



National Transportation Safety Board Aviation Accident Final Report

Location:	PISGAH, MS	Accident Number:	MIA99LA022
Date & Time:	11/01/1998, 1600 CST	Registration:	N383FF
Aircraft:	FERGUSON RANS S-10 SAKOTA	Aircraft Damage:	Destroyed
Defining Event:		Injuries:	1 Fatal
Flight Conducted Under:	Part 91: General Aviation - Personal		

Analysis

The airplane was observed flying down the centerline of the runway between 150 to 200 feet agl, and commence an abrupt steep bank to the left. Once into the 45 to 50 degree bank, the nose dropped, and the ballistic recovery parachute was seen to partially deploy. The airplane continued in the descending spiral until impact with the ground. No evidence of precrash malfunctions of flight controls were found.

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 during a low altitude maneuver resulting in the aircraft's uncontrollable descent until impact with the terrain.

Findings

Occurrence #1: LOSS OF CONTROL - IN FLIGHT
Phase of Operation: MANEUVERING - TURN TO REVERSE DIRECTION

Findings

1. LOW ALTITUDE FLIGHT/MANEUVER - ATTEMPTED - PILOT IN COMMAND
2. (C) AIRCRAFT CONTROL - NOT MAINTAINED - PILOT IN COMMAND

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

Findings

3. TERRAIN CONDITION - GRASS

Factual Information

On November 1, 1998, about 1600 central standard time, an experimental, Ferguson Rans S-10 Sakota, N383FF, registered to a private individual, operating as a Title 14 CFR Part 91 personal flight, crashed while maneuvering overhead Pisgah Airstrip, Pisgah, Mississippi. Visual meteorological conditions prevailed and no flight plan was filed. The amateur-built airplane was destroyed and the private-rated pilot, the sole occupant, sustained fatal injuries. The flight originated from the private strip about 20 minutes before the accident.

According to a witness, the pilot's father, the flight was performing a flyby maneuver at about 150 to 200 feet agl, on a heading of 180 degrees down the centerline of the runway, and at about the 2/3 point of the runway the flight entered an abrupt 45-to 50-degree left bank. During the left bank, the nose dropped and the ballistic recovery chute (BRS), was observed to deploy. The left bank continued for about 270 degrees, the nose dropped 25 to 30 degrees below the horizon trailing the partially deployed BRS, and the airplane impacted the terrain in a nearly vertical attitude. The engine sounded normal the whole time. The father mentioned that he thought the pilot had no acrobatic experience.

A friend of the pilot who helped build the airplane and who had given dual instruction to the pilot about 5 to 6 weeks previously in the same airplane stated they performed maneuvers and steep turns above 5,000 feet agl.

Examination of the airplane by FAA personnel revealed the airplane impacted the ground in a near vertical attitude, upright, heading about 180 degrees. The ballistic recovery system, (BRS) drogue chute was about 60-feet forward of the wreckage and the main canopy was deployed behind the left wing and both appeared undamaged. Severe fuselage crushing extended rearward to aft of the pilot's seat. The wings, aft fuselage and empennage were minimally damaged.

Flight control continuity from the cockpit control stick about the roll axis was impossible to confirm due to impact damage to rod ends under the cockpit floor, but was confirmed using control linkage outward of the damage to the flight controls. Pitch control continuity was confirmed from stick to elevator. Rudder control path continuity was confirmed from pedals to control surface. Engine control continuity was not possible due to impact damage. The Hobbs meter indicated 64.9 hours. The two composite fuel tanks had been compromised, and the wreckage smelled of fuel. The fuel lines and carburetors contained fuel and the pilot's father said the tanks were nearly full at takeoff. The main fuel valve and the right fuel valve were found in the "on" position and the left valve was in an intermediate position. Seat belts and harnesses were intact and still attached to their respective anchoring points. The pilot was found with seat belt and harness fastened. (For additional information see attached FAA Inspector's Statement).

Postmortem examination of the pilot was performed by Steven T. Hayne, M.D., Deputy Coroner, Rankin County, Pearl, Mississippi, on November 1, 1998, and revealed cause of death to be attributed to multiple traumatic injuries suffered in the crash. No findings that could be considered causal were noted. Toxicological testing was conducted at the Federal Aviation Administration Research Laboratory, Oklahoma City, Oklahoma. The tests were negative for ethanol, carbon monoxide, basic, acidic, and neutral drugs.

Pilot Information

Certificate:	Private	Age:	37, 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:	Yes
Medical Certification:	Class 3 Valid Medical--no waivers/lim.	Last FAA Medical Exam:	05/18/1998
Occupational Pilot:		Last Flight Review or Equivalent:	
Flight Time:	102 hours (Total, all aircraft), 28 hours (Total, this make and model), 67 hours (Pilot In Command, all aircraft), 21 hours (Last 90 days, all aircraft), 7 hours (Last 30 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	FERGUSON	Registration:	N383FF
Model/Series:	RANS S-10 SAKOTA RANS S-10	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	Yes
Airworthiness Certificate:	Experimental	Serial Number:	0594173
Landing Gear Type:	Tailwheel	Seats:	2
Date/Type of Last Inspection:	04/29/1998, 100 Hour	Certified Max Gross Wt.:	960 lbs
Time Since Last Inspection:	63 Hours	Engines:	1 Reciprocating
Airframe Total Time:	65 Hours	Engine Manufacturer:	Rotax
ELT:	Installed, not activated	Engine Model/Series:	582 UL DCDI
Registered Owner:	DAVID M. BOSWELL	Rated Power:	100 hp
Operator:	DAVID M. BOSWELL	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	JAN, 346 ft msl	Distance from Accident Site:	13 Nautical Miles
Observation Time:	2154 CST	Direction from Accident Site:	270°
Lowest Cloud Condition:	Clear / 0 ft agl	Visibility	10 Miles
Lowest Ceiling:	None / 0 ft agl	Visibility (RVR):	0 ft
Wind Speed/Gusts:	12 knots / 17 knots	Turbulence Type Forecast/Actual:	/
Wind Direction:	140°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29 inches Hg	Temperature/Dew Point:	30° C / 18° C
Precipitation and Obscuration:			
Departure Point:		Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	1540 CST	Type of Airspace:	Class G

Airport Information

Airport:	PISGAH, MS.	Runway Surface Type:	Grass/turf
Airport Elevation:		Runway Surface Condition:	Dry
Runway Used:	18	IFR Approach:	None
Runway Length/Width:		VFR Approach/Landing:	Traffic Pattern

Wreckage and Impact Information

Crew Injuries:	1 Fatal	Aircraft Damage:	Destroyed
Passenger Injuries:	N/A	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Fatal	Latitude, Longitude:	

Administrative Information

Investigator In Charge (IIC):	ALAN C STONE	Report Date:	02/16/2001
Additional Participating Persons:	ALLEN M DAVIS; JACKSON, MS		
Publish Date:			
Investigation Docket:	NTSB accident and incident dockets serve as permanent archival information for the NTSB's investigations. Dockets released prior to June 1, 2009 are publicly available from the NTSB's Record Management Division at pubinq@ntsb.gov , or at 800-877-6799. Dockets released after this date are available at http://dms.nts.gov/pubdms/ .		

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