



National Transportation Safety Board Aviation Accident Final Report

Location:	SANTA FE, NM	Accident Number:	FTW96LA367
Date & Time:	09/01/1996, 1808 MDT	Registration:	N103HJ
Aircraft:	Jackson SONERAI I	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 Minor

Flight Conducted Under: Part 91: General Aviation - Personal

Analysis

The airplane was on a flight from Questa, New Mexico, to Moriarty, New Mexico. After departing Questa, an intermediate stop was made at Taos Municipal Airport, Taos, New Mexico, for fuel; however, there was no fuel available. Approximately 24 minutes after departing Taos, while in cruise flight at 9,500 feet MSL, the engine lost power. A forced landing was made in an open field, and during the landing roll, the airplane 'flipped over the nose.' A witness reported hearing the airplane's engine 'stop,' and observed the airplane in a 'glide.' The witness also heard the engine 'start and stop' several times. An examination of the fuel system revealed that the expansion fuel cap had separated during ground impact, and the only evidence of fuel was a slight odor. The pilot reported that there was no fuel visible on the clear plastic tube, which served as a fuel quantity gauge at the time the engine lost power.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: the pilot's improper planning/decision, which resulted in fuel exhaustion due to an inadequate supply of fuel. The lack of suitable terrain for the forced landing was a related factor.

Findings

Occurrence #1: LOSS OF ENGINE POWER(TOTAL) - NONMECHANICAL
Phase of Operation: CRUISE

Findings

1. (C) PLANNING/DECISION - IMPROPER - PILOT IN COMMAND
 2. REFUELING - NOT PERFORMED - PILOT IN COMMAND
 3. (C) FLUID,FUEL - EXHAUSTION
 4. (C) FUEL SUPPLY - INADEQUATE - PILOT IN COMMAND
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Occurrence #2: FORCED LANDING
Phase of Operation: EMERGENCY DESCENT/LANDING

Occurrence #3: NOSE OVER
Phase of Operation: EMERGENCY LANDING

Findings

5. (F) TERRAIN CONDITION - NONE SUITABLE
6. TERRAIN CONDITION - ROUGH/UNEVEN

Factual Information

On September 1, 1996, at 1808 mountain daylight time, a Jackson Sonera I, N103HJ, registered to and operated by a private owner as a Title 14 CFR Part 91 personal flight, was substantially damaged during a forced landing, following a loss of power near Santa Fe, New Mexico. Visual meteorological conditions prevailed and a flight plan was not filed. The commercial pilot, the sole occupant, sustained minor injuries. The flight originated from Questa, New Mexico, about 1723, and was en route to Moriarty, New Mexico.

The pilot reported the following information to the FAA inspector. The first leg of the flight from Moriarty to Questa took approximately one hour. After arriving at Questa he was unable to start the aircraft for the second leg of the flight. Both engine magnetos were replaced. After departing Questa, an intermediate stop was made at Taos Municipal Airport, Taos, New Mexico, for fuel. However, there was no fuel available. Approximately 24 minutes after departing Taos, while in cruise flight at 9,500 feet MSL, the engine lost power. A forced landing was initiated to an open field, and during the landing roll, the aircraft "flipped over the nose."

A witness reported in a written statement observing and hearing the following information. The airplane appeared to be attempting to land at the Santa Fe Airport. At approximately 1,000 feet AGL the airplane's engine lost total power. While the airplane was in a "glide," he heard the engine try to restart several times; however, each time it only "sputtered and quit."

An examination of the airplane by the FAA inspector revealed damage to the rudder, the landing gear, both wing tips, and the fuselage. An examination of the fuel system revealed that the expansion fuel cap had separated during ground impact, and the only evidence of fuel was a slight odor. The pilot reported to the FAA inspector that there was no fuel visible on the clear plastic tube which serves as a fuel quantity gauge, at the time the engine lost power.

Pilot Information

Certificate:	Commercial; Private	Age:	28, Male
Airplane Rating(s):	Multi-engine Land; Single-engine Land	Seat Occupied:	Front
Other Aircraft Rating(s):	Helicopter	Restraint Used:	Seatbelt, Shoulder harness
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 1 Valid Medical--no waivers/lim.	Last FAA Medical Exam:	08/19/1996
Occupational Pilot:	Last Flight Review or Equivalent:		
Flight Time:	650 hours (Total, all aircraft), 28 hours (Total, this make and model), 600 hours (Pilot In Command, all aircraft), 32 hours (Last 90 days, all aircraft), 24 hours (Last 30 days, all aircraft), 4 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Jackson	Registration:	N103HJ
Model/Series:	SONERAI I SONERAI I	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	Yes
Airworthiness Certificate:	Experimental	Serial Number:	003
Landing Gear Type:	Tailwheel	Seats:	1
Date/Type of Last Inspection:	07/26/1996, Annual	Certified Max Gross Wt.:	850 lbs
Time Since Last Inspection:	4 Hours	Engines:	1 Reciprocating
Airframe Total Time:	126 Hours	Engine Manufacturer:	Continental
ELT:	Not installed	Engine Model/Series:	C-90-12F
Registered Owner:	MATTHEW L. THOMAS	Rated Power:	90 hp
Operator:	MATTHEW L. THOMAS	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	SAF, 6345 ft msl	Distance from Accident Site:	6 Nautical Miles
Observation Time:	1750 MDT	Direction from Accident Site:	255°
Lowest Cloud Condition:	Scattered / 10000 ft agl	Visibility	40 Miles
Lowest Ceiling:	None / 0 ft agl	Visibility (RVR):	0 ft
Wind Speed/Gusts:	/	Turbulence Type Forecast/Actual:	/
Wind Direction:		Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29 inches Hg	Temperature/Dew Point:	28° C / 7° C
Precipitation and Obscuration:			
Departure Point:	TAOS, NM (SKX)	Type of Flight Plan Filed:	None
Destination:	MORIARTY, NM (OEO)	Type of Clearance:	None
Departure Time:	1741 MDT	Type of Airspace:	Class G

Wreckage and Impact Information

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

Administrative Information

Investigator In Charge (IIC): DOUGLAS D WIGINGTON **Report Date:** 04/29/1997

Additional Participating Persons: JEFFREY D HUSS; ALBUQUERQUE, NM

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](#).