Improving Safety through Accident Investigation

Robert L. Sumwalt, III
• NTSB is an independent federal agency
  - investigate transportation accidents
  - determine probable cause
  - issue safety recommendations
Facilities

• Headquartered in Washington, DC
• 4 Regional Offices
• NTSB Training Center
Our greatest virtues:

Independence

Credibility
NTSB Aviation Accident Investigation
Involvement: 2015

Domestic
• 1209 GA accidents
  - 222 fatal accidents
  - 376 fatalities

Foreign
• Approx. 200 (Annex 13 Accredited Representatives)
Breaking News: A plane has crashed.
Determining the level of response
Different Types of NTSB Investigations

Data Collection Accident ("C-Form")

- Non-injury GA accidents
- No airworthiness issues
Different Types of NTSB Investigations

Limited Investigation
Different Types of NTSB Investigations

Regional Investigation
Different Types of NTSB Investigations

Go-Team Investigation
Anatomy of an accident investigation

NOTIFICATION + 2 HOURS
The Launch
Arrival on Scene
Boots on the Ground

Go-teams have specialists in:

- Powerplants
- Structures
- Systems
- Operations
- Human performance
- Survival factors
- Airworthiness
- ATC
- Transportation Disaster Assistance
- Meteorology
- Recorders
The Hunt for ...
The “Black Boxes”
Media Briefings
Family Briefings
Meeting with Elected Officials
The Party Process

- The NTSB designates parties to the investigation to those organizations that can provide technical expertise.

- Typically parties may include:
  - FAA (by law)
  - Operator
  - Airframe and engine manufacturers
  - Major component manufacturers
  - Pilot, ATC, maintenance, and flight attendant union representatives
  - Airport authorities
  - First responders
Value of the Party System

- Parties provide technical expertise
- Parties provide checks and balances to the process of accident investigation
- Transparency
- Immediate corrective actions
Nightly Progress Meetings
Anatomy of an accident investigation

MONTH 3 - 4
Anatomy of an accident investigation

MONTH 12
“From tragedy we draw knowledge to improve the safety of us all.”