



AVIATION



HIGHWAY



MARINE



RAILROAD



PIPELINE

Aviation Investigation Final Report

Location:	Dulles, Virginia	Accident Number:	ERA23LA212
Date & Time:	April 28, 2023, 10:00 Local	Registration:	N507GD
Aircraft:	GULFSTREAM AEROSPACE CORP GVII-G500	Aircraft Damage:	None
Defining Event:	Cabin safety event	Injuries:	1 Serious, 3 None
Flight Conducted Under:	Part 91: General aviation - Executive/Corporate		

Analysis

The flight attendant reported that after informing the flight crew that the cabin was secure, she was making her way back to her seat when the flight began to take off. During the takeoff the flight attendant fell and was seriously injured. The flight continued to its destination where the flight attendant was checked by medical personnel. She then elected to return to the airport of origin, and once there was transported to the hospital where it was discovered that her ankle was fractured. Following the accident, the operator modified their procedures to require that the flight deck crew verify that cabin crew are seated prior to taxi.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be:

The initiation of the takeoff while before the flight attendant had returned to her seat, which resulted in a serious injury during takeoff.

Findings

Personnel issues	Lack of action - Cabin crew
Personnel issues	Identification/recognition - Flight crew

Factual Information

History of Flight

Takeoff	Cabin safety event (Defining event)
---------	-------------------------------------

Pilot Information

Certificate:	Airline transport; Commercial; Flight instructor	Age:	43,Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	4-point
Instrument Rating(s):	Airplane	Second Pilot Present:	Yes
Instructor Rating(s):	Airplane single-engine	Toxicology Performed:	
Medical Certification:	Class 1 Without waivers/limitations	Last FAA Medical Exam:	January 4, 2023
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	May 5, 2023
Flight Time:	6959 hours (Total, all aircraft), 111 hours (Total, this make and model), 4531 hours (Pilot In Command, all aircraft)		

Co-pilot Information

Certificate:	Airline transport; Commercial; Flight instructor	Age:	52,Male
Airplane Rating(s):	Single-engine land; Single-engine sea; Multi-engine land	Seat Occupied:	Right
Other Aircraft Rating(s):	Glider	Restraint Used:	4-point
Instrument Rating(s):	Airplane	Second Pilot Present:	Yes
Instructor Rating(s):	Airplane multi-engine; Airplane single-engine; Instrument airplane	Toxicology Performed:	
Medical Certification:	Class 1 With waivers/limitations	Last FAA Medical Exam:	November 22, 2022
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	December 20, 2022
Flight Time:	6500 hours (Total, all aircraft), 110 hours (Total, this make and model), 4800 hours (Pilot In Command, all aircraft)		

Passenger Information

Certificate:	Age:	Female
Airplane Rating(s):	Seat Occupied:	Rear
Other Aircraft Rating(s):	Restraint Used:	None
Instrument Rating(s):	Second Pilot Present:	Yes
Instructor Rating(s):	Toxicology Performed:	
Medical Certification:	Last FAA Medical Exam:	
Occupational Pilot:	Last Flight Review or Equivalent:	
Flight Time:		

Aircraft and Owner/Operator Information

Aircraft Make:	GULFSTREAM AEROSPACE CORP	Registration:	N507GD
Model/Series:	GVII-G500	Aircraft Category:	Airplane
Year of Manufacture:	2022	Amateur Built:	
Airworthiness Certificate:	Transport	Serial Number:	72107
Landing Gear Type:	Retractable - Tricycle	Seats:	16
Date/Type of Last Inspection:	April 28, 2023 Continuous airworthiness	Certified Max Gross Wt.:	80000 lbs
Time Since Last Inspection:		Engines:	2 Turbo fan
Airframe Total Time:	92 Hrs	Engine Manufacturer:	P&W CANADA
ELT:	C126 installed, not activated	Engine Model/Series:	PW814GA
Registered Owner:	GENERAL DYNAMICS CORP	Rated Power:	15429 Lbs thrust
Operator:	GENERAL DYNAMICS CORP	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	IAD, 294 ft msl	Distance from Accident Site:	2 Nautical Miles
Observation Time:	09:52 Local	Direction from Accident Site:	164°
Lowest Cloud Condition:		Visibility	7 miles
Lowest Ceiling:	Overcast / 1100 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	10 knots / 20 knots	Turbulence Type Forecast/Actual:	Unknown / Unknown
Wind Direction:	80°	Turbulence Severity Forecast/Actual:	Unknown / Unknown
Altimeter Setting:	29.96 inches Hg	Temperature/Dew Point:	13°C / 11°C
Precipitation and Obscuration:	Moderate - None - Rain		
Departure Point:	Dulles, VA	Type of Flight Plan Filed:	IFR
Destination:	Wildwood, NJ (WWD)	Type of Clearance:	IFR
Departure Time:		Type of Airspace:	Class B

Airport Information

Airport:	WASHINGTON DULLES INTERNATIONAL IAD	Runway Surface Type:	Concrete
Airport Elevation:	313 ft msl	Runway Surface Condition:	Wet
Runway Used:	19C	IFR Approach:	None
Runway Length/Width:	11500 ft / 150 ft	VFR Approach/Landing:	None

Wreckage and Impact Information

Crew Injuries:	2 None	Aircraft Damage:	None
Passenger Injuries:	1 Serious, 1 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Serious, 3 None	Latitude, Longitude:	38.969106,-77.459352(est)

Administrative Information

Investigator In Charge (IIC):	Young, Joshua
Additional Participating Persons:	Harry Arthur; FAA/FSDO; Herndon, VA
Original Publish Date:	June 29, 2023
Last Revision Date:	
Investigation Class:	Class 4
Note:	The NTSB did not travel to the scene of this accident.
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=107169

The National Transportation Safety Board (NTSB) is an independent federal agency charged by Congress with investigating every civil aviation accident in the United States and significant events in other modes of transportation—railroad, transit, highway, marine, pipeline, and commercial space. We determine the probable causes of the accidents and events we investigate, and issue safety recommendations aimed at preventing future occurrences. In addition, we conduct transportation safety research studies and offer information and other assistance to family members and survivors for each accident or event we investigate. We also serve as the appellate authority for enforcement actions involving aviation and mariner certificates issued by the Federal Aviation Administration (FAA) and US Coast Guard, and we adjudicate appeals of civil penalty actions taken by the FAA.

The NTSB does not assign fault or blame for an accident or incident; rather, as specified by NTSB regulation, “accident/incident investigations are fact-finding proceedings with no formal issues and no adverse parties ... and are not conducted for the purpose of determining the rights or liabilities of any person” (Title 49 *Code of Federal Regulations* section 831.4). Assignment of fault or legal liability is not relevant to the NTSB’s statutory mission to improve transportation safety by investigating accidents and incidents and issuing safety recommendations. In addition, statutory language prohibits the admission into evidence or use of any part of an NTSB report related to an accident in a civil action for damages resulting from a matter mentioned in the report (Title 49 *United States Code* section 1154(b)). A factual report that may be admissible under 49 *United States Code* section 1154(b) is available [here](#).