



Aviation Investigation Final Report

Location:	SPEARFISH, South Dakota	Accident Number:	DEN88LA153
Date & Time:	July 11, 1988, 14:50 Local	Registration:	CGCCF
Aircraft:	PIPER PA-22-150	Aircraft Damage:	Substantial
Defining Event:		Injuries:	4 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

THE ACCIDENT INVOLVED A TRI-PACER WITH FOUR PERSONS AND ABOUT 150 POUNDS OF BAGGAGE ON BOARD WHO WERE FROM CANADA AND VACATIONING IN THE U.S. THE PILOT SAID THE ACFT BECAME AIRBORNE AND CLIMBED TO ABOUT 100 FT ABOVE THE RWY, BUT WOULD NOT MAINTAIN ALTITUDE DUE TO THE HIGH DENSITY ALTITUDE. THE PILOT DECIDED TO LAND IN A FIELD, BUT THE FIELD WAS ROUGH AND UNEVEN WHICH RESULTED IN DAMAGE TO THE ACFT. THE DENSITY ALTITUDE AT THE TIME OF THE ACCIDENT WAS CALCULATED TO BE ABOUT 6,000 FEET.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be:

Findings

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

Findings

1. (F) WEATHER CONDITION - HIGH DENSITY ALTITUDE
2. (C) CLIMB - NOT POSSIBLE
3. (C) PREFLIGHT PLANNING/PREPARATION - INADEQUATE - PILOT IN COMMAND

Occurrence #2: ON GROUND/WATER ENCOUNTER WITH TERRAIN/WATER
Phase of Operation: LANDING - ROLL

Findings

4. (F) TERRAIN CONDITION - ROUGH/UNEVEN

Factual Information

Pilot Information

Certificate:	Private	Age:	43, 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:	September 16, 1987
Occupational Pilot:	UNK	Last Flight Review or Equivalent:	
Flight Time:	1300 hours (Total, all aircraft), 1250 hours (Total, this make and model), 1250 hours (Pilot In Command, all aircraft), 50 hours (Last 90 days, all aircraft), 4 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	PIPER	Registration:	CGCCF
Model/Series:	PA-22-150 PA-22-150	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	
Landing Gear Type:	Tricycle	Seats:	4
Date/Type of Last Inspection:	June 15, 1988 100 hour	Certified Max Gross Wt.:	1950 lbs
Time Since Last Inspection:	24 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	3644 Hrs	Engine Manufacturer:	LYCOMING
ELT:	Installed, activated, did not aid in locating accident	Engine Model/Series:	O-320-A1A
Registered Owner:	NED SHILLINGTON	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:	Clear	Visibility	25 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	25 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	110°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29 inches Hg	Temperature/Dew Point:	29°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	(SPF)	Type of Flight Plan Filed:	VFR
Destination:	SCOTTSBLUFF, NE (BFF)	Type of Clearance:	None
Departure Time:	14:50 Local	Type of Airspace:	

Airport Information

Airport:	SPEARFISH SPF	Runway Surface Type:	Grass/turf
Airport Elevation:	0 ft msl	Runway Surface Condition:	Dry
Runway Used:	0	IFR Approach:	None
Runway Length/Width:	0 ft / 0 ft	VFR Approach/Landing:	Full stop

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	3 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	4 None	Latitude, Longitude:	44.479598,-103.839797(est)

Administrative Information

Investigator In Charge (IIC):	Johnson, Robert
Additional Participating Persons:	OLIVIO A GIACOLETTO; RAPID CITY , SD
Original Publish Date:	August 8, 1989
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=17500

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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](#).