Alaska Airlines Flight 1282
[Boeing 737-9, Registration N704AL]
Left Mid Exit Door Plug Separation

INVESTIGATIVE HEARING
National Transportation Safety Board
August 6–7, 2024 | Washington, DC

DAY 1: AUGUST 6
AGENDA, PANELS, AND ISSUE AREAS
9:00 a.m - 7:00 p.m.

Times are approximate. Breaks will be announced.

Opening Statements .............9:00 a.m. - 10:00 a.m.
• Chair’s Opening Statement
• Introduction of the Parties
• Introduction of the Exhibits
• Investigator-in-Charge (IIC) Opening Presentation

Panel 1 .........................10:00 a.m. - 1:45 p.m.
Overview of B737-9 Manufacturing and Inspections

Watch Panel | Technical Panel
Elizabeth Lund, Boeing Commercial Airplanes | Pocholo Cruz
Doug Ackerman, Boeing Commercial Airplanes | Nils Johnson
Terry George, Spirit AeroSystems | Sabrina Woods
Scott Grabon, Spirit AeroSystems
Lloyd Catlin, International Association of Machinists

Issue Areas
B737-9 production (in general)
- Fuselage manufacturing
- Inspections at Spirit and Boeing
- Company organization and reporting structure
  - Reporting concerns/observations, stopping production from a line level staff concern

Training of mechanics/turnover/retention
Mechanic experience/pairing & assigning of tasks
Process for documenting non-conformance (records, non-conformance order (NCO), work cards)
Description of Shipside Action Tracker (SAT) system and how it is intended to be used
Description of Common Manufacturing Execution System (CMES) and how it is intended to be used
Process for documenting removals of previously installed parts or components
  - Boeing process specs – Boeing Process Instructions (BPI) and Desktop Instructions
  - Training process and details for BPI/etc end users

Lunch (on your own) .............1:45 p.m. - 2:45 p.m.

Panel 2 .........................2:45 p.m. - 6:30 p.m.
Events Surrounding the Opening and Closing of the Mid Exit Door (MED) Plug

Witness Panel | Technical Panel
Elizabeth Lund, Boeing Commercial Airplanes | Pocholo Cruz
Michael Riney, Spirit AeroSystems | Nils Johnson
Pocholo Cruz
Nils Johnson
Sabrina Woods

Issue Areas
B737-9 production (specific to accident airplane #8798)
Lack of documentation of the MED plug being opened and closed
MED plug removal and reinstallation at Boeing – task management
  - Description of the normal task(s) to remove the MED plug, and how they are managed and tracked.
  - Comparison of previous MED plug openings vs accident airplane
Description of flow and component travelling during assembly (for the processes surrounding MED plug removal/reinstallation)
Assembly line flow pace (how is it determined)
Boeing/Spirit procedures for reporting/addressing discrepancies anomalies or concerns from the floor up
  - Reports made regarding MED plug removal and reinstallation
Describe what we learned from Shipside Action Tracking (SAT) for this airplane
Role of the Spirit employees (staffed by Aerotech, Strom Aviation, Launch) in Renton
Changes after accident

Chair’s Closing Remarks ..........6:30 p.m. - 7:00 p.m.
– DAY 1 ADJOURNS –
DAY 2: AUGUST 7
AGENDA, PANELS, AND ISSUE AREAS
9:00 a.m. - 7:00 p.m.

Times are approximate. Breaks will be announced.

Opening Statements .............. 9:00 a.m. - 9:30 a.m.
• Chair’s Opening Statement
• Introduction of the Parties
• Introduction of the Exhibits

Panel 3 .......................... 9:30 a.m. - 1:45 p.m.
Safety Management Systems (SMS) and Quality Management Systems (QMS)

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<td>William (Bill) Brown, Spirit AeroSystems</td>
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<td>Chris Eick, Federal Aviation Administration</td>
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Issue Areas

Safety Management Systems
» Process of promoting effective safety culture
» Voluntary
» Implementation
» Reporting (tracking) systems and (internal) audits

Quality Management System process
» Explain what QMS is and how it relates to manufacturing
» External and internal
  » Suppliers/process managing, reacquiring Spirit
» Describe significant challenges in the last 5 years
» Hiring/retention/other (new, lesser experienced staffing)
  » Other

Policy communications/dissemination

Describe production rate evolution (-5 years, -10 years) and actions taken as rate changes

FAA actions regarding NTSB recommendation SMS for manufacturing A-21-048

Lunch (on your own) .............. 1:45 p.m. - 2:45 p.m.

Panel 4 .......................... 2:45 p.m. - 6:30 p.m.

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FAA Oversight

Describe work plan and process for oversight of production
» How is the audit schedule determined
» Other methods/tools for oversight
» Changes in oversight methods
  » Designated vs direct
  » Other

Results of FAA audit of Boeing
» Describe how/why/procedure for auditing
» Issues with process and documentation and non-conformance

Effectiveness of FAA guidance and actions on manufacturing
» SMS currently is not a requirement – how does this affect tasking for FAA oversight now, and in the future when it is required?
» QMS
» Training/enhanced oversight programs

FAA oversight of:
» Manufacturers records keeping
» History of audits – undocumented removals – (BPI for part or assembly removal)

Boeing
» History of BPI for part or assembly removal

Chair’s Closing Remarks .............. 6:30 p.m. - 7:00 p.m.

— HEARING ADJOURNS —
WITNESSES

PANEL 1: Overview of B737-9 Manufacturing and Inspections
Witnesses #1–5

Elizabeth Lund
Chair, Quality Operations Council
Senior Vice President, Quality
Boeing Commercial Airplanes
Seattle, WA

Doug Ackerman
Vice President of Supplier Quality
Boeing Commercial Airplanes
Seattle, WA

Terry George
Senior Vice President
General Manager Boeing Programs
Spirit AeroSystems
Wichita, KS

Scott Grabon
Senior Director 737/P8 Quality
Spirit AeroSystems
Wichita, KS

Lloyd Catlin
Business Representative
International Association of Machinists
Renton, WA

PANEL 2: Events Surrounding the Opening and Closing of the Mid Exit Door (MED) Plug
Witnesses #6 & #7

Elizabeth Lund
Chair, Quality Operations Council, Senior Vice President, Quality
Boeing Commercial Airplanes
Seattle, WA

Michael Riney
Senior Manager – Manufacturing General Support
Spirit AeroSystems
Seattle, WA

PANEL 3: Safety Management Systems (SMS) and Quality Management Systems (QMS)
Witnesses #8–17

Paul J. Wright
Senior Director, Safety Management System
Chief Aerospace Safety Office
Boeing Commercial Airplanes
Seattle, WA

Hector Silva
Vice President, Regulatory Compliance and Core Quality
Boeing Commercial Airplanes
Renton, WA

Doug Ackerman
Vice President of Supplier Quality
Boeing Commercial Airplanes
Seattle, WA

Gregg Brown
Senior Vice President – Quality and Support
Spirit AeroSystems
Wichita, KS

William (Bill) Brown
Senior Advisor – Quality
Spirit AeroSystems
Wichita, KS

Chris Eck
Aerospace Engineer, Policy & Standards Division
Federal Aviation Administration
Washington, DC

Michael Bartron
Chief Scientist and Technical Advisor for Safety and Risk Analysis
Federal Aviation Administration
Washington, DC

Steve Slagle
Program Manager, Project Management Section
Federal Aviation Administration
Washington, DC

Brian Knaup
Manager AIR-580 – System Operation and Oversight Branch
Federal Aviation Administration
Washington, DC

Lloyd Catlin
Business Representative
International Association of Machinists
Renton, WA

PANEL 4: FAA Oversight
Witnesses #18–22

Hector Silva
Vice President, Regulatory Compliance and Core Quality
Boeing Commercial Airplanes
Seattle, WA

Bill Brown
Senior Advisor
Spirit AeroSystems
Wichita, KS

Brian Knaup
Manager AIR-580 (System Operation and Oversight Branch)
Federal Aviation Administration
Lakewood, CA

Bryan Kilgroe
Manager, AIR-582B, Airplane Oversight Section, Designated PC700 Principal Inspector
Federal Aviation Administration
Charleston, SC

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