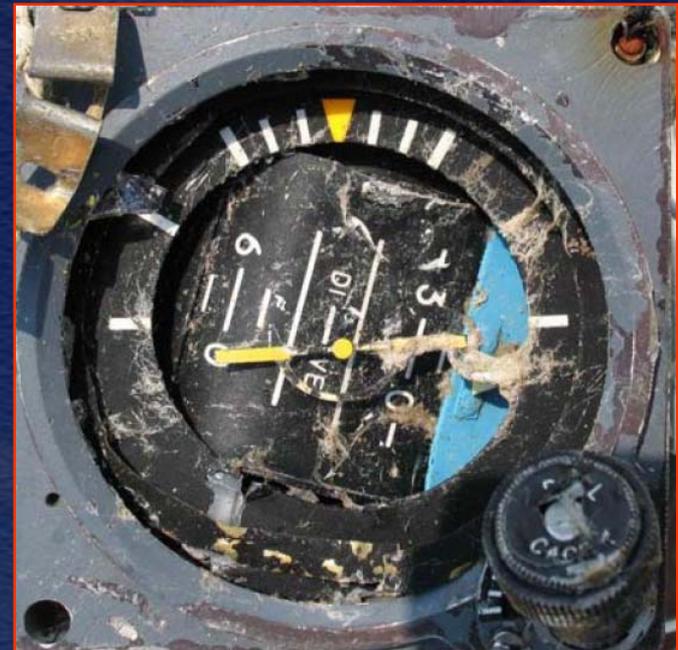




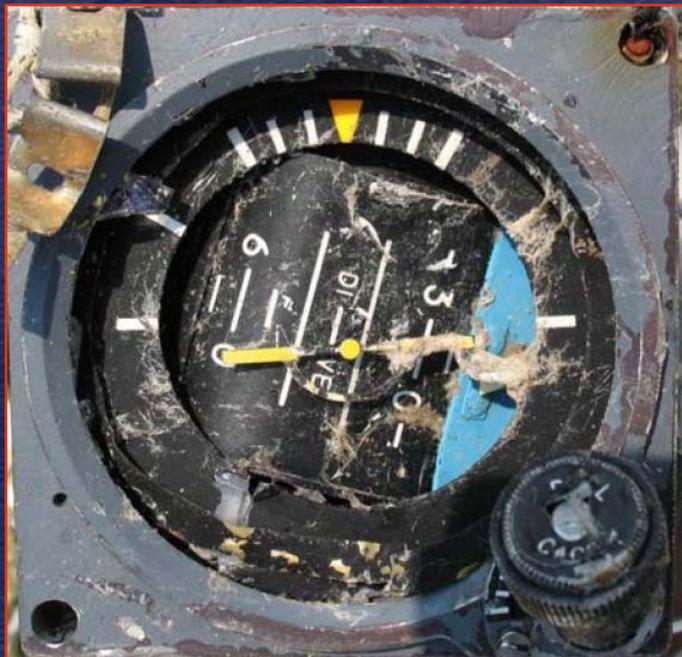
**NTSB** National Transportation Safety Board

# High Standards: Getting the Right Attitude

Robert L. Sumwalt  
August 24, 2010



# June 4, 2007



# What the investigation found

## Captain/chief pilot/check airman

- had prior certificate revocation
- routinely failed to comply with procedures and regulations
- falsified training records

# NTSB Finding

- “The pilots’ lack of discipline, in-depth systems knowledge, and adherence to procedures contributed to their inability to cope with anomalies experienced during the accident flight.”

# The customer

- Had contracted with this Part 135 operator for 19 years.
- Wanted safe transport for medical personnel, patients, and transport organs.



# Different expectations

- There is often a “disconnect” between the expectations of the “customer” and what they are actually getting.

# What do your customers want?

- World class
  - Top 3 - 5 percent of the industry
  - Organization thrives in seeking to be the very best
- Best practices
  - Adopts and implements procedures above and beyond regulatory requirements
- Basic regulatory compliance
  - Meets spirit of regulations, but no higher
- Sub-standard performance
  - non-adherence to regulations, cutting corners are the norm

# What are they getting?

- World class
  - Top 3 - 5 percent of the industry
  - Organization thrives in seeking to be the very best
- Best practices
  - Adopts and implements procedures above and beyond regulatory requirements
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  - Meets spirit of regulations, but no higher
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# The importance of written standards

- “Standard operating procedures (SOPs) are universally recognized as basic to safe aviation operations.”
  - AC 120-71A
- “A flight operations manual is an essential possession for all corporate aviation departments.”
  - NBAA Management Guide

# NTSB accident investigations

- The NTSB has found that lack of standards is a consistent theme across many aircraft accidents.
  - Organizations don't have adequate standards
  - People don't adhere to whatever standards are in place



**October 25, 2002**



**NTSB**



# Standardization ?

- Maneuvers Guide – contained key procedures for briefing and conducting instrument approaches
  - Pilots were expected to adhere to procedures in Maneuvers Guide
  - Maneuvers Guide was only issued to the chief pilot and instructors

# Standardization ?

- Company check airman: rated company's standardization as "6" (on 1-10 scale)
- Company pilot: "Fair to good"
- Lead ground instructor: "Fair"
  - Suspected that some pilots were following SOPs while others were not
  - Aware that some pilots used their own checklists, instead of company checklists
- Another pilot: never seen any standardized callouts documented in any company manual
  - To compensate, she used callouts she used at another company

“When asked about the flight department's standard operating procedures (SOPs), the chief pilot advised that they did not have any...”



“... the flight department had started out as just one pilot and one airplane, and that they now had five pilots and two airplanes...”

09 14 2007

# February 2, 2005



NTSB



# Comair Airlines Flight 5191

## Lexington, Kentucky

- Bombardier CRJ
- 49 Fatalities
- Wrong runway takeoff



# Crew Actions

- Setting tone during preflight
  - Casual and relaxed
  - Abbreviated taxi briefing
- Noncompliance with sterile cockpit rule
  - 40 of the 150 seconds during taxi were violations of sterile cockpit rule
- Distraction likely contributed to loss of positional awareness



# NTSB Finding

- “The flight crew’s noncompliance with standard operating procedures, including the captain’s abbreviated taxi briefing and both pilots’ nonpertinent conversation, most likely created an atmosphere in the cockpit that enabled the crew’s errors.”

# Pinnacle Airlines Flight 3701

## Jefferson City, Missouri



- October 14, 2004
- Bombardier CL-600-2B19
- Repositioning flight
- Both flight crewmembers killed

# NTSB's Probable Cause

- “the pilots’ unprofessional behavior, deviation from standard operating procedures, and poor airmanship, which resulted in an in-flight emergency from which they were unable to recover...”



# Corporate Airlines dba American Connection Flight 5966 Kirksville, Missouri



- October 19,2004
- BAE J-32 (Jetstream)
- Crashed into trees on nighttime non-precision instrument approach
- 13 fatalities
- 2 serious injuries

# NTSB Finding

- “The pilots’ nonessential conversation below 10,000 feet MSL was contrary to established sterile cockpit regulations and reflected a demeanor and cockpit environment that fostered deviation from established standard procedures, ... and professionalism, reducing the margin of safety well below acceptable limits ....”



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# What level is your operation?

- World class
  - Top 3 - 5 percent of the industry
  - Organization thrives in seeking to be the very best
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# Things to think about

- Do you have clearly defined, well thought-out standards?
- If so, do you insist on rigorous adherence to those standards?
- How do you measure adherence?
- Do you reward the right kinds of behavior?







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