Aviation Investigation Final Report

Location:	Pawtucket, Rhode Island	**Accident Number:**	NYC05LA012
Date & Time:	October 29, 2004, 17:00 Local	**Registration:**	N469PD
Aircraft:	Douglas Adventure Air AMPIB	**Aircraft Damage:**	Destroyed
Defining Event:		**Injuries:**	1 Fatal
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The pilot had completed construction of the accident airplane, and an FAA inspector had approved it for flight and issued a special airworthiness certificate. On the day of the accident, which was the second flight conducted since the construction was completed, witnesses observed the airplane in the airport traffic pattern. As the airplane turned onto the base leg, about 500 feet above the ground, it suddenly "nosed over," and spiraled towards the ground. The witnesses also recalled that the engine "sputtered" just prior to it descending. An additional witness recalled that the engine was "revving at full power" as it descended. The airplane came to rest about 1 mile from the airport, where a post-crash fire consumed the wreckage. According to a statement posted by the accident owner/pilot on a website message board dedicated to Adventurer experimental amphibian airplanes, the pilot stated that he had modified the elevator of the airplane from a 3 degree maximum up angle, to a 18 degree maximum up angle for the accident flight, "to see if I have leveled out the wings, and if I can get sufficient elevator up travel to climb out of the airport at 90mph." Examination of the wreckage revealed that the airplane's automotive type engine was extensively damaged by the post-crash fire, and further examination could not be performed. Also noted were several socks filled with steel ball bearings, weighing approximately 25 pounds, and 1 or 2-50-pound bags of ballast in the wreckage. The exact location of where the socks and ballast were stationed during the flight could not be determined.

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, which resulted in an inadvertent stall.

Findings

Occurrence #1: LOSS OF CONTROL - IN FLIGHT
Phase of Operation: APPROACH - VFR PATTERN - BASE TURN

Findings
1. (C) AIRCRAFT CONTROL - NOT MAINTAINED - PILOT IN COMMAND
2. STALL/SPIN - INADVERTENT - PILOT IN COMMAND

Occurrence #2: IN FLIGHT COLLISION WITH TERRAIN/WATER
Phase of Operation: DESCENT - UNCONTROLLED

Findings
3. TERRAIN CONDITION - GROUND

Factual Information

On October 29, 2004, about 1700 eastern daylight time, an amateur built Adventure Air AMPIB, N469PD, was destroyed while landing at the North Central State Airport (SFZ), Pawtucket, Rhode Island. The certificated private pilot was fatally injured. Visual meteorological conditions prevailed, and no flight plan was filed for the local personal flight conducted under 14 CFR Part 91.

According to a Federal Aviation Administration (FAA) inspector, the pilot had recently completed construction of the accident airplane. On September 21, 2004, an FAA inspector conducted an inspection of the airplane, approved it for flight, and issued a special airworthiness certificate.

The accident flight was the second flight conducted since the construction was completed.

On the day of the accident, witnesses observed the airplane in the airport traffic pattern, utilizing runway 23. As the airplane turned onto the base leg, about 500 feet above the ground, it suddenly "nosed over," and spiraled towards the ground. The witnesses also recalled that the engine "sputtered" just prior to it descending. An additional witness recalled that the engine was "revving at full power" as it descended.

The airplane came to rest about 1 mile from runway 23, where a post-crash fire consumed the wreckage.

According to a statement posted by the accident owner/pilot on October 25, 2004, on a website message board dedicated to Adventurer experimental amphibian airplanes, "I am happy to report that I took N469PD to the air for the first time, October 21...I set rudder trim two clicks to the right to compensate for prop wash, accelerated to 45-50, let tail come up, pushed nose over and down slightly, and lifted off at about 90 mph. Upon liftoff, I found that I was carrying a lot of right stick to try to get the 'heavy' left wing to come up. The stick was also all the way back, and I was in a climbing left turn (this is before I changed the elevator up angle, it was at 3 degrees max up for this first flight, now it is at 18 degrees max up)...Next sunny calm morning, will do another short flight to see if I have leveled out the wings, and if I can get sufficient elevator up travel to climb out of the airport at 90mph..."

Examination of the wreckage by a FAA inspector revealed that the airplane's automotive type engine was extensively damaged by the post-crash fire, and further examination could not be performed. The inspector also noted several socks filled with steel ball bearings, weighing approximately 25 pounds, and 1 or 2 50-pound bags of ballast in the wreckage. The exact location of where the socks and ballast were stationed during the flight could not be determined.

Examination of the tie-down area where the pilot kept the airplane revealed two additional 50-pound bags of ballast.

The pilot reported 292 total hours of flight experience on his most recent application for an FAA third class medical certificate, which was dated July 22, 2004.

The pilot did not hold an FAA mechanic certificate, nor did he hold the appropriate aircraft builder certificate.

The weather recorded at the airport, about the time of the accident, included winds from 240 degrees at 3 knots, and clear skies.

Pilot Information

Certificate:	Private	**Age:**	53,Male
Airplane Rating(s):	Single-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:**	Yes
Medical Certification:	Class 3 With waivers/limitations	**Last FAA Medical Exam:**	July 1, 2004
Occupational Pilot:	No	**Last Flight Review or Equivalent:**	
Flight Time:	292 hours (Total, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Douglas	**Registration:**	N469PD
Model/Series:	Adventure Air AMPIB	**Aircraft Category:**	Airplane
Year of Manufacture:		**Amateur Built:**	Yes
Airworthiness Certificate:	Experimental (Special)	**Serial Number:**	102B
Landing Gear Type:	Tailwheel; Amphibian	**Seats:**	2
Date/Type of Last Inspection:	Unknown	**Certified Max Gross Wt.:**	3000 lbs
Time Since Last Inspection:		**Engines:**	1 Reciprocating
Airframe Total Time:		**Engine Manufacturer:**	Chevrolet
ELT:	Installed, not activated	**Engine Model/Series:**	ZZ4
Registered Owner:	Paul I. Douglas	**Rated Power:**	333 Horsepower
Operator:		**Operating Certificate(s) Held:**	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	**Condition of Light:**	Day
Observation Facility, Elevation:	SFZ,441 ft msl	**Distance from Accident Site:**	
Observation Time:	16:55 Local	**Direction from Accident Site:**	
Lowest Cloud Condition:	Clear	**Visibility**	10 miles
Lowest Ceiling:	None	**Visibility (RVR):**	
Wind Speed/Gusts:	3 knots /	**Turbulence Type Forecast/Actual:**	/
Wind Direction:	240°	**Turbulence Severity Forecast/Actual:**	/
Altimeter Setting:	29.97 inches Hg	**Temperature/Dew Point:**	14°C / 6°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Pawtucket, RI (SFZ)	**Type of Flight Plan Filed:**	None
Destination:		**Type of Clearance:**	None
Departure Time:		**Type of Airspace:**	

Airport Information

Airport:	North Central State Airport SFZ	**Runway Surface Type:**	
Airport Elevation:	441 ft msl	**Runway Surface Condition:**	
Runway Used:		**IFR Approach:**	None
Runway Length/Width:		**VFR Approach/Landing:**	Traffic pattern

Wreckage and Impact Information

Crew Injuries:	1 Fatal	**Aircraft Damage:**	Destroyed
Passenger Injuries:		**Aircraft Fire:**	On-ground
Ground Injuries:	N/A	**Aircraft Explosion:**	None
Total Injuries:	1 Fatal	**Latitude, Longitude:**	41.920555,-71.491111

Administrative Information

Investigator In Charge (IIC):	Demko, Stephen
Additional Participating Persons:	William Wicks; FAA/FSDO; Boston, MA
Original Publish Date:	October 31, 2006
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=60459