High Altitude Wake Turbulence
Decision Making to Avoid Loss of Control

Thursday, 12 Oct 17 | 11:45 a.m. to 12:45 p.m.

PANELISTS:
RANDALL BROOKS, ETIENNE COTE, JOHN COX, DANN RUNIK

MODERATORS: TOM HUFF / PAUL BJ RANSBURY
Meeting Flow

Audience Participation Essential

• Brief Introductions
  • Moderators and Panelists
• Scenario Overview
  • Airbus A380 / Challenger 604 Wake Turbulence Upset
• Audience / Panel Discussions
  • Informal Audience Poll on Upset Experiences
  • Initial Question Goes to the Panel
  • Open Discussion: Questions from the Audience
Challenger 604 vs. A380 Wake Upset

630 NM SE MUSCAT
7 JAN 2017
Interim Report Overview

- Blue Skies, Few Clouds 3-4,000’ AMSL Over Ocean
- Rapid and Large Pitch / Roll / Yaw Excursions Recorded
  - Lateral Accelerations Up to 0.94 G
  - Vertical Accelerations Up to: +1.6 G and -3.2G
  - Pitch Attitudes Up to: 9° Up and 20° Down
  - Rudder Deflections Up to: 11.2°
  - Several Full Rolls Reported by Crew
  - Airspeed Fluctuation from 248 KIAS to 330 KIAS
- Lost ~8,700’ of Altitude in 32 Seconds
- Engine Shutdown Due to N1 and ITT Fluctuations. Restarted Later
- OEM Assessment: Challenger Not Restorable to an Airworthy State

Interim Report BFU17-0024-2X: tinyurl.com/a380wake
Wake Turbulence at High Altitude

Airbus A380: ~262' Wingspan

194' (~75% Airbus Wingspan)

Challenger 604: ~64' Wingspan
Wake Turbulence at High Altitude

Airbus A380

Flightpath

1000+ feet

Levels Off in Approximately 15 NM in Cruise Configuration

Challenger 604

AWARENESS  PREVENTION  RECOVERY
High Altitude Wake Turbulence
Decision Making to Avoid Loss of Control

Thursday, 12 Oct 17 | 11:45 a.m. to 12:45 p.m.

PANELISTS:
RANDALL BROOKS, ETIENNE COTE, JOHN COX, DANN RUNIK

MODERATORS: TOM HUFF / PAUL BJ RANSBURY