



Aviation Investigation Final Report

Location:	RICE, Washington	Accident Number:	SEA95LA090
Date & Time:	April 29, 1995, 12:00 Local	Registration:	N2520P
Aircraft:	PIPER PA-22-150	Aircraft Damage:	Substantial
Defining Event:		Injuries:	3 Minor
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

THE PILOT REPORTED THAT HE PERFORMED A SHORT FIELD MANEUVER FROM HIS PRIVATE AIRSTRIP, WITH A NORMAL TAKEOFF ROLL AND WITH THE APPLICATION OF FULL FLAPS AT ROTATION, WHICH HE STATED WAS IN ACCORDANCE WITH THE AIRCRAFT MANUAL. HE WAS UNABLE TO CLIMB, AND MANEUVERED TO AVOID TREES AHEAD, AT OR NEAR STALL SPEED, AND THAT THE AIRCRAFT BEGAN STALLING SO HE AIMED THE AIRPLANE AT THE TERRAIN, WHERE IT FLIPPED OVER AFTER IMPACT. THE AIRCRAFT WAS LOADED WITH THREE PERSONS AND OVER 40 GALLONS OF FUEL.

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 THE PROPER CLIMB RATE. A FACTOR WAS TREES IN THE FLIGHT PATH.

Findings

Occurrence #1: LOSS OF CONTROL - IN FLIGHT
Phase of Operation: TAKEOFF - INITIAL CLIMB

Findings

1. (F) OBJECT - TREE(S)
2. (C) PROPER CLIMB RATE - NOT ATTAINED - PILOT IN COMMAND

Occurrence #2: NOSE OVER
Phase of Operation: LANDING - ROLL

Factual Information

On April 29, 1995, approximately 1200 Pacific daylight time, a Piper PA-22-150, N2520P, was substantially damaged when it nosed over following a forced landing after takeoff from an airstrip near Rice, Washington. The pilot and two passengers sustained minor injuries. No flight plan had been filed and visual meteorological conditions prevailed. The flight, which was personal, was to have been operated under 14CFR91 and was local in nature, originating from the pilot's personal airstrip.

The pilot reported that he planned a short field takeoff. The takeoff roll was normal, and he stated that he applied full flaps at the end of the takeoff run, in accordance with the Piper manual for the aircraft. In a telephone interview, he stated that at 40 feet above ground level, he felt he would be unable to clear trees which were located about 1200 feet beyond the upwind end of the 1800 foot turf runway and in his flight path. He stated that he executed a shallow left turn but was unable to achieve the desired climb rate. He reported that the aircraft was flying at or near stall speed and that he then intentionally lowered the nose and executed a power on descent to a forced landing, during which the aircraft nosed over. In a written statement, he said that at 30 feet altitude, severe downdrafts were encountered and he was unable to clear trees ahead as the climb continued. He initiated a shallow left turn while attempting to climb. He stated that wind shear continued to eliminate ascent; after turning 90 degrees it became apparent that his altitude was insufficient to clear trees. He started, at near stall speed, to turn left towards the north and the aircraft began stalling so he "aimed" the airplane at sand below with wings level, slowly directing the airplane into the ground, where it flipped upon impact.

The pilot reported the winds as calm with an estimated temperature of 60 degrees F., and stated that there were no perceived problems with the aircraft's powerplant during the accident. He stated that "wind shear came out of nowhere and caused the plane to be unable to clear trees ahead."

Pilot Information

Certificate:	Private	Age:	32, 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:	No
Medical Certification:	Class 3 Valid Medical--no waivers/lim.	Last FAA Medical Exam:	August 22, 1994
Occupational Pilot:	UNK	Last Flight Review or Equivalent:	
Flight Time:	257 hours (Total, all aircraft), 248 hours (Total, this make and model), 257 hours (Pilot In Command, all aircraft), 18 hours (Last 90 days, all aircraft), 10 hours (Last 30 days, all aircraft), 3 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	PIPER	Registration:	N2520P
Model/Series:	PA-22-150 PA-22-150	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	22-2882
Landing Gear Type:	Tricycle	Seats:	4
Date/Type of Last Inspection:	Annual	Certified Max Gross Wt.:	2000 lbs
Time Since Last Inspection:	20 Hrs	Engines:	1 Reciprocating
Airframe Total Time:		Engine Manufacturer:	LYCOMING
ELT:	Installed, activated, did not aid in locating accident	Engine Model/Series:	O-320
Registered Owner:	SAYRE, JOHN R.	Rated Power:	150 Horsepower
Operator:		Operating Certificate(s) Held:	None
Operator Does Business As:		Operator Designator Code:	

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:		Distance from Accident Site:	
Observation Time:		Direction from Accident Site:	
Lowest Cloud Condition:	Scattered / 4000 ft AGL	Visibility	50 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	/	Turbulence Type Forecast/Actual:	/
Wind Direction:	0°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	16°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:		Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	12:00 Local	Type of Airspace:	Class G

Airport Information

Airport:		Runway Surface Type:	
Airport Elevation:		Runway Surface Condition:	
Runway Used:	0	IFR Approach:	None
Runway Length/Width:		VFR Approach/Landing:	Precautionary landing

Wreckage and Impact Information

Crew Injuries:	1 Minor	Aircraft Damage:	Substantial
Passenger Injuries:	2 Minor	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	3 Minor	Latitude, Longitude:	48.419322,-118.109619(est)

Administrative Information

Investigator In Charge (IIC):	Mccreary, Steven
Additional Participating Persons:	DONALD BIRD; SPOKANE , WA
Original Publish Date:	January 29, 1996
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=42143

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The NTSB does not assign fault or blame for an accident or incident; rather, as specified by NTSB regulation, “accident/incident investigations are fact-finding proceedings with no formal issues and no adverse parties ... and are not conducted for the purpose of determining the rights or liabilities of any person” (Title 49 *Code of Federal Regulations* section 831.4). Assignment of fault or legal liability is not relevant to the NTSB’s statutory mission to improve transportation safety by investigating accidents and incidents and issuing safety recommendations. In addition, statutory language prohibits the admission into evidence or use of any part of an NTSB report related to an accident in a civil action for damages resulting from a matter mentioned in the report (Title 49 *United States Code* section 1154(b)). A factual report that may be admissible under 49 *United States Code* section 1154(b) is available [here](#).