



National Transportation Safety Board Aviation Accident Final Report

Location:	WEST JORDAN, UT	Accident Number:	FTW98FA384
Date & Time:	09/02/1998, 2030 MDT	Registration:	N8232B
Aircraft:	Cessna 172	Aircraft Damage:	Destroyed
Defining Event:		Injuries:	2 Fatal
Flight Conducted Under:	Part 91: General Aviation - Personal		

Analysis

A witness riding on his dirt motorcycle parallel to the powerlines saw two bright flashes and heard a loud bang from behind. The airplane crashed 50 to 75 feet in front of him. Other witnesses reported observing a flash, hearing a loud noise, and observing the airplane descending vertically towards the ground. The airplane had struck the top static line on a transmission tower, severing the right wing and empennage. The transmission tower is about 100 feet agl. Airport traffic pattern altitude is 800 feet agl. The accident occurred in visual meteorological conditions, during the hours of darkness, about 2 miles west of the airport. The transmission lines run parallel to the runway.

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 proper airport traffic pattern altitude. Factors were night lighting conditions and the unseen static line.

Findings

Occurrence #1: IN FLIGHT COLLISION WITH OBJECT
Phase of Operation: APPROACH - VFR PATTERN - DOWNWIND

Findings

1. (F) OBJECT - WIRE,STATIC
2. (C) PROPER ALTITUDE - NOT MAINTAINED - PILOT IN COMMAND
3. (F) LIGHT CONDITION - NIGHT

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

Factual Information

HISTORY OF FLIGHT

On September 2, 1998, approximately 2030 mountain daylight time, a Cessna 172, N8232B, registered to and operated by the pilot, was destroyed when it collided with transmission lines and impacted terrain while on approach to, and 2 miles west of, Salt Lake City Municipal 2 Airport, West Jordan, Utah. The private pilot and one passenger were fatally injured. Visual meteorological conditions prevailed, and no flight plan was filed for the personal flight conducted under Title 14 CFR Part 91. Flight origination and departure time are unknown.

There were several witnesses to the accident. Mr. Jeffrey Hoover was riding his dirt motorcycle parallel to the powerlines west of the Oquirrh Shadows subdivision. "[He] saw two bright flashes [and] heard a loud bang from behind...and then [an airplane] crashed right in front of [him] (approximately 50-75 feet). The plane came down on its top and it did not skid." Other witnesses reported observing a flash, hearing a loud noise, and observing the airplane descending vertically towards the ground. According to the Salt Lake County Sheriff's Office, the first of several 9-1-1 calls was received at 2033.

It could not be determined where the flight originated or at what time, but Mr. Brian O'Leary of the Salt Lake City Airport Authority identified the airplane as being based at Salt Lake City Municipal 2 Airport.

The accident occurred in visual meteorological conditions during the hours of darkness at a location of 112 degrees, 01.707 minutes west longitude, and 40 degrees, 37.310 minutes north latitude. The physical address was 7300 South 6000 West.

CREW INFORMATION

The pilot and his passenger were identified as Hooshang Shabestari and his wife, Mina, both Iranians and both employed as sales executives with Wardley Better Homes and Gardens in Midvale, Utah. Mr. Shabestari held Private Pilot Certificate No. 107345344, dated May 5, 1990, with an airplane single engine land rating. He was not instrument rated. He also held a third class airman medical certificate, dated April 9, 1998, with the restriction, "Must have available corrective lenses for near vision."

Mr. Shabestari's logbook was found in the airplane, and contained entries from January 20, 1990, to July 4, 1998. As of the last date, Mr. Shabestari was logged 335.8 hours total flight time, of which 75.4 hours were in night conditions. The majority of his flight experience was accrued in N8232B. His most recent biennial flight review was accomplished April 27, 1998, in N8232B.

AIRCRAFT INFORMATION

N9232B (serial number 36032) was manufactured by the Cessna Aircraft Company in 1957. It was equipped with a Continental O-300-A engine (serial number 12783-8-7-A), rated at 145 horsepower, and a 2-blade, fixed pitch, all-metal McCauley propeller (model number 1A1704, serial number DM7651).

The airplane maintenance records were located by family members and made available for inspection. The airframe and engine last received annual and 100-hour inspections, respectively, on August 15, 1997, at a tachometer time of 2,463 hours (according to an FAA

inspector, the annual inspection expired on August 31, 1998, two days before the accident). At that time, the airframe had accumulated 4,694 total hours, and the engine had operated for 2,071 hours since the last major overhaul. At the accident site, the tachometer read 2,489.4 hours. On August 1, 1997, the altimeter, encoder, and transponder were tested and certified to 20,000 feet in accordance with FAR 91.217 and 91.413.

METEOROLOGICAL INFORMATION

The following weather observations, pertinent to the accident, were recorded at Salt Lake City Municipal 2 Airport (U42), located 2 miles east, and Salt Lake City International Airport (SLC), located 11 miles north-northeast, of the accident site:

U42 (1955 mdt): Wind 300 degrees at 7 knots; visibility greater than 10 statute miles; sky clear; temperature 26 degrees C.; dew point 14 degrees C.; altimeter setting 30.00 inches of mercury.

SLC (2056 mdt): Wind 280 degrees at 6 knots; visibility greater than 10 statute miles; sky clear; temperature 25 degrees C.; dew point 18 degrees C.; altimeter setting 29.98 inches of mercury.

According to the U.S. Naval Observatory, sunset occurred at 1959 and twilight ended at 2027. The moon was described as "waxing gibbous with 83 percent of the visible disk illuminated."

WRECKAGE AND IMPACT INFORMATION

According to the Utah Power Company, the airplane struck the top static line on a transmission tower, located approximately four miles west of Salt Lake City Municipal 2 Airport. At the accident site, the transmission towers and powerlines run generally north and south (170-350 degrees). The magnetic heading from where the airplane struck the static line to the point of ground impact, some 720 feet away, was 115 degrees. The elevation was 4,910 feet msl.

The empennage and right wing were severed from the airplane. They were located 270 and 280 feet from the transmission tower, respectively. The propeller spinner, located at the base of the transmission tower, bore circumferential scratch marks. The propeller blades bore chatter marks and gouges on the leading edges, and chordwise scratches on the cambered surfaces.

The main body of wreckage lay inverted and was aligned on a magnetic heading of 295 degrees. All airplane components were located and identified. Flight control continuity was established. All severed control cables bore evidence consistent with overload failures.

MEDICAL AND PATHOLOGICAL INFORMATION

Autopsy and toxicological protocols (#R199801101) were performed by the Utah State Medical Examiner's Office, Todd C. Grey, M.D., prosector. A toxicological screen was also performed by FAA's Civil Aeromedical Institute (CAMI) in Oklahoma City, Oklahoma. According to CAMI's report (#9800250001), no carbon monoxide, cyanide or drugs were detected in the blood, and ethanol was detected in the vitreous humor. Similar results were noted in the Utah State Medical Examiner's toxicological report.

TESTS AND RESEARCH

According to the "Airport/Facility Directory-Southwest U.S.," effective August 13, 1998, to October 8, 1988, page 187, the traffic pattern altitude at Salt Lake City Municipal 2 Airport is 5,403 feet msl (mean sea level), or 800 feet agl (above ground level). FAA's Advisory Circular

(AC) 90-66A, dated August 26, 1993, also recommends that "airplanes observe a 1000-foot above ground level traffic pattern altitude." The Aeronautical Information Manual states that pilots should "enter pattern in level flight, abeam the midpoint of the runway at pattern altitude. (1,000' agl is recommended pattern altitude unless established otherwise...)" See attachments to this report.

ADDITIONAL INFORMATION

According to a Utah Power Company spokesman, the airplane severed a 3/8-inch "extra high strength steel braided" static line 40 feet south of a transmission tower. The top of the transmission tower is approximately 100 feet above the ground. Four spans of the static line dropped to the ground, shorting out the 345,000 volt powerlines.

In addition to the Federal Aviation Administration, the Cessna Aircraft Company was designated a party to this investigation.

The wreckage was released to Spanish Fork Flying Service on September 3, 1998.

Pilot Information

Certificate:	Private	Age:	59, Male
Airplane Rating(s):	Single-engine Land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	Seatbelt
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	Yes
Medical Certification:	Class 3 Valid Medical--w/ waivers/lim.	Last FAA Medical Exam:	04/09/1998
Occupational Pilot:		Last Flight Review or Equivalent:	
Flight Time:	336 hours (Total, all aircraft), 330 hours (Total, this make and model), 303 hours (Pilot In Command, all aircraft), 6 hours (Last 90 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	Registration:	N8232B
Model/Series:	172 172	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Normal	Serial Number:	36032
Landing Gear Type:	Tricycle	Seats:	4
Date/Type of Last Inspection:	08/15/1997, Annual	Certified Max Gross Wt.:	2200 lbs
Time Since Last Inspection:	264 Hours	Engines:	1 Reciprocating
Airframe Total Time:	4720 Hours	Engine Manufacturer:	Continental
ELT:	Installed, activated, did not aid in locating accident	Engine Model/Series:	O-300-A
Registered Owner:	HOOSHANG SHABESTARI	Rated Power:	145 hp
Operator:	HOOSHANG SHABESTARI	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Night/Dark
Observation Facility, Elevation:	U42, 4603 ft msl	Distance from Accident Site:	0 Nautical Miles
Observation Time:	1955 MDT	Direction from Accident Site:	0°
Lowest Cloud Condition:	Clear / 0 ft agl	Visibility	10 Miles
Lowest Ceiling:	None / 0 ft agl	Visibility (RVR):	0 ft
Wind Speed/Gusts:	7 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	300°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	26°C / 14°C
Precipitation and Obscuration:			
Departure Point:	WEST JORDAN, UT (U42)	Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	0000	Type of Airspace:	Class E

Airport Information

Airport:	SALT LAKE CITY MUNI 2 (U42)	Runway Surface Type:	Asphalt
Airport Elevation:	4603 ft	Runway Surface Condition:	Dry
Runway Used:	34	IFR Approach:	None
Runway Length/Width:	5860 ft / 100 ft	VFR Approach/Landing:	Traffic Pattern

Wreckage and Impact Information

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

Administrative Information

Investigator In Charge (IIC):	ARNOLD W SCOTT	Report Date:	02/16/2001
Additional Participating Persons:	DENNIS E MOORE; SALT LAKE CITY, UT FLOYD J LANDON; SALT LAKE CITY, UT GREG W SCHMIDT; WICHITA, KS		
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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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](#).