



National Transportation Safety Board Aviation Accident Final Report

Location:	ROCK SPRINGS, WY	Accident Number:	DEN85LTM05
Date & Time:	08/01/1985, 1520 MDT	Registration:	N37438
Aircraft:	INTERSTATE S-1A	Aircraft Damage:	Substantial
Defining Event:		Injuries:	2 Serious

Flight Conducted Under: Part 91: General Aviation - Personal

Analysis

WHILE ON A X-COUNTRY FLT, THE ACFT ENCOUNTERED TURBULENCE & DOWNDRAFTS. THE PLT STATED THAT AT 1ST, HE WAS NOT CONCERNED, BUT THEN IT BECAME APPARENT THAT THE ACFT MAY IMPACT THE GROUND. THE ACFT HAD LIMITED POWER (75 HP) & THE TERRAIN ELEVATION IN THAT AREA WAS APRX 7000 FT MSL. SUBSEQUENTLY, THE ACFT DESCENDED INTO THE GROUND & FLIPPED OVER AFTER IMPACT.

Probable Cause and Findings

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

Findings

Occurrence #1: IN FLIGHT ENCOUNTER WITH WEATHER
Phase of Operation: CRUISE - NORMAL

Findings

1. (C) IN-FLIGHT PLANNING/DECISION - IMPROPER - PILOT IN COMMAND
2. (F) TERRAIN CONDITION - HIGH TERRAIN
3. (F) WEATHER CONDITION - HIGH DENSITY ALTITUDE
4. (F) WEATHER CONDITION - TURBULENCE
5. (F) WEATHER CONDITION - DOWNDRAFT
6. DESCENT - NOT CORRECTED

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

Factual Information

Pilot Information

Certificate:	Private	Age:	28, Male
Airplane Rating(s):	Single-engine Land	Seat Occupied:	Front
Other Aircraft Rating(s):	None	Restraint Used:	Seatbelt
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:	04/17/1984
Occupational Pilot:		Last Flight Review or Equivalent:	
Flight Time:	553 hours (Total, all aircraft), 553 hours (Total, this make and model), 553 hours (Pilot In Command, all aircraft), 91 hours (Last 90 days, all aircraft), 8 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	INTERSTATE	Registration:	N37438
Model/Series:	S-1A S-1A	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Normal	Serial Number:	283
Landing Gear Type:	Tailwheel	Seats:	2
Date/Type of Last Inspection:	02/16/1985, Annual	Certified Max Gross Wt.:	1200 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:		Engine Manufacturer:	CONTINENTAL
ELT:	Installed	Engine Model/Series:	A-75
Registered Owner:	THOMAS H. HELTON	Rated Power:	75 hp
Operator:	THOMAS H. HELTON	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	RKS, 6737 ft msl	Distance from Accident Site:	41 Nautical Miles
Observation Time:	1555 MDT	Direction from Accident Site:	70°
Lowest Cloud Condition:	Scattered / 6000 ft agl	Visibility	80 Miles
Lowest Ceiling:	None / 0 ft agl	Visibility (RVR):	0 ft
Wind Speed/Gusts:	20 knots / 24 knots	Turbulence Type Forecast/Actual:	/
Wind Direction:	220°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	29° C
Precipitation and Obscuration:			
Departure Point:	HARFORD, WY	Type of Flight Plan Filed:	None
Destination:	ROCK SPRINGS, WY (RKS)	Type of Clearance:	None
Departure Time:	1310 MDT	Type of Airspace:	Class G

Wreckage and Impact Information

Crew Injuries:	1 Serious	Aircraft Damage:	Substantial
Passenger Injuries:	1 Serious	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 Serious	Latitude, Longitude:	

Administrative Information

Investigator In Charge (IIC):	MICHAEL L STOCKHILL	Report Date:	
Additional Participating Persons:			
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 pubinquiry@ntsb.gov , or at 800-877-6799. Dockets released after this date are available at http://dms.nts.gov/pubdms/ .		

The National Transportation Safety Board (NTSB), established in 1967, is an independent federal agency mandated by Congress through the Independent Safety Board Act of 1974 to investigate transportation accidents, determine the probable causes of the accidents, issue safety recommendations, study transportation safety issues, and evaluate the safety effectiveness of government agencies involved in transportation. The NTSB makes public its actions and decisions through accident reports, safety studies, special investigation reports, safety recommendations, and statistical reviews.

The Independent Safety Board Act, as codified at 49 U.S.C. Section 1154(b), precludes the admission into evidence or use of any part of an NTSB report related to an incident or accident in a civil action for damages resulting from a matter mentioned in the report. A factual report that may be admissible under 49 U.S.C. § 1154(b) is available [here](#).