



National Transportation Safety Board Aviation Accident Final Report

Location:	Newfane, NY	Accident Number:	ERA10LA389
Date & Time:	08/01/2010, 1420 EDT	Registration:	N4976E
Aircraft:	CESSNA A185F	Aircraft Damage:	Substantial
Defining Event:	Collision with terr/obj (non-CFIT)	Injuries:	1 Fatal, 5 Minor
Flight Conducted Under:	Part 91: General Aviation - Skydiving		

Analysis

The airplane was departing for a skydiving flight. During rotation, the jump door opened, which was located on the right side of the airplane. The pilot said that he was not concerned with the door, which would not have critically impacted the airplane's performance; however, an experienced parachutist attempted to secure the door to the point where he was partially outside of the airplane. The pilot attempted to stop the parachutist and became distracted, which resulted in the airplane veering left toward trees while flying at a low airspeed. The airplane subsequently struck a stand of trees and impacted the ground. The airplane came to rest inverted in a wooded area, with the roof of the cabin and empennage separated. Examination of the airplane did not reveal any mechanical malfunctions and the pilot reported that the airplane performed as expected, without any mechanical issues. One of the occupants noted that the jump door was checked prior to takeoff and appeared to be secured. The jump door separated during the accident and was found in the latched position. The jump door and surrounding structure were distorted due to impact damage.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's failure to maintain aircraft control due to his diverted attention, which resulted in a collision with trees during the initial climb after takeoff. Contributing to the accident was the passenger's attempt to secure the jump door after it opened during takeoff.

Findings

Aircraft	Passenger/crew doors - Not specified Performance/control parameters - Not attained/maintained (Cause)
Personnel issues	Action - Passenger (Factor) Attention - Pilot (Cause) Aircraft control - Pilot (Cause)

Factual Information

On August 1, 2010, about 1420 eastern daylight time, a Cessna A185F, N4976E, operated by Frontier Skydivers, Inc., was substantially damaged when it impacted trees, during the initial climb after takeoff from Hollands International Airport (85N), Newfane, New York. The certificated commercial pilot and four passengers sustained minor injuries. One passenger was killed. Visual meteorological conditions prevailed and no flight plan had been filed for the local skydiving flight that was conducted under the provisions of 14 Code of Federal Regulations Part 91.

During a telephone interview, the pilot reported that he had completed seven or eight uneventful flights prior to the accident. A jump instructor was on board the accident flight, with a student and a videographer; and two additional "experienced" jumpers. The two jumpers intended to exit the airplane at an altitude of 5,000 feet, and the parachute instructor intended to conduct a tandem jump with the student from an altitude of 12,500 feet.

The flight departed from runway 25, a 2,875-foot-long, 75-foot-wide, turf runway. The airplane accelerated and lifted off normally; however, during rotation the jump door opened, which was located on the right side of the airplane. The pilot said he was not concerned with the door, which would not have critically impacted the airplane's performance. One of the experienced parachutists attempted to secure the door, and the pilot yelled at him to stop. The parachutist continued to attempt to secure the door to the point where he was partially outside of the airplane. The pilot physically grabbed the parachutist and tried to pull him back into the airplane. During this time, the pilot became distracted, which resulted in the airplane veering left toward trees, while flying at a low airspeed. The airplane subsequently struck a stand of trees and impacted the ground.

The airplane came to rest inverted in a wooded area, with the roof of the cabin and empennage separated.

Examination of the airplane by a Federal Aviation Administration (FAA) inspector and a representative from the airframe manufacturer did not reveal any mechanical malfunctions. In addition, the pilot reported that the airplane performed as expected, without any mechanical issues.

The inspector noted that the jump door, which was hinged to open upward, was separated and in the latched position. The jump door and surrounding structure were distorted due to impact damage.

The videographer noted that the door was checked prior to takeoff and appeared to be secured. The airplane had been operated for about 55 hours since its most recent annual inspection, which was performed on July 1, 2010.

The pilot reported 3,985 hours of total flight experience, which included 559 hours in the same make and model as the accident airplane. His most recent FAA second-class medical certificate was issued on April 27, 2010.

The reported weather at an airport located about 12 miles southwest of the accident site, at 1353, was: wind from 110 degrees at 3 knots; visibility 10 statute miles; few clouds at 4,800

feet, scattered clouds at 12,000 and 25,000 feet; temperature 28 degrees Celsius (C); dew point 16 degrees C; altimeter 29.98 inches of mercury.

History of Flight

Takeoff	Miscellaneous/other
Initial climb	Collision with terr/obj (non-CFIT) (Defining event)

Pilot Information

Certificate:	Commercial	Age:	68, Male
Airplane Rating(s):	Single-engine Land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	Seatbelt, Shoulder harness
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 2 With Waivers/Limitations	Last Medical Exam:	04/27/2010
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	12/01/2009
Flight Time:	3985 hours (Total, all aircraft), 559 hours (Total, this make and model), 3937 hours (Pilot In Command, all aircraft), 96 hours (Last 90 days, all aircraft), 17 hours (Last 30 days, all aircraft), 0 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Manufacturer:	CESSNA	Registration:	N4976E
Model/Series:	A185F	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Normal	Serial Number:	18503924
Landing Gear Type:	Tailwheel	Seats:	6
Date/Type of Last Inspection:	07/01/2010, Annual	Certified Max Gross Wt.:	3350 lbs
Time Since Last Inspection:	54 Hours	Engines:	1 Reciprocating
Airframe Total Time:	2903 Hours	Engine Manufacturer:	Lycoming
ELT:	Installed, not activated	Engine Model/Series:	TIO-540-J2BD
Registered Owner:	DAYSTAR TRADING & VENTURES LLC	Rated Power:	350 hp
Operator:	Frontier Skydivers	Air Carrier Operating Certificate:	None

Meteorological Information and Flight Plan

Observation Facility, Elevation:	IAG, 589 ft msl	Observation Time:	1353 EDT
Distance from Accident Site:	12 Nautical Miles	Condition of Light:	Day
Direction from Accident Site:	220°	Conditions at Accident Site:	Visual Conditions
Lowest Cloud Condition:	Few / 4800 ft agl	Temperature/Dew Point:	28° C / 16° C
Lowest Ceiling:	None	Visibility	10 Miles
Wind Speed/Gusts, Direction:	3 knots, 110°	Visibility (RVR):	
Altimeter Setting:	29.97 inches Hg	Visibility (RVV):	
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Newfane, NY (85N)	Type of Flight Plan Filed:	None
Destination:	Newfane, NY (85N)	Type of Clearance:	None
Departure Time:	1420 EDT	Type of Airspace:	

Airport Information

Airport:	Hollands International (85N)	Runway Surface Type:	Grass/turf
Airport Elevation:	360 ft	Runway Surface Condition:	Dry
Runway Used:	25	IFR Approach:	None
Runway Length/Width:	2875 ft / 75 ft	VFR Approach/Landing:	None

Wreckage and Impact Information

Crew Injuries:	1 Minor	Aircraft Damage:	Substantial
Passenger Injuries:	1 Fatal, 4 Minor	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Fatal, 5 Minor		

Administrative Information

Investigator In Charge (IIC):	Luke Schiada	Adopted Date:	06/27/2011
Additional Participating Persons:	Thomas G McCormick; FAA/FSDO; Rochester, NY Jan R Smith; Cessna Aircraft Company; Wichita, KS		
Publish Date:	06/27/2011		
Investigation Docket:	http://dms.nts.gov/pubdms/search/dockList.cfm?mKey=76810		

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