



# National Transportation Safety Board Aviation Accident Final Report

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<b>Location:</b>	West Point, VA	<b>Accident Number:</b>	ERA09LA435
<b>Date &amp; Time:</b>	08/01/2009, 1900 EDT	<b>Registration:</b>	N1999G
<b>Aircraft:</b>	BEECH B90	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>	Miscellaneous/other	<b>Injuries:</b>	1 Fatal, 6 None
<b>Flight Conducted Under:</b>	Part 91: General Aviation - Skydiving		

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## Analysis

During a skydiving flight at approximately 14,000 feet, an instructor positioned himself at the door opening with his jump student nearby. The student inadvertently pulled the instructor's reserve parachute D-ring, deploying the chute and pulling the instructor out of the airplane. The instructor contacted the left horizontal stabilizer then descended toward the ground coming to rest suspended in a tree by his parachute.

## Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The inadvertent deployment of the instructor's reserve parachute.

## Findings

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Personnel issues	Incorrect action selection - Passenger (Cause)
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## Factual Information

### HISTORY OF FLIGHT

On August 1, 2009, about 1900 eastern daylight time, a Beech B90, N1999G, registered to Fayard Enterprises LLC, operated by Rampart Aviation, Inc., was substantially damaged during a skydive flight near West Point, Virginia. Visual meteorological conditions prevailed at the time and no flight plan was filed for the 14 Code of Federal Regulations (CFR) Part 91 skydive flight from Middle Peninsula Regional Airport (FYJ), West Point, Virginia. The pilot and 5 skydivers were not injured while one skydiver was killed.

The pilot stated that before takeoff fourteen skydivers boarded the airplane. The flight departed and climbed to 14,000 feet where a group of skydivers deplaned. At that point, he felt a large thud and a shudder in the flight controls that lasted about 3 seconds. The airplane yawed to the left and pitched up, then the flight control feel returned to normal.

According to a student jumper who was on his 26th jump, after the group of skydivers deplaned, his instructor positioned himself at the cabin door opening facing inside the cabin, and he came in front of his instructor. The student jumper reported that he put his hands on the instructor's chest and 1 count before exiting, he noticed the instructor's reserve parachute handle was "out." He told the instructor to stop and tried to grab him from the back to bring him back into the airplane. The instructor was "...ripped out of the plane..." and he watched the instructor hit the tail then noted he fell away from the airplane. He watched the instructor's reserve parachute open and by that time he was told to jump solo.

One of the tandem instructor's who was next to exit the airplane reported that the instructor positioned himself outside the airplane facing the front of the airplane and appeared to start his exit count. The tandem instructor sensed confusion between the accident instructor and student jumper and the accident instructor stopped the count on "set." He noticed the two briefly communicating, and also noticed the accident instructor trying to grab the plane. While the accident instructor was doing this the student jumper appeared to reach out to assist the accident instructor and appeared to reach in the area of the accident instructor's left side in the vicinity of his reserve parachute ripcord. At that point the accident instructor was "violently pulled from the door and I felt him violently strike the tail." The remaining jumpers departed the airplane.

The pilot further reported that after the remaining skydivers exited the airplane he turned around and noticed a large dent on the leading edge of the left horizontal stabilizer. He descended at a slow rate of descent and landed without further incident.

A search for the accident instructor was immediately initiated and his body was located the following morning. According to the Virginia State Police Report, the instructor was found suspended in a tree by a white colored parachute. The report also indicated that a video recorded the event and their review of the video in slow motion revealed the student jumper pulled the reserve parachute D-ring.

### METEOROLOGICAL INFORMATION

A surface observation weather report taken at Middle Regional Airport, West Point, Virginia, at 1902, or approximately 2 minutes after the accident indicates the visibility was 10 statute miles, and clear skies existed. The temperature and dew point were 28 and 21 degrees Celsius

respectively, and the altimeter setting was 30.03 inches of mercury.

#### WRECKAGE AND IMPACT INFORMATION

Examination of the airplane by a FAA inspector revealed substantial damage to the left horizontal stabilizer.

#### MEDICAL AND PATHOLOGICAL INFORMATION

A postmortem examination of the skydive instructor was performed by the Office of the Chief Medical Examiner, Richmond, Virginia. The cause of death was listed as “Cervical Spine Fracture at C6 due to Blunt Force Injury of Head and Neck.”

Forensic toxicology was performed on specimens of the skydive instructor by the Department of Forensic Science, Commonwealth of Virginia. The toxicology report stated the results were negative in the blood and vitreous fluid for tested drugs and volatiles.

#### History of Flight

Enroute-cruise	Miscellaneous/other (Defining event)
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#### Pilot Information

<b>Certificate:</b>	Airline Transport; Commercial	<b>Age:</b>	31, Male
<b>Airplane Rating(s):</b>	Multi-engine Land; Single-engine Land	<b>Seat Occupied:</b>	Left
<b>Other Aircraft Rating(s):</b>	None	<b>Restraint Used:</b>	Seatbelt, Shoulder harness
<b>Instrument Rating(s):</b>	Airplane	<b>Second Pilot Present:</b>	No
<b>Instructor Rating(s):</b>	None	<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>	Class 1 Without Waivers/Limitations	<b>Last Medical Exam:</b>	03/31/2009
<b>Occupational Pilot:</b>	Yes	<b>Last Flight Review or Equivalent:</b>	02/12/2009
<b>Flight Time:</b>	4430 hours (Total, all aircraft), 11 hours (Total, this make and model), 3700 hours (Pilot In Command, all aircraft), 205 hours (Last 90 days, all aircraft), 75 hours (Last 30 days, all aircraft), 9 hours (Last 24 hours, all aircraft)		

## Aircraft and Owner/Operator Information

<b>Aircraft Manufacturer:</b>	BEECH	<b>Registration:</b>	N1999G
<b>Model/Series:</b>	B90	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>		<b>Amateur Built:</b>	No
<b>Airworthiness Certificate:</b>	Normal	<b>Serial Number:</b>	LJ-319
<b>Landing Gear Type:</b>	Retractable -	<b>Seats:</b>	15
<b>Date/Type of Last Inspection:</b>	07/17/2009, Continuous Airworthiness	<b>Certified Max Gross Wt.:</b>	9650 lbs
<b>Time Since Last Inspection:</b>		<b>Engines:</b>	2 Turbo Prop
<b>Airframe Total Time:</b>	10955 Hours	<b>Engine Manufacturer:</b>	Pratt & Whitney
<b>ELT:</b>	Installed, not activated	<b>Engine Model/Series:</b>	PT6 SER 578HP
<b>Registered Owner:</b>	FAYARD ENTERPRISES LLC	<b>Rated Power:</b>	550 hp
<b>Operator:</b>	Rampart Aviation, Inc.	<b>Air Carrier Operating Certificate:</b>	None

## Meteorological Information and Flight Plan

<b>Observation Facility, Elevation:</b>	FYJ, 20 ft msl	<b>Observation Time:</b>	1902 EDT
<b>Distance from Accident Site:</b>		<b>Condition of Light:</b>	Day
<b>Direction from Accident Site:</b>		<b>Conditions at Accident Site:</b>	Visual Conditions
<b>Lowest Cloud Condition:</b>	Clear	<b>Temperature/Dew Point:</b>	28° C / 21° C
<b>Lowest Ceiling:</b>	None	<b>Visibility</b>	10 Miles
<b>Wind Speed/Gusts, Direction:</b>	7 knots, 110°	<b>Visibility (RVR):</b>	
<b>Altimeter Setting:</b>	30.03 inches Hg	<b>Visibility (RVV):</b>	
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>	West Point, VA	<b>Type of Flight Plan Filed:</b>	None
<b>Destination:</b>	West Point, VA (FYJ)	<b>Type of Clearance:</b>	Unknown
<b>Departure Time:</b>	EDT	<b>Type of Airspace:</b>	

## Wreckage and Impact Information

<b>Crew Injuries:</b>	1 None	<b>Aircraft Damage:</b>	Substantial
<b>Passenger Injuries:</b>	1 Fatal, 5 None	<b>Aircraft Fire:</b>	None
<b>Ground Injuries:</b>	N/A	<b>Aircraft Explosion:</b>	None
<b>Total Injuries:</b>	1 Fatal, 6 None		

## Administrative Information

**Investigator In Charge (IIC):** Timothy W Monville **Adopted Date:** 12/20/2010

**Additional Participating Persons:** John J Keymont; FAA/FSDO; Richmond, VA

**Publish Date:** 12/20/2010

**Investigation Docket:** <http://dms.nts.gov/pubdms/search/dockList.cfm?mKey=74425>

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