

NATIONAL TRANSPORTATION SAFETY BOARD
Vehicle Recorder Division

March 8, 2021

Cockpit Voice Recorder

Specialist's Factual Report
By Christopher Babcock

1. EVENT SUMMARY

Location: Atlanta, Georgia
Date: April 18, 2018
Aircraft: Airbus A330, Registration N806NW
Operator: Delta Air Lines, Flight 30
NTSB Number: DCA18LA163

2. GROUP

A group was not convened.

3. DETAILS OF INVESTIGATION

The NTSB Vehicle Recorder Division received the following CVR:

Recorder Manufacturer/Model: **Honeywell 6022**
Recorder Serial Number: **04154**

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 6022, is a solid state CVR that records 120 minutes of digital audio. Specifically, it contains a 2-channel recording of the last 120 minutes of operation and separately contains a 3-channel recording of the last 30 minutes of operation. The 120-minute portion of the recording is comprised of one channel that combines three audio panels sources and a second channel that contains the cockpit area microphone (CAM) source. The 30-minute portion of the recording contains 3 channels of audio information: one channel for each flight crew, one channel for a cockpit observer.

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, 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:

- Audio consistent with the airplane being stationary on the ground with electrical power on.
- Post-accident conversations or sounds that are irrelevant, or do not provide any additional information useful to the investigation.
- Conversations or other audio consistent with maintenance personnel working in or near the cockpit.
- Background sounds in an unoccupied cockpit such as:
 - Radio transmission from other aircraft or ground facilities.
 - Unintelligible or difficult to discern conversation or other sounds likely emanating from the cabin or outside the airplane.

3.5 Timing and Correlation

Air traffic control data indicate that the accident aircraft (flight 30) landed approximately 18:34 EDT and stopped on the runway for about 33 minutes during the firefighting activity. The aircraft reached the gate approximately 19:12 EDT. Recorded aircraft time on the CVR indicated that the CVR recording started at 21:19:38 EDT. The data indicate that the CVR was powered down at 21:24:09 EDT and powered up again at 22:38:34 EDT. The CVR recording ended at 00:38:34 EDT the next morning.

Additionally, a transmission from Atlanta Ground Control to a different flight, Delta flight 2473, was heard on the CVR approximately 4 minutes and 19 seconds into the recording clearing them “down to the end and monitor tower.” Air traffic control data indicate that Delta 2473 taxied on to the taxiway at 21:21 EDT and departed at 21:28 EDT the evening of April 18.