



GE Aerospace

Safety Management System

Overview

In the early days of aviation, managing safety was reactive, focused on investigating accidents and incidents after they occurred. The industry realized many incidents could be prevented through proactive management, leading to the development of Safety Management Systems (SMS) in the late 20th century and widespread adoption in the early 21st century. SMS has since become foundational to maintaining aviation's strong safety record.

What is a Safety Management System?

A Safety Management System systematically manages an organization's risks and improves safety in four ways:

- Policy: Setting safety roles and accountability
- Risk Management: assessment and mitigation of risk in operations
- Promotion: Encouraging safety through training, communication and reinforcement of safety culture
- Assurance: Ensures SMS is functioning as its supposed to and continuously improving

GE Aerospace's Safety Management System

GE Aerospace was the first manufacturer to have its SMS accepted by the FAA, and the company established its SMS 10 years before the agency proposed requiring it. As part of the system, GE Aerospace encourages employees to report safety concerns voluntarily and confidentially, without fear of retaliation. SMS is one of the most important tools the company uses to Bring Them Home Safely.



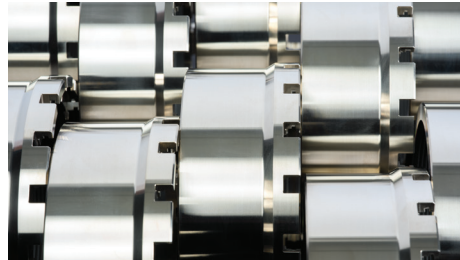


A Safety Management System identifies hazards before they turn into patterns, trends and incidents. Here is how GE Aerospace's SMS is targeting risks and helping us to mitigate them.



New Subsurface Ultrasonic Inspections Identify Metal Quality Risk

A few years after introducing ultrasonic inspections of critical components, the inspections detected a crack deep inside a disk of a widebody engine. Engineers discovered there was iron contamination in the metal. The early finding allowed GE Aerospace to alert operators to proactively remove parts, reducing risk and preventing an incident.



Data Sharing with Raw Material Suppliers Abates Emerging Issues

In 2022, GE Aerospace established a safety-quality partnership with raw material suppliers for engine components that rotate at high speeds. The collaboration promoted transparent data sharing and has allowed GE Aerospace and its suppliers to address and abate emerging issues during weekly meetings. One of the biggest raw material suppliers is starting its own SMS with GE Aerospace's assistance.



Recommendations Help Prevent Unapproved Parts

GE Aerospace led the formation of the Aviation Supply Chain Integrity Coalition that issued 13 recommendations to help prevent unapproved parts from entering the supply chain. The company is now working to implement the recommendations and prevent rogue actors from selling unapproved engine parts.

