



# National Transportation Safety Board

Gulfstream Aerospace Corporation  
G-IV, N121JM  
Bedford, Massachusetts  
May 31, 2014

Investigator-in-Charge  
presentation



# Accident Summary

- May 31, 2014, 2140 local time
- Gulfstream Aerospace Corp. G-IV
- Part 91 corporate flight
- Laurence G. Hanscom Field (BED)
- Three crewmembers, four passengers fatally injured
- Night visual meteorological conditions

# Accident Summary

- Arrived at BED about 1545; gust lock engaged after landing
- Passengers returned about 6 hours later
- Gust lock not disengaged before engine start
- Gust lock/throttle lever interlock
  - Allowed 3 to 4 times throttle lever movement than design intent

# Accident Summary

- Pilots did not discuss checklists or takeoff planning
- Pilots did not perform flight control check
- Gust lock remained engaged

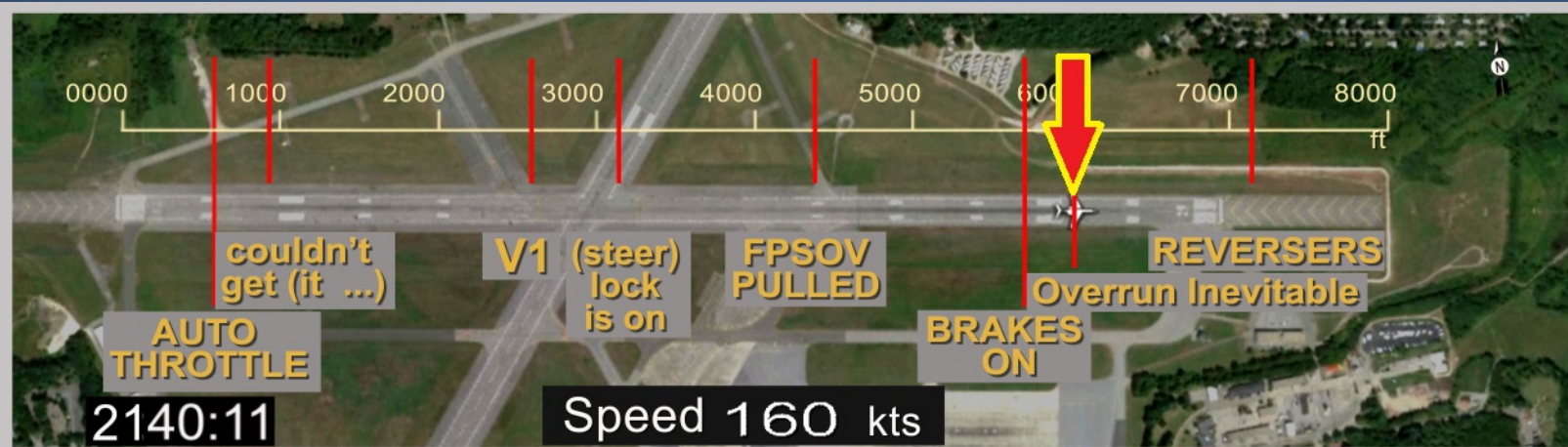
# Animation

Video is located on the  
NTSB YouTube Channel:

<http://www.youtube.com/user/NTSBgov>

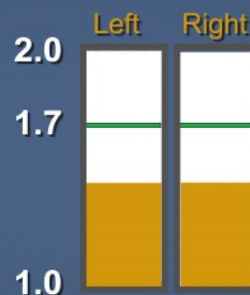


# Rejected Takeoff



2139:59 PIC (steer) lock is on.  
 2140:02 PIC (steer) lock is on.  
 2140:03 PIC (steer) lock is on.  
 2140:04 PIC (steer) lock is on.  
 2140:06 PIC (steer) lock is on.  
 2140:07 PIC (steer) lock is on.

Engine Pressure Ratio



**AUTOTHROTTLE**

**FPSOV PULLED**

**BRAKES ON**

REVERSERS

# Safety Issues

- Retrofit of G-IV gust lock system
- Lack of guidance regarding use of engineering drawings during design reviews
- Importance of using challenge-verification-response format for checklists
- Defining scope of procedural noncompliance in business aviation
- Replacement of nonfrangible fittings

# Parties to Investigation

- Federal Aviation Administration
- Gulfstream Aerospace Corp.
- Massachusetts Port Authority
- Honeywell International
- Rockwell Collins



# Accredited Representative

- United Kingdom Air Accidents Investigation Branch
  - Rolls-Royce (United Kingdom)



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