

#### National Transportation Safety Board

### Technology in Aviation Accidents – Friend and Foe

Katherine Wilson, Ph.D. NTSB, Office of Aviation Safety

### Overview

- Technology benefits:
  - advanced aircraft systems
  - predictive maintenance
  - connectivity, etc
- Technology challenges:
  - cockpit distractions
  - mode/system confusion
  - loss of stick and rudder skills, etc



### Technology in Accidents/Investigations

## "Friend"

- Cell phone records sleep/activity periods
- Onboard data records video, audio, system status



### Technology in Accidents/Investigations

### "Foe"

- Pilot distractions
- Cockpit activities/behavior







#### NTSB Most Wanted List

- Expand Recorder Use to Enhance Safety
- Eliminate Distractions



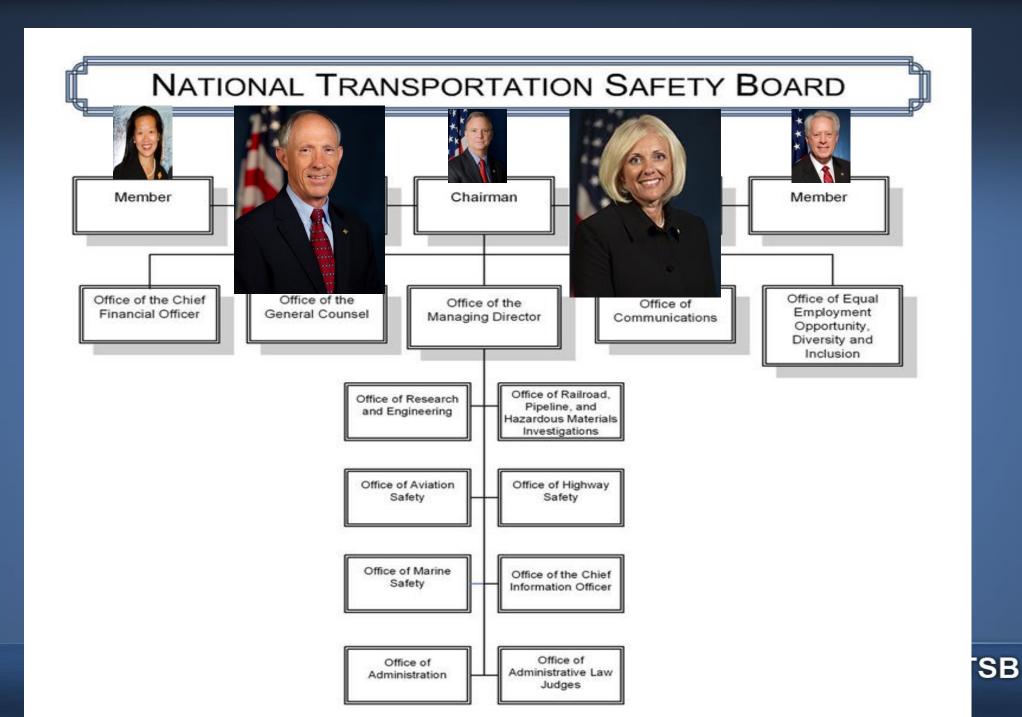


### National Transportation Safety Board

### **NTSB** Update

# **Foreign Investigations**





# **Office of Aviation Safety**

- Staffing
  - 125 total
  - 88 investigators
    - 51 in regions, 37 at headquarters
- ~ 1300 U.S. accidents per year
  - ~ 5 launches per week
- ~ 1000 foreign notifications
  - ~ 250 acc rep assignments per year
  - 6 foreign launches in 2018



## **U.S.** Investigations

- Air Canada 759
- Ypsilanti, MI MD-83
- Teterboro, NJ Learjet



CFM56 SWA engine failure





# CFM56/SWA Investigative Hearing

Hearing Issues:

- fan blade design and development
- fan blade inspection methods & procedures
- engine containment design and certification criteria





### **Other Initiatives**

- ASIAS MOU
- Data Analytics
- Turbulence Study

