



National Transportation Safety Board Aviation Accident Final Report

Location:	BRULE, NE	Accident Number:	CHI95LA080
Date & Time:	02/03/1995, 0927 MST	Registration:	N3633Q
Aircraft:	SCHWEIZER G-164B	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 None

Flight Conducted Under: Part 91: General Aviation - Positioning

Analysis

THE PILOT REPORTED THAT HE EXPERIENCED ENGINE POWER FLUCTUATIONS. WHEN HE SCANNED THE ENGINE GAUGES, HE OBSERVED NO FUEL PRESSURE INDICATION. HE SET UP FOR A FORCED LANDING, AND THE ENGINE LOST POWER. HE MANEUVERED OVER A SET OF POWERLINES AND THE AIRPLANE NOSED OVER DURING THE LANDING ATTEMPT, SUSTAINING SUBSTANTIAL DAMAGE. INSPECTION OF THE AIRPLANE REVEALED THAT THERE WAS SUFFICIENT FUEL ON BOARD, THE GRAVITY FEED FUEL FLOW TO THE FIREWALL WAS VERIFIED, AND THE VENT SYSTEM WAS CHECKED. EXAMINATION OF THE ENGINE AND LOW PRESSURE FUEL PUMP REVEALED NO EVIDENCE OF PREIMPACT MECHANICAL MALFUNCTION.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be:
Loss of engine power due to undetermined reasons.

Findings

Occurrence #1: LOSS OF ENGINE POWER
Phase of Operation: CRUISE

Findings

1. (C) REASON FOR OCCURRENCE UNDETERMINED

Occurrence #2: FORCED LANDING
Phase of Operation: DESCENT - EMERGENCY

Occurrence #3: NOSE OVER
Phase of Operation: LANDING

Factual Information

On February 3, 1995, at 0927 mountain standard time, a Schweizer G-164B airplane, N3633Q, operated by Frank R. Martin, sustained substantial damage when it nosed over during a forced landing near Brule, Nebraska. The commercial pilot reported no injuries. The positioning flight, conducted under 14 CFR Part 91, departed Hershey, Nebraska, about 0900, with a planned destination of Kimball, Nebraska. Visual meteorological conditions prevailed and no flight plan was filed.

The pilot reported that the winds at the time of the accident were from the northwest at 25 gusting to 30 knots. He experienced engine power fluctuations. When he scanned the engine gauges, he observed no fuel pressure indication. He reported the gas generator was fluctuating and the turbine temperature was "OK." He set up for a forced landing, and the engine lost power. He maneuvered over a set of powerlines and the airplane nosed over during the landing attempt, sustaining substantial damage.

The wreckage was examined by a Federal Aviation Administration (FAA) Airworthiness Inspector. He reported that the wreckage was moved prior to his arrival. Sufficient fuel was on board, gravity feed fuel flow to the firewall was verified, and the vent system was checked. He reported no evidence of preimpact airframe malfunction.

The engine was transported to Dallas, Texas, and examined. The FAA Aviation Safety Inspector, who observed the examination, reported significant impact damage, minor rotational damage, and no evidence of preimpact mechanical malfunction. The low pressure fuel pump exhibited "major" impact damage and could not be tested. Partial disassembly revealed no internal damage.

Pilot Information

Certificate:	Commercial	Age:	43, Male
Airplane Rating(s):	Single-engine Land	Seat Occupied:	Center
Other Aircraft Rating(s):	None	Restraint Used:	Seatbelt, Shoulder harness
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 2 Valid Medical--no waivers/lim.	Last FAA Medical Exam:	12/15/1994
Occupational Pilot:		Last Flight Review or Equivalent:	
Flight Time:	11500 hours (Total, all aircraft), 10500 hours (Total, this make and model), 200 hours (Last 90 days, all aircraft), 100 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	SCHWEIZER	Registration:	N3633Q
Model/Series:	G-164B G-164B	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Restricted	Serial Number:	777B
Landing Gear Type:	Tailwheel	Seats:	1
Date/Type of Last Inspection:	12/29/1994, Annual	Certified Max Gross Wt.:	5200 lbs
Time Since Last Inspection:	1 Hours	Engines:	1 Reciprocating
Airframe Total Time:	2881 Hours	Engine Manufacturer:	P&W
ELT:	Not installed	Engine Model/Series:	PT6A-20B
Registered Owner:	FRANK R. MARTIN	Rated Power:	550 hp
Operator:	FRANK R. MARTIN	Operating Certificate(s) Held:	
Operator Does Business As:		Operator Designator Code:	MRQG

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	BFF, 3965 ft msl	Distance from Accident Site:	85 Nautical Miles
Observation Time:	0850 MST	Direction from Accident Site:	290°
Lowest Cloud Condition:	Scattered / 8500 ft agl	Visibility	25 Miles
Lowest Ceiling:	None / 0 ft agl	Visibility (RVR):	0 ft
Wind Speed/Gusts:	18 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	300°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	2°C / -2°C
Precipitation and Obscuration:			
Departure Point:	HERSHEY, NE	Type of Flight Plan Filed:	None
Destination:	KIMBALL, NE (IBM)	Type of Clearance:	VFR
Departure Time:	0900 MST	Type of Airspace:	Class E

Wreckage and Impact Information

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

Administrative Information

Investigator In Charge (IIC): WESLEY M ROBBINS **Report Date:** 09/24/1995

Additional Participating Persons: RICHARD E JOHNSON; LINCOLN, NE

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](#).