



Aviation Investigation Final Report

Location:	KETTLE RIVER, Minnesota	Accident Number:	CHI94LA163
Date & Time:	May 15, 1994, 20:00 Local	Registration:	N9761K
Aircraft:	STINSON 108-2	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

THE PILOT REPORTED THE ENGINE LOST RPM, SPUTTERED AND STOPPED ABOUT 10-12 SECONDS AFTER TAKEOFF. THE AIRPLANE STRUCK SOME TREES DURING THE FORCED LANDING. FAA INSPECTORS WHO EXAMINED THE AIRPLANE COULD FIND NO ENGINE ANOMALY WHICH WOULD CAUSE A LOSS OF POWER. THE TEMPERATURE WAS 51 DEGREES, AND THE DEW POINT WAS 43 DEGREES. THESE TEMPERATURE/DEW POINT CONDITIONS ARE FAVORABLE FOR SERIOUS CARBURETOR ICING. THE PILOT STATED HE DID A CARBURETOR HEAT CHECK ON RUN-UP. THE FAA INSPECTOR WHO EXAMINED THE WRECKAGE REPORTED THE CARBURETOR HEAT WAS IN THE 'OFF' POSITION.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: THE PILOT'S IMPROPER USE OF CARBURETOR HEAT AND THE LACK OF SUITABLE TERRAIN FOR A FORCED LANDING. THE CARBURETOR ICING WEATHER CONDITION WAS A FACTOR.

Findings

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

Findings

1. (F) WEATHER CONDITION - CARBURETOR ICING CONDITIONS
2. FUEL SYSTEM,CARBURETOR - ICE

3. (C) CARBURETOR HEAT - IMPROPER USE OF - PILOT IN COMMAND

Occurrence #2: FORCED LANDING

Phase of Operation: DESCENT - EMERGENCY

Occurrence #3: IN FLIGHT COLLISION WITH OBJECT

Phase of Operation: DESCENT - EMERGENCY

Findings

4. OBJECT - TREE(S)

5. (C) TERRAIN CONDITION - NONE SUITABLE

Factual Information

On May 15, 1994, about 2000 central daylight time, a Stinson 108- 2, N9761K, experienced a loss of engine power during takeoff from a private airstrip near Kettle River, Minnesota. The airplane sustained substantial damage when it struck some trees in the forced landing. The private pilot was not injured. No flight plan was filed for the personal flight, and visual meteorological conditions prevailed at the time.

The pilot stated the engine rpm dropped about 10-12 seconds after lift off, then the engine started sputtering and stopped. Federal Aviation Administration Inspectors who examined the wreckage reported the carburetor and intake manifold were damaged by ground impact. They were not able to determine if the fuel contained any contaminants. The Inspectors stated they were not able to find any engine malfunctions. The temperature was 51 degrees F., and the dew point was 43 degrees F. The pilot stated he checked the operation of the carburetor heat during his pre- takeoff engine run-up. The FAA inspector who examined the wreckage reported the carburetor heat was in the OFF position.

Pilot Information

Certificate:	Private	Age:	30, Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 3 Expired	Last FAA Medical Exam:	November 13, 1991
Occupational Pilot:	UNK	Last Flight Review or Equivalent:	
Flight Time:	79 hours (Total, all aircraft), 15 hours (Total, this make and model), 22 hours (Pilot In Command, all aircraft), 1 hours (Last 90 days, all aircraft), 1 hours (Last 30 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	STINSON	Registration:	N9761K
Model/Series:	108-2 108-2	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal; Utility	Serial Number:	108-2761
Landing Gear Type:	Tailwheel	Seats:	4
Date/Type of Last Inspection:	May 9, 1994 Annual	Certified Max Gross Wt.:	2400 lbs
Time Since Last Inspection:	1 Hrs	Engines:	1 Reciprocating
Airframe Total Time:		Engine Manufacturer:	FRANKLIN
ELT:		Engine Model/Series:	165-B3
Registered Owner:		Rated Power:	165 Horsepower
Operator:	STEVEN J. KORHONEN	Operating Certificate(s) Held:	None
Operator Does Business As:		Operator Designator Code:	

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	COQ ,1278 ft msl	Distance from Accident Site:	16 Nautical Miles
Observation Time:	20:15 Local	Direction from Accident Site:	45°
Lowest Cloud Condition:	Unknown / 3400 ft AGL	Visibility	10 miles
Lowest Ceiling:	Overcast / 3400 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	7 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	0°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	11°C / 6°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	(NONE)	Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	20:00 Local	Type of Airspace:	Class G

Airport Information

Airport:		Runway Surface Type:	
Airport Elevation:		Runway Surface Condition:	
Runway Used:	0	IFR Approach:	None
Runway Length/Width:		VFR Approach/Landing:	Forced landing

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 None	Latitude, Longitude:	46.509769,-92.950523(est)

Administrative Information

Investigator In Charge (IIC):	Doub, Mark
Additional Participating Persons:	MICHAEL CAPANELLO; MINNEAPOLIS , MN
Original Publish Date:	February 14, 1995
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=9532

The National Transportation Safety Board (NTSB) is an independent federal agency charged by Congress with investigating every civil aviation accident in the United States and significant events in other modes of transportation—railroad, transit, highway, marine, pipeline, and commercial space. We determine the probable causes of the accidents and events we investigate, and issue safety recommendations aimed at preventing future occurrences. In addition, we conduct transportation safety research studies and offer information and other assistance to family members and survivors for each accident or event we investigate. We also serve as the appellate authority for enforcement actions involving aviation and mariner certificates issued by the Federal Aviation Administration (FAA) and US Coast Guard, and we adjudicate appeals of civil penalty actions taken by the FAA.

The NTSB does not assign fault or blame for an accident or incident; rather, as specified by NTSB regulation, “accident/incident investigations are fact-finding proceedings with no formal issues and no adverse parties ... and are not conducted for the purpose of determining the rights or liabilities of any person” (Title 49 *Code of Federal Regulations* section 831.4). Assignment of fault or legal liability is not relevant to the NTSB’s statutory mission to improve transportation safety by investigating accidents and incidents and issuing safety recommendations. In addition, statutory language prohibits the admission into evidence or use of any part of an NTSB report related to an accident in a civil action for damages resulting from a matter mentioned in the report (Title 49 *United States Code* section 1154(b)). A factual report that may be admissible under 49 *United States Code* section 1154(b) is available [here](#).