety Assurance

- Structured Safety Review Boards for safety decisions and risk escalation
- Discreet mitigation and monitoring
- Regular review of process control metrics
- Confidential Employee Reporting
- Analytics exploration
- Internal audits

Safety Promotion

- Training and resources
 - All Employee SMS Awareness Training
 - SMS Training for Managers
 - SMS Training for SMS Practitioners
 - SMS Employee Brochure - “My Role in SMS”
 - SMS University
 - Newsletters
 - InSite
 - Podcasts
 - Plasma screens
 - Safety Promotion Center



Safety Management System (SMS)

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What is my role in the SMS?

- Be committed to procedures and regulations
- Report any identified hazards, safety concerns or safety suggestions

What can I report?

- Hazards
- Concerns
- Unusual incidents
- Possible violations and safety improvement work

Safety Reporting Options:

- Notify your health performance and Safety Representative, and
- Submit Safety reports into Safety Life

Report without fear of reprisal for human mistakes and errors

Safety Accountability:

- I am accountable for my own safety, the safety of those around me and those who use our products and services
- Follow procedures and if I see an unsafe condition it is up to me to report it
- I must report injuries and damages

Safety Management System (SMS)

The Boeing Safety Management System (SMS) is an integrating framework for managing safety risks throughout the life cycle of a product or service. This includes identifying hazards, mitigating product safety risks, and continuously improving safety performance to foster a positive safety culture and shape policies that uphold Boeing's commitment to aerospace safety. Boeing is on the SMS journey and is committed to rebuilding stakeholder trust, acting with transparency, and focusing on safety, quality and compliance.

Safety Management System (SMS) inSite feature highlights:

- Provide a focused forum for the One Boeing Engineering SMS priority
- Strengthen understanding & further enterprise alignment of SMS
- Promote and share information on SMS Engineering implementation
- Encourage inclusion by creating a space to dialog and share information and express thoughts
- Grow a following and influence network specific to SMS and safety

SMS Framework

SMS helps Boeing move from being...

- REACTIVE** to incidents, to
- PROACTIVE** in identifying current potential hazards, and then to
- PREDICTIVE** in identifying potential future problems.

Positive Safety Culture

Informed:

People are knowledgeable about the human, technical, organizational and environmental factors that determine the safety of the system as a whole.



Flexible:

People can adapt organizational processes when facing high temporary operations or certain kinds of danger, shifting from the conventional hierarchical mode to a flatter mode.

Reporting:

People are prepared to report their errors and experiences.

Learning:

People have the willingness and the competence to draw conclusions from safety information systems and the will to implement major reforms.

Just:

People are encouraged (even rewarded) for providing essential safety-related information. However, there is a clear line that differentiates between acceptable and unacceptable behavior.

Positive Safety Culture is a key enabler for SMS to be successful

Perguntas e Respostas