

NATIONAL TRANSPORTATION SAFETY BOARD

Vehicle Recorder Division

Washington, D.C. 20594

March 29, 2012

Data Recorders – Addendum 1

Group Chairman's Factual Report By Michael Bauer

1. EVENT SUMMARY

Location: Roswell, New Mexico
Date: April 02, 2011
Aircraft: Gulfstream G650
Registration: N652GD
Operator: Gulfstream Aerospace
NTSB Number: DCA11MA076

On April 2, 2011, about 0934 mountain daylight time, an experimental Gulfstream Aerospace Corporation (GAC) GVI (G650)¹, registration N652GD, serial number 6002, crashed during takeoff from runway 21 at Roswell International Air Center Airport (ROW), Roswell, New Mexico. The flight was being operated by the manufacturer as part of its G650 developmental field performance flight test program. The two pilots and the two flight test engineers were fatally injured, and the airplane was substantially damaged. The flight was being conducted under 14 *Code of Federal Regulations* Part 91, and visual meteorological conditions prevailed at the time of the accident.

2. ADDENDUM SUMMARY

The addendum adds additional flight data from the accident flight 153. The data covers the entire take-offs performed prior to test runs 7A1 and 7A2. No plots of the data were generated and the data were provided to the Aircraft Performance Group Chairman.

Table A-1 lists the parameters and table A-2 describes the unit abbreviations provided in this addendum.

The tabular data is provided in electronic (*.csv²) format as Attachment 1 to this addendum.

¹ Gulfstream uses the Roman numeral designation "GVI" for aircraft certification purposes and the designation "G650" for marketing purposes. These designations mean the same aircraft model for purposes of this report and are used interchangeably.

² Comma Separated Value format.

Table A-1. Verified and provided parameters.

Parameter Name	Parameter Description	Source
1. Airspeed Cal-ADS3 (kt)	Calibrated Airspeed	Air Data System 3
2. Altitude Radio-1 ASCB (ft)	Left Radio Altitude	ASCB Bus
3. Ctrl Col Force-L (lbf)	Left Control Column Force	Flight Control Computer 1
4. Ctrl Col Pos-L FCC1 (deg)	Left Control Column Position	Flight Control Computer 1
5. Gear WOW-L LGCU1 (discrete)	Left Main Gear Weight On Wheels	Landing Gear Control Unit 1
6. Gear WOW-R LGCU1 (discrete)	Right Main Gear Weight On Wheels	Landing Gear Control Unit 1
7. Gear Select Up LGCU1	Gear Handle Selected Up	Landing Gear Control Unit 1
8. Pitch IRS-2 (deg)	Pitch Angle	Inertial Reference System 2
9. Pitch Rate IRS-2 (deg/sec)	Rate of Pitch Angle change	Inertial Reference System 2

NOTE: Pressure altitude is based on a standard altimeter setting of 29.92 inches of mercury (in Hg). The pressure altitude information presented in the FDR plots and in the electronic data has not been corrected for the local altimeter setting at the time of the event.

Table A-2. Unit abbreviations.

Units Abbreviation	Description
deg	degrees
deg/sec	degrees per seconds
discrete	discrete
kts	knots
lbf	pounds-force

NOTE: For parameters with a unit description of discrete, a discrete is typically a 1-bit parameter that is either a 0 state or a 1 state where each state is uniquely defined for each parameter.