

NATIONAL TRANSPORTATION SAFETY BOARD
Vehicle Recorder Division

July 30, 2020

Cockpit Voice Recorder

Specialist's Factual Report
By Michael Portman

1. EVENT SUMMARY

Location: Disputanta, VA
Date: December 18, 2019
Aircraft: Embraer EMB-190, Registration N959UW
Operator: American Airlines, Flight 2247
NTSB Number: DCA20CA043

On December 18, 2019, at about 1100 EST, an American Airlines EMB-190, N959UW, operating flight 2247, from LaGuardia Airport, New York (LGA) to Raleigh-Durham International Airport, North Carolina (RDU), encountered turbulence and the #1 flight attendant (FA) received a serious injury. Upon arrival in RDU, the #1 FA was transported to a local hospital for treatment of her injury. There were 2 flight crew, 2 flight attendants and 44 passengers on the 14 Code of Federal Regulations (CFR) part 121 domestic passenger flight. A solid-state cockpit voice recorder (CVR) was sent to the National Transportation Safety Board (NTSB) Vehicle Recorder Division for evaluation.

2. GROUP

A group was not convened.

3. DETAILS OF INVESTIGATION

The NTSB Vehicle Recorder Division received the following CVR:

Recorder Manufacturer/Model: **Honeywell 6025**
Recorder Serial Number: **DVDR-01113**

3.1 CVR Carriage Requirements

Per federal regulation, turbine engine powered aircraft operating under 14 CFR Part 121 must be equipped with a CVR that records a minimum of the last 2 hours of aircraft operation; this is accomplished by recording over the oldest audio data. When the CVR is deactivated or removed from the airplane, it retains only the most recent 2 hours of CVR operation.

3.2 Recorder Description

This model CVR, the Honeywell 6025 Digital Voice and Data Recorder (DVDR), records a minimum of 120 minutes of digital audio stored on solid state memory modules. Four channels are recorded: one channel for each flight crew, one channel for a cockpit observer, and one channel for the cockpit area microphone (CAM).

3.3 Recorder Damage

Upon arrival at the laboratory, it was evident that the CVR had not sustained any heat or structural damage and the audio information was extracted from the recorder normally, without difficulty.

3.4 Audio Recording Description

The recording consisted of four channels of audio information with an approximate duration of 2-hours and 7-minutes, however none of the audio was pertinent to the incident/accident investigation. The audio was consistent with the CVR being overwritten or recorded over by subsequent events. Characteristics of overwritten CVRs include:

- Post-event conversations or sounds that are irrelevant or do not provide any additional information useful to the investigation.
- Conversations or other audio consistent with subsequent aircraft operations after the event flight.