



Date: March 20, 2024

To: Tim LeBaron
Director, Office of Aviation Safety

Through: Kristi Dunks
Deputy Director for Regional Operations, Office of Aviation Safety

From: Noel Coleman, Chief, AS-70
Dennis Hogenson, Regional Chief, Western Pacific Region

Subject: Request to change coding, analysis, and probable cause of
WPR16FA036

The subject report was released in August of 2017. A similar accident involving a Van's RV-7 airplane occurred in February 2022 initiating a review of this accident. The Office of Research and Engineering utilized an updated file carving process to re-examine recorded GoPro data from the subject accident and was able to recover 29 images consistent with the accident flight. Review of the recorded images provided new information on the events immediately preceding the in-flight breakup and impact with terrain. Additional research was also performed on several similar accidents involving RV airplanes. Review of the investigation revealed errors in the accident factual, analysis, coding, and probable cause based on the new information obtained. Thus, we propose revising the factual, analysis, coding, and probable cause as follows.

Factual

An Onboard Image Recorder Specialist's Factual Report - Addendum has been developed for inclusion in the public docket. A Structures Group Chair's Factual Report - Addendum has been developed for inclusion in the public docket. The accident factual report has been revised as shown in the attached.

Analysis

A Structures Group Chair's Analysis Report - Addendum has been developed for inclusion in the OUO docket. The accident analysis has been revised as shown in the attached.

Coding

Findings:

Personnel issues-Task performance-Use of equip/Info-Use of equip/system-Pilot.

Personnel issues-Task performance-Use of equip/info-Aircraft control-Pilot.

Personnel issues-Psychological-Attention/monitoring-Monitoring equip/instruments-Pilot.

Aircraft-Aircraft oper/perf/control parameter-Airspeed-Capability exceeded.
Aircraft-Aircraft Structures-Empennage structure-Rudder-Capability exceeded.

Event Sequence:

Maneuvering-aerobatics - Loss of control in flight.

Maneuvering-aerobatics - Aircraft Structural Failure.

Maneuvering-aerobatics - Part(s) separation from AC.

Uncontrolled descent - Collision with terr/obj (non-CFIT).

PC

The pilot's aerobatic maneuver leading to airspeeds above the airplane's never exceed speed, which resulted in rudder flutter and an in-flight breakup.

If approved, the change will be reflected in the docket and the revised report will be republished.

Approved

A black rectangular redaction box covering a signature or name.