



Aviation Investigation Final Report

Location:	SOUTHBRIDGE, Massachusetts	Accident Number:	NYC96LA028
Date & Time:	November 26, 1995, 12:10 Local	Registration:	N344C
Aircraft:	STINSON 108-2	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 Serious, 2 Minor
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

During cruise flight, the pilot observed a loss of engine power. He performed emergency procedures; however, the engine continued to lose power. The pilot made a forced landing during which the airplane collided with trees. Postaccident examination of the engine revealed the engine crankshaft was separated into three pieces. An inspector stated, 'The failed crankshaft has evidence of a fatigue fracture...'

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: fatigue failure of the engine crankshaft.

Findings

Occurrence #1: LOSS OF ENGINE POWER(TOTAL) - MECH FAILURE/MALF
Phase of Operation: CRUISE - NORMAL

Findings

1. (C) ENGINE ASSEMBLY, CRANKSHAFT - FATIGUE

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

Occurrence #3: IN FLIGHT COLLISION WITH OBJECT
Phase of Operation: EMERGENCY LANDING

Findings

2. OBJECT - TREE(S)

Factual Information

On November 26, 1995, at 1210 eastern standard time, a Stinson 108-2, N344C, sustained substantial damage during a forced landing in Southbridge, Massachusetts. The private pilot received serious injuries, and the two passengers received minor injuries. Visual meteorological conditions prevailed, and no flight plan was filed for the personal flight, which departed New Bedford, Massachusetts destined for Warehouse Point, Connecticut. The flight was being conducted under 14 CFR Part 91.

In the NTSB form 6120.1/2, the pilot stated:

...Took off and headed back to [Warehouse Point, Connecticut]. Everything went fine until we got to Southbridge. We were about 4 miles past Southbridge, I heard a slight noise and noticed a drop of 50 RPM. I pulled [carburetor] heat and went to full rich on fuel. The engine seemed to smooth out, so I started to close the [carburetor] heat. When [carburetor] heat about 1/2 closed, I noticed RPM dropping to zero, and I could [see] propeller tips going by. I tried once to restart, but no response.

The pilot performed a forced landing to the backyard of a private residence, during which the airplane collided with trees.

Postaccident examination of the engine by the Federal Aviation Administration (FAA) Inspector revealed that the engine crankshaft was separated in three pieces. The FAA Inspector's report stated:

...The failure of the crankshaft is suspected to be the cause of the engine failure. There was very minor damage to the propeller....The failed crankshaft has evidence of a fatigue fracture at the number 6 web. The FAA IIC believes the crankshaft failure was not a result of impact, but in fact failed in flight from a propagating fatigue crack.

The report further stated:

...Two people...in the woods witnessed the accident....Both witnesses cannot recall hearing engine operating noise....

Pilot Information

Certificate:	Private	Age:	51, 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 Valid Medical-w/ waivers/lim	Last FAA Medical Exam:	March 24, 1994
Occupational Pilot:	UNK	Last Flight Review or Equivalent:	
Flight Time:	592 hours (Total, all aircraft), 200 hours (Total, this make and model), 478 hours (Pilot In Command, all aircraft), 21 hours (Last 90 days, all aircraft), 9 hours (Last 30 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	STINSON	Registration:	N344C
Model/Series:	108-2 108-2	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	3344
Landing Gear Type:	Tailwheel	Seats:	4
Date/Type of Last Inspection:	Annual	Certified Max Gross Wt.:	2150 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:		Engine Manufacturer:	FRANKLIN
ELT:		Engine Model/Series:	6A4-165-B3
Registered Owner:	LOUIS F. FURNAS	Rated Power:	165 Horsepower
Operator:		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:		Distance from Accident Site:	
Observation Time:		Direction from Accident Site:	
Lowest Cloud Condition:	Unknown	Visibility	
Lowest Ceiling:	Unknown	Visibility (RVR):	
Wind Speed/Gusts:	/	Turbulence Type Forecast/Actual:	/
Wind Direction:	0°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:		Temperature/Dew Point:	
Precipitation and Obscuration:			
Departure Point:	NEW BEDFORD , MA (EWB)	Type of Flight Plan Filed:	None
Destination:	NORTHAMPTON , MA (7B2)	Type of Clearance:	
Departure Time:	11:20 Local	Type of Airspace:	Class G

Airport Information

Airport:	SOUTHBRIDGE MUNICIPAL 3B0	Runway Surface Type:	
Airport Elevation:	697 ft msl	Runway Surface Condition:	
Runway Used:	0	IFR Approach:	
Runway Length/Width:		VFR Approach/Landing:	Forced landing

Wreckage and Impact Information

Crew Injuries:	1 Serious	Aircraft Damage:	Substantial
Passenger Injuries:	2 Minor	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Serious, 2 Minor	Latitude, Longitude:	

Administrative Information

Investigator In Charge (IIC):	Leonard, Charles
Additional Participating Persons:	ROBERT A HENNIGAN; WINDSOR LOCKS , CT
Original Publish Date:	April 1, 1996
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=39124

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