



NTSB National Transportation Safety Board

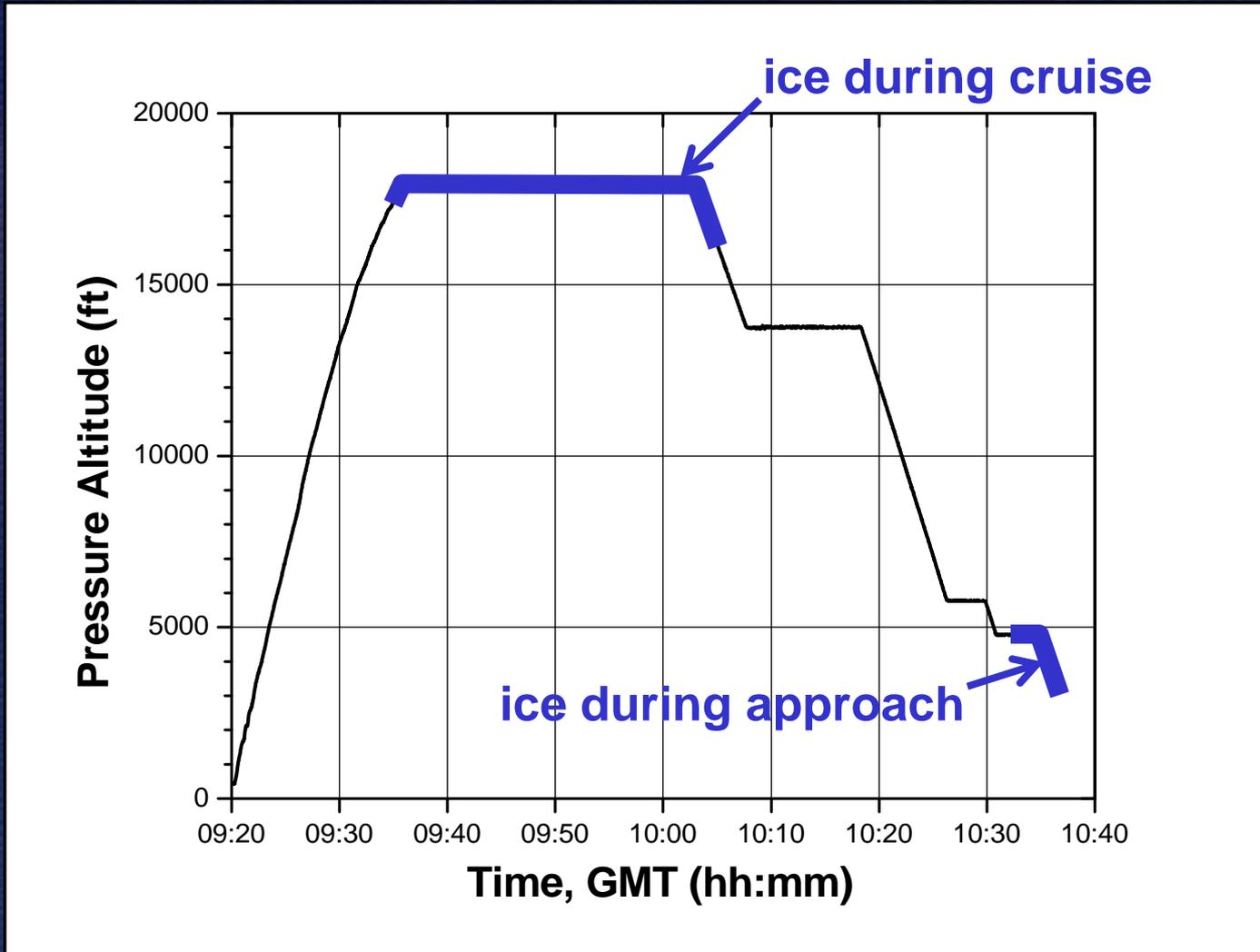
Office of Aviation Safety



Airplane Performance

Timothy Burtch

Flight Profile



Airplane Performance Monitoring

- No requirement for APM
- Minimize hazards associated with ice and alert flight crews
- Detect effects on airplane rather than conditions
- EASA issued Airworthiness Directive for APM in August 2009
- FAA “no action” decision



APM and Flight 8284

- APM not on accident airplane
- ATR evaluated accident flight
- At FL180, “CRUISE SPEED LOW” after 10 minutes
- At 5,000 feet, “CRUISE SPEED LOW” 70 seconds before flap extension
- At 5,000 feet, “DEGRADED PERF” 40 seconds before flap extension



Simulator Training for Ice

- ATR simulator met standards
- Many training simulators do not accurately model ice
- Every ice encounter is unique
- Incorporate data from previous incidents and accidents
- Slow flight and stall regime important





NTSB