

 National Transportation Safety Board FACTUAL REPORT AVIATION		NTSB ID: DEN00FA127		Aircraft Registration Number: N4377V	
		Occurrence Date: 07/08/2000		Most Critical Injury: Fatal	
		Occurrence Type: Accident		Investigated By: NTSB	
Location/Time					
Nearest City/Place Aspen		State CO	Zip Code 81611	Local Time 1120	Time Zone MDT
Airport Proximity: Off Airport/Airstrip		Distance From Landing Facility:			
Aircraft Information Summary					
Aircraft Manufacturer Cessna		Model/Series 195/195		Type of Aircraft Airplane	
Revenue Sightseeing Flight: No			Air Medical Transport Flight: No		
Narrative					
Brief narrative statement of facts, conditions and circumstances pertinent to the accident/incident:					
HISTORY OF FLIGHT					
<p>On July 8, 2000, at approximately 1120 mountain daylight time, a Cessna 195 single-engine airplane, N4377V, was destroyed when it collided with terrain while maneuvering 7.4 miles northeast of Aspen, Colorado. The airplane was registered to and operated by the airline transport pilot. The pilot and his three passengers received fatal injuries. Visual meteorological conditions prevailed and a visual flight rules flight plan was filed, but not activated, for the 14 Code of Federal Regulations Part 91 personal flight. The flight departed the Aspen-Pitkin County Airport (ASE) at 1106, and was enroute to the Front Range Airport, Watkins, Colorado, at the time of the accident.</p> <p>According to family members, the pilot flew the airplane from the Front Range Airport to ASE earlier on the morning of the accident. After having breakfast at Aspen, the pilot and his passengers boarded the airplane for the return flight to Watkins.</p> <p>Radar data depicted the airplane departing ASE, flying north down the Roaring Fork River Valley, then turning right to fly southeast up the Woody Creek Valley. The last radar return (39 degrees 14 minutes and 47.3 seconds North and 106 degrees 49 minutes and 52.6 seconds West) depicted the airplane at 8,388 feet msl (approximately 148 feet above the terrain).</p> <p>On July 9, 2000, at 1630, a missing aircraft report was issued by the FAA based on family concerns when the aircraft did not arrive at the Front Range Airport. On July 10th at 0600, the Civil Air Patrol commenced an aerial search. Approximately 0745, the search airplanes found the accident site in the Woody Creek Valley, approximately 5.5 miles east of the location of the last radar return.</p>					
PERSONNEL INFORMATION					
<p>The pilot held an airline transport pilot certificate with an airplane multi-engine land rating and type ratings in the Boeing 737, 757, 767, and 777 aircraft. He also held a commercial pilot certificate with an airplane single-engine land rating, and current flight instructor ratings for single-engine and instrument airplanes. The pilot was issued a first class medical certificate on March 2, 2000, with the limitation "must wear corrective lenses and possess glasses for near and interim vision." According to the March 2000 medical application, the pilot reported that he had accumulated a total of 5,800 flight hours. It is not known how many hours were accumulated in the accident airplane; however, the pilot had been the registered owner of the airplane since July 7, 1998.</p>					
AIRPORT & SURROUNDING AREA INFORMATION					
The ASE airport is located north of the city of Aspen at an elevation of 7,815 feet msl. A review					

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of the Airport Facility Directory entry for ASE revealed that it stated that "unique VFR [visual flight rules] departure procedures exist." The departure procedures stated that "as soon as possible, but no later than crossing airport boundary, turn right to a heading of 360 degrees - a 30-degree right turn from runway heading - hold this heading for at least 2 miles from the airport.

NOTE: It is recognized that aircraft performance will differ with aircraft type and takeoff conditions; therefore, the aircraft operator must have the latitude to determine whether takeoff thrust should be reduced prior to, during, or after flap retraction."

According to local pilots, the normal procedure for departing Aspen and flying to the Denver area is to fly north, down the Roaring Fork River Valley, until the aircraft has enough altitude to reach the Ruedi Reservoir. A review of this route on the sectional aeronautical chart revealed that after takeoff, the pilot would have had to fly the airplane north-northwest approximately 8 to 10 nautical miles toward the town of Basalt prior to turning east toward the Ruedi Reservoir. The Woody Creek Valley branches off the Roaring Fork River Valley approximately 3 miles north of the airport. The Woody Creek Valley is surrounded by rapidly rising terrain on each side, and terminates at the Williams Mountains, which have a ridgeline with elevations between 12,000 and 12,700 feet msl.

An NTSB database search for accidents occurring between 1983 and 1999 in the vicinity of the Aspen airport revealed that there were 8 accidents, 4 of which involved fatalities, in the accident site area that cited the high mountains and aircraft performance exceeded as causal and/or contributing factors.

AIRCRAFT INFORMATION

The 1949 model 4-seat airplane (serial number 7299) was equipped with a 300-horsepower Jacobs R755-A2 radial engine (serial number 31056). The aircraft maintenance records were not located during the investigation; however, an invoice and accompanying periodic aircraft inspection report indicated that the airplane underwent its last annual inspection on June 22, 2000, at a tachometer time of 4,282.0 hours.

A calculation of weight and balance was conducted using estimated fuel and passenger weights. The estimated weight and balance was within the manufacturer's limitations.

METEOROLOGICAL INFORMATION

At 1053, the Aspen weather observation facility reported the wind from 330 degrees at 6 knots, visibility 10 statute miles, scattered clouds at 6,000 feet and broken clouds at 15,000 feet, temperature 23 degrees Celsius, dew point 4 degrees Celsius, and an altimeter setting of 30.01 inches of mercury. The density altitude was calculated by an NTSB investigator to be 10,518 feet.

WRECKAGE AND IMPACT INFORMATION

The accident site was located at 9,860 feet msl at a latitude and longitude of 39 degrees 14 minutes and 24 seconds North and 106 degrees 42 minutes and 42 seconds West. The wreckage distribution path, including an area of broken and cut trees, was oriented along a measured magnetic heading of 257 degrees (almost opposite the direction of flight depicted on the radar track) and measured approximately 130 feet in length. A fire consumed the cockpit/cabin area. The empennage remained partially attached to the fuselage and sustained impact damage. The vertical stabilizer and rudder, and the left horizontal stabilizer and elevator remained attached to the empennage. The right horizontal stabilizer was found separated from the empennage, but came to rest next to the empennage. The outboard portions of the wings were separated from the airplane and displayed leading edge damage. The right wing came to rest under freshly broken trees. The wings' fracture surfaces displayed characteristics consistent with overload failure. Flight control continuity was confirmed from the rudder and left elevator to the cabin area; however, due

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to the wing damage, confirmation of aileron control continuity was not possible.

The engine sustained fire damage and remained attached to the airplane via control cables, and the propeller remained attached to the engine. Three cylinders were found separated from the crankcase and one was partially melted. Both propeller blades displayed chordwise scoring and fresh cuts were found in some of the fallen tree branches. The engine was relocated to a salvage facility where the spark plugs were removed and examined. The spark plugs appeared new and did not display any unusual wear or combustion properties. The engine's accessory section sustained impact and/or fire damage.

MEDICAL AND PATHOLOGICAL INFORMATION

An autopsy was not conducted on the pilot. A toxicological test on the pilot for carbon monoxide, cyanide, ethanol, and drugs was performed at the FAA's Civil Aeromedical Institute, Oklahoma City, Oklahoma. The results were negative.

ADDITIONAL INFORMATION

The wreckage was released to the owner's representative on February 11, 2002.

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Landing Facility/Approach Information					
Airport Name	Airport ID:	Airport Elevation Ft. MSL	Runway Used	Runway Length	Runway Width
Runway Surface Type: Unknown					
Runway Surface Condition: Unknown					
Approach/Arrival Flown: NONE					
VFR Approach/Landing: None					
Aircraft Information					
Aircraft Manufacturer Cessna		Model/Series 195/195		Serial Number 7299	
Airworthiness Certificate(s): Normal					
Landing Gear Type: Tailwheel					
Amateur Built Acft? No	Number of Seats: 4	Certified Max Gross Wt.	3350 LBS	Number of Engines: 1	
Engine Type: Reciprocating	Engine Manufacturer: Jacobs	Model/Series: R755-A2	Rated Power: 300 HP		
- Aircraft Inspection Information					
Type of Last Inspection Annual	Date of Last Inspection 06/2000	Time Since Last Inspection Hours	Airframe Total Time 4282 Hours		
- Emergency Locator Transmitter (ELT) Information					
ELT Installed?/Type Yes /	ELT Operated?	ELT Aided in Locating Accident Site?			
Owner/Operator Information					
Registered Aircraft Owner James W. Rightmire		Street Address 53 West Ranch Trail			
		City Morrison	State CO	Zip Code 80465	
Operator of Aircraft James W. Rightmire		Street Address 53 West Ranch Trail			
		City Morrison	State CO	Zip Code 80465	
Operator Does Business As:			Operator Designator Code:		
- Type of U.S. Certificate(s) Held: None					
Air Carrier Operating Certificate(s):					
Operating Certificate:			Operator Certificate:		
Regulation Flight Conducted Under: Part 91: General Aviation					
Type of Flight Operation Conducted: Personal					

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First Pilot Information

Name On File	City On File	State On File	Date of Birth On File	Age 51
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Sex: M	Seat Occupied: Unknown	Occupational Pilot? Civilian Pilot	Certificate Number: On File
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Certificate(s): Airline Transport; Flight Instructor; Commercial; Flight Engineer

Airplane Rating(s): Multi-engine Land; Single-engine Land

Rotorcraft/Glider/LTA: None

Instrument Rating(s): Airplane

Instructor Rating(s): Airplane Single-engine; Instrument Airplane

Current Biennial Flight Review?

Medical Cert.: Class 1	Medical Cert. Status: Valid Medical--w/ waivers/lim.	Date of Last Medical Exam: 03/2000
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- Flight Time Matrix	All A/C	This Make and Model	Airplane Single Engine	Airplane Multi-Engine	Night	Instrument		Rotorcraft	Glider	Lighter Than Air
						Actual	Simulated			
Total Time	5800									
Pilot In Command(PIC)										
Instructor										
Instruction Received										
Last 90 Days										
Last 30 Days										
Last 24 Hours										

Seatbelt Used?	Shoulder Harness Used?	Toxicology Performed? Yes	Second Pilot? No
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Flight Plan/Itinerary

Type of Flight Plan Filed: VFR				
Departure Point	State	Airport Identifier	Departure Time	Time Zone
Same as Accident/Incident Location		ASE	1106	MDT
Destination	State	Airport Identifier		
Watkins	CO	FTG		

Type of Clearance: VFR

Type of Airspace: Class G

Weather Information

Source of Wx Information:

Unknown

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Weather Information					
WOF ID	Observation Time	Time Zone	WOF Elevation	WOF Distance From Accident Site	Direction From Accident Site
ASE	1053	MDT	7815 Ft. MSL	7 NM	250 Deg. Mag.
Sky/Lowest Cloud Condition: Scattered			6000 Ft. AGL	Condition of Light: Day	
Lowest Ceiling: Broken		15000 Ft. AGL		Visibility: 10 SM	Altimeter: 30.01 "Hg
Temperature: 23 °C	Dew Point: 4 °C	Weather Conditions at Accident Site: Visual Conditions			
Wind Direction: 330		Wind Speed: 6		Wind Gusts:	
Visibility (RVR): 0 Ft.		Visibility (RVV) 0 SM			
Precip and/or Obscuration:					

Accident Information		
Aircraft Damage: Destroyed	Aircraft Fire: Ground	Aircraft Explosion: None

- Injury Summary Matrix	Fatal	Serious	Minor	None	TOTAL
First Pilot	1				1
Second Pilot					
Student Pilot					
Flight Instructor					
Check Pilot					
Flight Engineer					
Cabin Attendants					
Other Crew					
Passengers	3				3
- TOTAL ABOARD -	4				4
Other Ground	0	0	0		0
- GRAND TOTAL -	4	0	0		4

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Administrative Information

Investigator-In-Charge (IIC)
Norman F. Wiemeyer

Additional Persons Participating in This Accident/Incident Investigation:

Randy Holder
FAA FSDO
Denver, CO

Henry J Soderlund
Cessna Aircraft Company
Wichita, KS