LOSS OF FLIGHT 587

Pilot response to turbulence leads to crash

Flight 587 took off shortly after another large aircraft. The plane experienced turbulence and when the pilot attempted to respond with rudder motion, the vertical stabilizer separated from the plane.

“Aircraft Pilot Coupling (APC) events . . . occur only when the pilot attempts to control what the aircraft does. For this reason, pilot error is often listed as the cause of accidents and incidents that include an APC event. . . . However, it is typically not feasible for the pilot to identify and execute the required actions in real time.” - National Research Council

3 Solutions

Possible solutions are placed directly on the Cause Map, above the cause(s) they control. (Here solutions are shown in green boxes.)

- Possible solution: Develop formal training for operators specific to models involving same aircraft
- Possible solution: Detailed visual inspection of structural integrity after extreme in-flight lateral loading event
- Possible solution: Modification to flight control system
- Possible solution: Revise airplane upset recovery training aid
- Possible solution: Require handling evaluation
- Possible solution: Reduce control wheel forces by 30% and pedal forces consistently

For a free copy of our Root Cause Analysis Template in Microsoft Excel, used to create this page, visit our web site.

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