



AVIATION



HIGHWAY



MARINE



RAILROAD



PIPELINE

Aviation Investigation Final Report

Location:	Orange, Virginia	Accident Number:	ERA09LA344
Date & Time:	June 13, 2009, 19:45 Local	Registration:	N204EH
Aircraft:	DEHAVILLAND DHC-6 TWIN	Aircraft Damage:	None
Defining Event:	Low altitude operation/event	Injuries:	1 Serious, 1 None
Flight Conducted Under:	Part 91: General aviation - Skydiving		

Analysis

The pilot stated that after the 20 skydivers left the airplane, he “descended and entered at a 45-degree angle for the downwind leg for landing on runway 08.” Once on the downwind leg of the traffic pattern, the pilot stated that the “windshield began fogging up.” The pilot decided to make a 360-degree turn to the right while he wiped the window with a rag. The pilot further stated that the last altitude he remembered being at was 2,000 feet mean sea level. Many of the skydivers had landed in a predetermined landing area, which was a field 0.25 nautical miles northwest of the runway. They reported that the airplane was conducting a “low-pass” about 30 feet above the ground when its propeller struck a descending skydiver’s parachute. The skydiver was seriously injured when he fell approximately 20 feet and struck the ground, but the airplane landed without incident. A few of the skydivers stated that the jump was a memorial exercise to release the ashes of a friend that recently died. They added that the airplane’s low pass was part of the memorial exercise. The winds recorded at the airport about the time of the accident were calm. The pilot did not report any mechanical anomalies with the airplane.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot’s improper decision to perform a low-level maneuver over a populated skydive landing area and his inadequate visual lookout.

Findings

Personnel issues	Monitoring environment - Pilot
Personnel issues	Decision making/judgment - Pilot

Factual Information

History of Flight

Maneuvering-low-alt flying	Low altitude operation/event (Defining event)
Maneuvering-low-alt flying	Collision with terr/obj (non-CFIT)

On June 13, 2009, about 1945 eastern daylight time, a Dehavilland DHC-6 Twin Otter, N204EH, operated by Skydive Factory Inc., impacted a skydiver’s parachute while maneuvering near Orange County Airport (OMH), Orange, Virginia. The certificated airline transport pilot was not injured and the airplane was not damaged. The skydiver was seriously injured. Visual meteorological conditions prevailed and no flight plan was filed for the local skydive flight conducted under the provisions of 14 Code of Federal Regulations Part 91. The flight originated from OMH at 1925.

According to the pilot, after the 20 jumpers left the airplane, he “descended and entered at a 45-degree angle for the downwind leg for landing on runway 08.” Once on the downwind leg of the traffic pattern, the pilot stated that the “windshield began fogging up.” The pilot decided to make a 360-degree turn to the right while he wiped the window with a rag. The pilot further stated that the last altitude he remembered being at was 2,000 feet mean sea level.

Many of the skydivers had landed in a predetermined landing area, which was a field 0.25 nautical miles northwest of the runway. They reported that the airplane was conducting a “low-pass” about 30 feet above the ground, when its propeller struck a descending skydiver’s parachute. The skydiver was seriously injured when he fell approximately 20 feet and hit the ground, but the airplane landed without incident. A few of the skydivers stated that the jump was a memorial exercise to release the ashes of a friend that recently died. They added that the airplane's low pass was part of the memorial exercise.

The OMH weather recorded at 1943 included calm winds, clear skies, and visibility 10 miles.

Pilot Information

Certificate:	Airline transport; Commercial	Age:	54, Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 1 Without waivers/limitations	Last FAA Medical Exam:	August 14, 2008
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	December 20, 2007
Flight Time:	2921 hours (Total, all aircraft), 1314 hours (Total, this make and model), 2701 hours (Pilot In Command, all aircraft), 166 hours (Last 90 days, all aircraft), 80 hours (Last 30 days, all aircraft), 0 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	DEHAVILLAND	Registration:	N204EH
Model/Series:	DHC-6 TWIN	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	61
Landing Gear Type:	Tricycle	Seats:	23
Date/Type of Last Inspection:	February 6, 2009 100 hour	Certified Max Gross Wt.:	11500 lbs
Time Since Last Inspection:		Engines:	2 Turbo prop
Airframe Total Time:	40624 Hrs at time of accident	Engine Manufacturer:	P&W CANADA
ELT:	Installed, not activated	Engine Model/Series:	PT6A-60A
Registered Owner:	SKYDIVE FACTORY INC	Rated Power:	1050 Horsepower
Operator:	SKYDIVE FACTORY INC	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	OMH,465 ft msl	Distance from Accident Site:	0 Nautical Miles
Observation Time:	19:43 Local	Direction from Accident Site:	0°
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	/	Turbulence Type Forecast/Actual:	/
Wind Direction:		Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29.89 inches Hg	Temperature/Dew Point:	26°C / 22°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Orange, VA (OMH)	Type of Flight Plan Filed:	None
Destination:	Orange, VA (OMH)	Type of Clearance:	Traffic advisory
Departure Time:	19:25 Local	Type of Airspace:	

Airport Information

Airport:	Orange Country Airport OMH	Runway Surface Type:	Asphalt
Airport Elevation:	465 ft msl	Runway Surface Condition:	Dry
Runway Used:	08	IFR Approach:	None
Runway Length/Width:	3200 ft / 75 ft	VFR Approach/Landing:	None

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	None
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	1 Serious	Aircraft Explosion:	None
Total Injuries:	1 Serious, 1 None	Latitude, Longitude:	38.247222,-78.045555(est)

Administrative Information

Investigator In Charge (IIC):	Gretz, Robert
Additional Participating Persons:	James Cook; FAA/FSDO; Richmond, VA
Original Publish Date:	September 30, 2009
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=74035

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