

Aviation Investigation Final Report

Location:	NEWBERRY, Michig	gan	Accident Number:	CHI94LA068
Date & Time:	January 22, 1994, ⁻	13:48 Local	Registration:	N39505
Aircraft:	PIPER	PA-32RT-300T	Aircraft Damage:	Destroyed
Defining Event:			Injuries:	1 None
Flight Conducted Under:	Part 91: General av	viation - Personal		

Analysis

SHORTLY AFTER TAKEOFF, WHILE IN A CLIMB TO ASSIGNED ALTITUDE, THE PROPELLER BEGAN TO OVERSPEED. THE PILOT ELECTED TO RETURN TO THE AIRPORT HE HAD JUST DEPARTED. SMOKE BEGAN TO FILL THE COCKPIT, AND THE ENGINE STOPPED. THE PILOT MADE A FORCED LANDING IN A WOODED AREA. THE AIRPLANE WAS CONSUMED BY FIRE AFTER THE LANDING. THE INVESTIGATION FOUND THAT THERE WAS AN INTENSE FIRE IN THE ENGINE ACCESSORY SECTION NEAR THE TURBOCHARGER. THE OIL AND OIL FILTER HAD BEEN CHANGED THREE DAYS BEFORE THE ACCIDENT. THE ONLY FLIGHT THE AIRPLANE HAD MADE SINCE THE OIL CHANGE WAS A 2 HOUR FLIGHT THE MORNING OF THE ACCIDENT. THE OIL FILTER IS LOCATED ON THE ACCESSORY CASE NEAR THE TURBOCHARGER.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: an engine fire which started as the result of an oil leak around the engine oil filter.

Findings

Occurrence #1: FIRE Phase of Operation: CLIMB

Findings 1. (C) LUBRICATING SYSTEM, OIL FILTER/SCREEN - LEAK

Occurrence #2: LOSS OF ENGINE POWER(TOTAL) - MECH FAILURE/MALF Phase of Operation: DESCENT - EMERGENCY

Occurrence #3: FORCED LANDING Phase of Operation: DESCENT - EMERGENCY

Occurrence #4: IN FLIGHT COLLISION WITH OBJECT Phase of Operation: DESCENT - EMERGENCY

Findings 2. OBJECT - TREE(S)

Occurrence #5: IN FLIGHT COLLISION WITH TERRAIN/WATER Phase of Operation: DESCENT - UNCONTROLLED

Factual Information

On January 22, 1994, at 1348 eastern standard time, a PA32RT-300T, N39505, was destroyed when the pilot made a forced landing in a wooded area near Newberry, Michigan. The private, instrument-rated, pilot who was the sole occupant of the airplane, was not injured. The pilot reported a complete loss of power during the initial climb after takeoff. An instrument flight plan was filed, and visual meteorological conditions prevailed at the time. The personal flight originated at the Luce County Airport, Newberry, and the intended destination was the Riverview Airport, Jenison, Michigan.

The pilot reported the propeller began to overspeed during the climb from Newberry. He reduced power and turned back toward the airport. He stated he began to smell smoke, then the cabin began to fill with smoke. Shortly thereafter the engine lost all power. The pilot made a forced landing in a wooded area. The airplane was destroyed by a postimpact fire.

The engine was examined at the Lycoming Factory, Williamsport, Pennsylvania. There was evidence of an intense fire in the area of the right side of the accessory housing, below the turbocharger. No preexisting discrepancy or malfunction was discovered during the engine examination.

Engine log book entries indicate the engine oil and filter were changed on January 19, 1994. The flight from Jenison to Newberry the morning of the accident was the first flight since the oil change. The oil filter is located on the accessory housing in the vicinity of the turbocharger.

Fliot information			
Certificate:	Private	Age:	43,Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 3 Valid Medicalw/ waivers/lim	Last FAA Medical Exam:	August 25, 1992
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:	750 hours (Total, all aircraft), 270 hours (Total, this make and model), 660 hours (Pilot In Command, all aircraft), 41 hours (Last 90 days, all aircraft), 14 hours (Last 30 days, all aircraft), 2 hours (Last 24 hours, all aircraft)		

Pilot Information

Aircraft and Owner/Operator Information

Aircraft Make:	PIPER	Registration:	N39505
Model/Series:	PA-32RT-300T PA-32RT-30	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	32R7887097
Landing Gear Type:	Retractable - Tricycle	Seats:	6
Date/Type of Last Inspection:	November 1, 1993 Annual	Certified Max Gross Wt.:	3600 lbs
Time Since Last Inspection:	60 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	1360 Hrs	Engine Manufacturer:	LYCOMING
ELT:	Installed, activated, aided in locating accident	Engine Model/Series:	TIO-540-S1AD
Registered Owner:	JAMES D. HOLST	Rated Power:	300 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:	YAM ,630 ft msl	Distance from Accident Site:	45 Nautical Miles
Observation Time:	14:00 Local	Direction from Accident Site:	80°
Lowest Cloud Condition:	Scattered / 2000 ft AGL	Visibility	15 miles
Lowest Ceiling:	Broken / 14000 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	3 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	250°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	-26°C / -18°C
Precipitation and Obscuration:	Moderate - Showers - Snow		
Departure Point:	(ERY)	Type of Flight Plan Filed:	IFR
Destination:	JENISON , MI (08C)	Type of Clearance:	IFR
Departure Time:	13:45 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:	Destroyed
Passenger Injuries:		Aircraft Fire:	In-flight
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 None	Latitude, Longitude:	46.349597,-85.499099(est)

Administrative Information

Investigator In Charge (IIC):	Doub, Mark	
Additional Participating Persons:	PAUL HANSEN; GRAND RAPIDS, MI	
Original Publish Date:	February 14, 1995	
Last Revision Date:		
Investigation Class:	<u>Class</u>	
Note:		
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=9455	

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 <u>here</u>.