



Aviation Investigation Final Report

Location:	SMITHFIELD, North Carolina	Accident Number:	MIA97LA144
Date & Time:	April 19, 1997, 13:20 Local	Registration:	N9063K
Aircraft:	Stinson 108-1	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

While in cruise flight, the pilot noticed that the engine 'became a little rough,' oil pressure was bleeding off, and the tachometer was fluctuating, followed by a complete loss of engine power. The pilot elected to land in a field, touched down, rolled about 240 feet, before 'soft dirt' caused the airplane to nose over. Examination of the engine revealed it would not rotate, but oil and fuel were present. The engine was disassembled, and examination revealed that the crankshaft had cracked completely through at the number one connecting rod journal. The fracture appeared to be clean with no exterior evidence of an existing crack or deterioration of any kind. The fracture did have within it, ridges and valleys and what appeared to be air bubbles near the ridges and valleys.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: a fracture in the crankshaft, which resulted in a total loss of engine power, a forced landing, and a nose over.

Findings

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

Findings

1. (C) ENGINE ASSEMBLY, CRANKSHAFT - FRACTURED

Occurrence #2: FORCED LANDING

Phase of Operation: EMERGENCY DESCENT/LANDING

Occurrence #3: NOSE OVER

Phase of Operation: EMERGENCY LANDING

Findings

2. TERRAIN CONDITION - SOFT

Factual Information

On April 19, 1997, about 1320 eastern daylight time, a Stinson 108-1, N9063K, registered to a private owner, operating as a Title 14 CFR Part 91, local personal flight, nosed over during a forced landing, near Smithfield, North Carolina. Visual meteorological conditions prevailed and no flight plan was filed. The airplane was substantially damaged. The commercial pilot was not injured.

While in cruise flight the pilot noticed that the engine "became a little rough," oil pressure was bleeding off and the tachometer was fluctuating, followed by a complete loss of engine power. The pilot elected to land in a field, touched down, rolled about 240 feet, before the "soft dirt" caused the airplane to nose over.

Examination of the engine revealed it would not rotate, oil and fuel were present. The engine was disassembled on May 5, 1997, under the supervision of the FAA, and according the FAA Inspector's statement; "...it was noted that the crankshaft had cracked completely through at the number one connecting rod journal. This crack appeared to be clean with no exterior evidence of an existing crack or deterioration of any kind. The crack did have within it ridges and valleys and what appeared to be air bubbles near those ridges and valleys...."

Pilot Information

Certificate:	Commercial; Private	Age:	36, 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 2 Unknown	Last FAA Medical Exam:	March 22, 1996
Occupational Pilot:	UNK	Last Flight Review or Equivalent:	
Flight Time:	516 hours (Total, all aircraft), 92 hours (Total, this make and model), 466 hours (Pilot In Command, all aircraft), 8 hours (Last 90 days, all aircraft), 8 hours (Last 30 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Stinson	Registration:	N9063K
Model/Series:	108-1 108-1	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	108-2063
Landing Gear Type:	Tailwheel	Seats:	4
Date/Type of Last Inspection:	February 8, 1997 Annual	Certified Max Gross Wt.:	2150 lbs
Time Since Last Inspection:	42 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	1205 Hrs	Engine Manufacturer:	Franklin
ELT:	Not installed	Engine Model/Series:	6A4-150-B3
Registered Owner:	JOHN F. TALTON	Rated Power:	150 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:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	8 knots / 12 knots	Turbulence Type Forecast/Actual:	/
Wind Direction:	220°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29 inches Hg	Temperature/Dew Point:	18°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:		Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	13:00 Local	Type of Airspace:	

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:	35.499378,-78.340026(est)

Administrative Information

Investigator In Charge (IIC):	Yurman, Alan
Additional Participating Persons:	DOUG BADGETT; WINSTYON-SALEM , NC
Original Publish Date:	August 29, 1997
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=38267

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