



National Transportation Safety Board Aviation Accident Final Report

Location:	Gallup, NM	Accident Number:	DEN05FA045
Date & Time:	12/29/2004, 1018 MST	Registration:	N573B
Aircraft:	Piper PA-31P	Aircraft Damage:	Destroyed
Defining Event:		Injuries:	1 Fatal
Flight Conducted Under:	Part 91: General Aviation - Personal		

Analysis

While maneuvering during a precautionary landing with the right engine shutdown, the airplane entered a Vmc roll and an uncontrolled descent, and impacted wires, trees, and terrain. According to air traffic control communications, while en route the pilot experienced a rough running right engine and performed a precautionary shutdown of the engine. The pilot elected to divert to an airport and received vectors from air traffic control for a visual approach. Witnesses who were located at the airport reported the airplane was on a normal downwind for the runway. When the airplane reached the approach end of the runway, the pilot turned to the right which was away from the airport. A witness who was monitoring the UNICOM frequency informed the pilot he was turning away from the airport and the pilot responded, "Busy." The airplane continued the right turn subsequently entered a Vmc roll and a rapid descent toward the terrain. The airplane wreckage was located on hilly, rocky terrain approximately 3 miles south of the airport. The airplane was fragmented and destroyed during the impact sequence and post-impact fire. Examination of the airframe and propellers revealed no anomalies that would have precluded normal operations. Examination of the left engine revealed the forward gearbox was destroyed and mechanical continuity of the rotating components and internal mechanisms was established. Examination of the right engine revealed the forward gearbox was destroyed and mechanical continuity of the rotating components and internal mechanisms was established. The reason for the reported rough running engine was not determined. The lifters installed in both engines during the overhauls were not approved lifters for the accident engines.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: the pilot's failure to maintain minimum controllable airspeed which resulted in the loss of control, and impact with wires, a tree and terrain.

Findings

Occurrence #1: LOSS OF ENGINE POWER

Phase of Operation: CRUISE

Findings

1. 1 ENGINE
2. (F) ENGINE SHUTDOWN - INTENTIONAL - PILOT IN COMMAND
3. (F) REASON FOR OCCURRENCE UNDETERMINED
4. ENGINE ASSEMBLY, VALVE LIFTER - UNAPPROVED PART

Occurrence #2: LOSS OF CONTROL - IN FLIGHT

Phase of Operation: MANEUVERING

Findings

5. PRECAUTIONARY LANDING - INITIATED - PILOT IN COMMAND
6. (C) AIRCRAFT CONTROL - NOT MAINTAINED - PILOT IN COMMAND
7. (F) AIRSPEED(VMC) - NOT MAINTAINED - PILOT IN COMMAND

Occurrence #3: IN FLIGHT COLLISION WITH OBJECT

Phase of Operation: DESCENT - UNCONTROLLED

Findings

8. OBJECT - WIRE, TRANSMISSION
9. OBJECT - TREE(S)
10. TERRAIN CONDITION - GROUND

Factual Information

HISTORY OF FLIGHT

On December 29, 2004, at 1018 mountain standard time, a Piper PA-31P (Navajo) twin-engine airplane, N573B, was destroyed when it impacted transmission lines, trees and terrain following a loss of control while maneuvering near Gallup, New Mexico. The commercial pilot, who was the sole occupant, sustained fatal injuries. The airplane was registered to and operated by the pilot. Visual meteorological conditions prevailed, and an instrument flight rules (IFR) flight plan was filed for the Title 14 Code of Federal Regulations Part 91 personal flight. The flight departed Glendale Airport, Glendale, Arizona, at 0917, and was destined for Newton, Kansas.

According to the Glendale Federal Aviation Administration (FAA) control tower, the pilot received an IFR clearance to Newton, Kansas, at 0850. At 0915:16, prior to takeoff, the pilot stated, "...I got an engine that is running pretty hot, I'm gonna pull off here." At 0915:29, the pilot informed the controller he was going to taxi the airplane to the ramp to troubleshoot the problem. At 0915:52, the pilot stated, "I'm gonna make a quick phone call and I'll let you know what I want to do." At 0916:28, the pilot stated, "...once you get a little air movement past it looks like it's gonna be okay, I just do not want to hold too long. At 0917:16, the local controller cleared the pilot for takeoff.

According to the Albuquerque Air Route Traffic Control Center (ARTCC), the pilot reported he was on frequency, at 0928. At 1002:48, the pilot stated, "...I think I'm gonna do a precautionary shutdown of the right engine [I'd] like vectors to the [uh next] landing strip..." At 1703, the controller stated, "...understand [you're] shuttin down the uh right engine." The pilot confirmed the right engine shutdown, and requested vectors to the nearest airport. The controller informed the pilot of two landing locations, GUP and Black Rock Airport, near Zuni, New Mexico, which were approximately the same distance. The pilot chose GUP due to weather considerations. At 1007:38, the controller asked, "The heading is uh, I'm showin zero four zero at fifty two miles, able to make that?" The pilot acknowledged, "no problem..."

At 1013:34, the controller asked the pilot if emergency equipment was needed at GUP, and the pilot stated, "negative." At 1016:10, the controller informed the pilot the winds at GUP were at 170 degrees at 16 knots. At 1017, the pilot was cleared for the visual approach to GUP and shortly thereafter, the pilot was cleared to the GUP UNICOM frequency. No further communications were recorded between the pilot and the ARTCC controller.

Witnesses, who were located at the Gallup Municipal Airport, reported that Albuquerque ARTCC notified Gallup Flying Service, a local fixed based operator, that a Piper Navajo (PA-31P) was inbound with the right engine shut down due to a "rough running, shaking" engine. Shortly thereafter, the witnesses observed the airplane on a "normal downwind for runway 24." One witness communicated with the pilot on the UNICOM frequency, and the pilot indicated "he had things in control." When the airplane was near the approach end of runway 24, the witness observed the airplane turn right and heading away from the airport. The witness then contacted the pilot on the UNICOM frequency and informed him he was turning away from the airport. The pilot responded, "Busy." The witnesses observed the airplane continue the right turn, stall, and enter a rapid descent toward the terrain. One witness stated the airplane "went into a VMC roll to the right...the VMC roll developed fully into a vertical dive and remained so until the airplane impacted the ground." The witness who was monitoring the UNICOM

frequency lost sight of the airplane behind a ridge line and then saw smoke.

A witness who lived near the accident site reported he heard something above his house and observed an airplane coming towards him. He heard engines "going on and off again." The airplane was flying straight, then turned sideways and went down. The witness could not tell if either engine was operating.

According to the pilot's friends and relatives, the accident flight engine shutdown was the third or fourth engine shutdown the pilot performed since he purchased the airplane in August 2004.

PERSONNEL INFORMATION

The pilot held a commercial pilot certificate, issued on April 22, 1989, with single-engine land, multi-engine land, and instrument airplane ratings. The pilot was issued a second-class medical certificate on September 14, 2004, with a limitation for corrective lenses.

According to the pilot's personal logbook, as of the last entry dated December 23, 2004, the pilot had accumulated 935 total flight hours, 849 hours as pilot-in-command, and 470 hours in multi-engine airplanes. The pilot had logged 45 hours in the accident airplane. In the preceding 90 days, the pilot had logged 27 total flight hours, of which 10 hours were in the accident airplane, and in the preceding 30 days, he logged 10 total flight hours, of which 4 hours were in the accident airplane.

On June 9, 2004, the pilot completed an instrument proficiency check, pilot proficiency award program (WINGS Phase II), and a high altitude airplane endorsement at Flight Safety International, Lakeland, Florida. On July 7-16, 2004, the pilot completed 16 hours of instruction in a Piper Navajo simulator at Flight Safety International.

AIRCRAFT INFORMATION

The accident airplane, N573B, a Piper PA-31P, serial number 31P-7530008, was manufactured by Piper Aircraft Corporation in 1975. The Piper PA-31P is a pressurized twin-engine, low wing, all metal airplane of semimonocoque design. The airplane was powered by two six-cylinder, air cooled, geared propeller reduction, horizontally opposed, turbocharged, fuel injected, internal combustion engines.

The airplane was issued a FAA Standard Airworthiness Certificate on December 23, 1974, and was certificated for normal category operations. The airplane was registered to the pilot on August 28, 2004. A review of the airplane's maintenance records revealed the airframe underwent a recent annual inspection on July 30, 2004, at a total airframe time of 6,773.1 hours, and a Hobbs meter time of 1,270.7 hours. On December 23, 2004, at an hour meter time of 1,319.7, the airframe's air conditioning system was serviced, and an emergency locator transmitter (ELT) check was performed.

The left engine, a Lycoming TIGO-541-E1A (serial number RL-753-62) engine rated at 425 horsepower, underwent a major overhaul and was installed on the airframe on May 3, 2004, at a total time of 2,182 hours, and a Hobbs meter time of 1,198.6 hours. The engine's most recent 100-hour inspection was completed on July 30, 2004, at a total time of 2,256 hours and 74.1 hours since major overhaul.

A mechanic and friend of the pilot reported that during a flight on December 13, 2004, the pilot experienced a violent vibration with the left engine while on final approach to the

Glendale Airport. At the time of the event, the left engine had accumulated approximately 120 hours since major overhaul. Examination of the engine revealed the number 4 cylinder exhaust valve cap and keeper were broken, and the exhaust valve was loose. According to the maintenance logbook entry dated December 18, 2004, the mechanic "removed the #4 cylinder assembly on the #1 engine due to lifter failure." Per instructions from the facility that completed the engine overhaul, the mechanic installed a serviceable cylinder assembly and installed new lifters (12) on all six cylinders. The mechanic and pilot test ran the engine and no anomalies were noted.

The left propeller was a three-bladed Hartzell HC-C3YN-2LUF (hub serial number DG663B) single acting, hydraulically operated constant speed model with feathering capability. The propeller was overhauled and installed on the airplane on August 4, 2003. On December 28, 2004, the propeller hub was replaced during compliance with Hartzell Service Bulletin HC-SB-61-271.

The right engine, a Lycoming TIGO-541-E1A (serial number L-275-62) engine rated at 425 horsepower, underwent a major overhaul and was installed on the airframe on February 4, 2004, at an unknown total time, and a Hobbs meter time of 1,179.4 hours. The engine's most recent 100-hour inspection was completed on July 30, 2004, at 91.3 hours since major overhaul. According to the right engine maintenance records, on August 6, 2004, the propeller governor was replaced with an overhauled unit. The engine was "ground run and flight checked" with no anomalies.

According to the pilot's personal logbook, on August 7, 2004, the pilot noted in the logbook remarks, "lost [right] turbo and cabin pressure at 15,000 feet, return for repair." On August 12, 2004, at 114.9 hours since major overhaul, the differential pressure controller and waste gate were removed and replaced, and a new exhaust gas temperature probe and new exhaust gaskets were installed. The engine operational and leak checks were "satisfactory." No subsequent maintenance entries were noted in the right engine logbook.

The right propeller was a three-bladed Hartzell HC-C3YN-2LUF (hub serial number DG242) single acting, hydraulically operated constant speed model with feathering capability. The propeller was overhauled and installed on the airplane on August 11, 2003.

METEOROLOGICAL INFORMATION

At 0953, the routine aviation weather report (METAR) for GUP, located approximately 3 miles north of the accident site, was the wind from 170 degrees at 16 knots, gusting to 22 knots, 10 statute miles visibility, sky broken at 6,000, 7,500 and 9,000 feet, temperature 10 degrees Celsius, dew point 4 degrees Celsius, and altimeter 29.96 inches.

The witnesses reported visual flight rules (VFR) conditions at the airport at the time of the accident.

WRECKAGE AND IMPACT INFORMATION

The National Transportation Safety Board's on-scene investigation began on December 30, 2004, at 0800.

The accident site was located in hilly and rocky terrain approximately 3 miles south-southeast of GUP. Examination of the accident site revealed the airplane impacted the terrain on a measured magnetic heading of approximately 300 degrees at an elevation of approximately 6,500 feet msl. The Global Positioning System (GPS) coordinates recorded at the site were

latitude North 35 degrees 28.498 minutes and longitude West 108 degrees 44.883 minutes.

The right wing impacted transmission wires prior to impacting a tree and the terrain. A portion of the leading edge, which included the stall vane, was located between the transmission utility pole and the tree with the wire imbedded in the leading edge structure. The initial ground scar was located approximately 5 feet forward of the tree impact area. Fragmented windshield wipers were located in the tree debris and initial ground scar. Within the initial ground scar were fragmented engine gear box structure, gear box gears, and fragmented portions of navigational antennas.

Airplane debris fanned outward from the initial ground scar to the main wreckage. The debris field contained the left wing aileron, left wing flap, right wing structure, left and right propeller assemblies, left and right engine cowlings, fragmented engine gearbox structure, engine accessories, broken sections of the windshield. The main wreckage, which consisted of the fuselage, the left wing, the left engine, and a portion of the right wing, came to rest inverted approximately 500 feet from the initial ground scar. The main wreckage was destroyed by a post-impact fire. The right engine separated from the right wing and came to rest approximately 100 feet from the main wreckage, approximately 600 feet from the initial ground scar.

The left wing structure remained attached to the fuselage; however, the flight control surfaces were separated. The engine nacelle was fragmented and the left engine remained partially attached via control cables and wires. The left main landing gear was found extended, locked and attached to the left wing structure. The left wing fuel tanks were compromised and destroyed. The fuel pump and fuel filter were destroyed by fire. The fuel selector and firewall shutoff valves were destroyed by fire and their positions prior to impact were not determined. The flap jackscrew displayed no threads which was consistent with a retracted position. The aileron bell crank and two cables were secure. The control cable was continuous to the cockpit area and the cable end was broomstrawed and displayed thermal damage. The balance cable was continuous to the turnbuckle area where the cable was separated and displayed thermal damage.

A majority of the right wing structure remained attached to the fuselage. The engine nacelle was fragmented and the right engine was separated. The right main landing gear was found extended and displayed thermal damage. The right wing fuel tanks were destroyed. The fuel pump and fuel filter were destroyed by fire. The fuel selector and firewall shutoff valves were destroyed by fire and their positions prior to impact were not determined. The flap control surface was partially separated and the flap jackscrew displayed no threads which was consistent with a retracted position. The aileron was separated and located beneath the forward fuselage. The aileron bellcrank was in position and both control cables were secure. The aileron control cable was intact to the cockpit area where it was still attached to a portion of the control wheel chain. The balance cable was intact to the center turnbuckle area. The aileron trim drum inner shaft displayed three threads forward extension consistent with a neutral position.

The empennage was found inverted and partially attached to the fuselage. The vertical stabilizer, rudder, both horizontal stabilizers, and elevators displayed fire damage. The rudder and elevator control surfaces remained attached to their respective attach points. The rudder and elevator cables remained attached to the control surfaces. The cables were intact to the cockpit area; however, the cables were cut by rescue personnel during extrication. The rudder

trim drum inner shaft displayed four threads forward extension consistent with a 3 - 5 degrees tab right position. The elevator trim drum inner shaft displayed a forward extension of approximately 0.65 inches consistent with a neutral elevator position.

The cabin and cockpit were destroyed by fire. The cockpit engine control positions were not determined. The flight and engine instruments were destroyed. The fuel control panel was destroyed by fire and control positions were not determined. Rescue personnel reported the pilot seat and shoulder restraints were secure. The nose landing gear was broken and displayed thermal damage. The nose gear hydraulic actuator was extended consistent with the nose landing gear in an extended position.

The left engine remained partial attached to the airframe and came to rest inverted. The engine accessories were separated and located in the debris field. The forward gear box was destroyed and the components were scattered throughout the debris field. The engine was partially damaged by fire, and no evidence of catastrophic mechanical malfunction was noted. The fuel servo was located near the engine and was damaged by fire. The turbocharger compressor and impeller displayed rotational scoring signatures. No evidence of foreign object debris (FOD) was noted in the turbocharger turbine or compressor assemblies.

The three-bladed left propeller was separated from the engine and located in the debris field. One of the blades was separated near the propeller hub and was not located. Two blades remained attached to the propeller hub and displayed leading edge gouges, chord wise scratches across the cambered surface, and S-bending on the trailing edges. The propeller governor was separated from the mounting structure and was not located.

The right engine was separated from the airframe, and no evidence of catastrophic mechanical malfunction was noted. The engine accessories were separated and located in the debris field. The forward gear box was destroyed and the components were scattered throughout the debris field. The fuel servo was destroyed and located in the debris field. The turbocharger compressor and impeller displayed static witness marks. No evidence of FOD was noted in the turbocharger turbine or compressor assemblies.

The three-bladed right propeller assembly was separated from the engine and located in the debris field. The three blades remained attached to the propeller hub. One blade displayed gouges near the hub and was bent forward approximately 45 degrees. Several gouges were noted on the trailing edge. One blade was bent aft approximately 45 degrees and the outer 1 inch of the blade tip was bent aft. One blade displayed S-bending and was twisted in the direction of low pitch.

MEDICAL AND PATHOLOGICAL INFORMATION

On December 30, 2004, an autopsy was performed by the University of New Mexico, Office of the Medical Investigator, Albuquerque, New Mexico, and specimens were retained for toxicological analysis by the FAA Civil Aeromedical Institute (CAMI), Oklahoma City, Oklahoma. According to the Medical Investigator, the cause of death for the pilot was multiple blunt force injuries.

Toxicological tests were negative for alcohol, and not performed for carbon monoxide and cyanide. An unspecified amount of hydroxychloroquine was present in the liver and kidney. According to CAMI, this medication is used in the treatment of Lupus erythematosus and Rheumatoid Arthritis. It is also used as an antimalarial agent.

TEST AND RESEARCH

On February 8, 2005, at the facilities of Air Transport, Phoenix, Arizona, the engines and propellers were examined by the NTSB IIC, a representative of the airframe manufacturer, a representative of the engine manufacturer, and a representative of the propeller manufacturer. Examination of the left engine revealed the left and right magnetos were destroyed by fire. The spark plugs were removed and the electrodes displayed varying coloration. The ignition harness was destroyed by fire. The oil suction screen was clear of contaminants, and the oil filter was crushed. The engine was disassembled. The cylinder combustion chambers and barrels were undamaged and no evidence of FOD or detonation was noted. The exhaust and intake valves were intact and undamaged. The piston and piston rings were intact. The crankshaft and connecting rods were undamaged. The crankshaft counterweights were secure and intact. The camshaft was intact and undamaged. Mechanical continuity of the rotating components and internal mechanisms was established. No evidence of lubrication deprivation or contamination was noted. The forward gearbox and components were destroyed and mechanical continuity was not established.

Examination of the right engine revealed the left and right magnetos were fragmented and destroyed. The spark plugs were removed and according to the Champion Spark Plugs Check-A-Plug chart AVO27, the electrodes displayed coloration consistent with normal operation. The ignition harness was damaged and not functionally tested. The oil suction screen was clear of contaminants, and the oil filter was crushed. The engine was disassembled. The cylinder combustion chambers and barrels were undamaged and no evidence of FOD or detonation was noted. The exhaust and intake valves were intact and undamaged. The piston and piston rings were intact. The crankshaft and connecting rods were undamaged. The crankshaft counterweights were secure and intact. The camshaft was intact and "washboard" wear was noted on the camshaft lobes. The camshaft and lifters were retained for further examination by the NTSB and engine manufacturer. Mechanical continuity of the rotating components and internal mechanisms was established. No evidence of lubrication deprivation or contamination was noted. The forward gearbox and components were destroyed and mechanical continuity was not established. The reason for the reported "rough running/shaking" engine was not determined.

According to the propeller manufacturer, both propellers sustained "harsh frontal impact damage." Numerous blade angle witness marks were noted on the preload plates of both propellers. Witness marks were noted on both pistons consistent with cylinder contact. The marks occurred at a low blade angle on both pistons. The fractured blade stub that remained in the propeller hub displayed a fracture surface consistent with overload failure. The blade pitch change knob was bent and the lip on the circumference of the blade shank was partially fractured. There were no discrepancies noted that would have precluded normal operation of both propellers.

On March 17, 2005, at the facilities of Lycoming Engines, Williamsport, Pennsylvania, the right engine camshaft and lifters were examined by a NTSB investigator and representatives of the engine manufacturer. Examination of the engine components revealed the camshaft was a reground camshaft and the camshaft lobes displayed an uneven coloration pattern consistent with partial contact between the camshaft lobe face and the lifter body. The lifter bodies were manufactured by C&B Aviation, Sturgis, South Dakota, and are not approved for Lycoming Engine installations. The lifters were not disassembled and each lifter (12) was functionally

tested. The lifters were individually placed into a fixture which allowed actuation of the hydraulic lifter. No anomalies were noted with the lifter assemblies.

During a telephone interview with the NTSB IIC, the C&B Aviation representative stated that he did not have a supplemental type certificate (STC) for the lifter bodies to be installed in the Lycoming series engines. C&B Aviation did have an STC for lifter installation on certain Teledyne Continental engines. A review of the FAA STC database confirmed the representative's information.

ADDITIONAL INFORMATION

The airplane wreckage was released and returned to the owner's insurance company on June 8, 2005.

Pilot Information

Certificate:	Commercial	Age:	50, Male
Airplane Rating(s):	Multi-engine Land; Single-engine Land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	Seatbelt, Shoulder harness
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	Yes
Medical Certification:	Class 2 With Waivers/Limitations	Last FAA Medical Exam:	09/01/2004
Occupational Pilot:		Last Flight Review or Equivalent:	06/01/2004
Flight Time:	936 hours (Total, all aircraft), 62 hours (Total, this make and model), 850 hours (Pilot In Command, all aircraft), 27 hours (Last 90 days, all aircraft), 10 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Piper	Registration:	N573B
Model/Series:	PA-31P	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Normal	Serial Number:	31P-7530008
Landing Gear Type:	Retractable - Tricycle	Seats:	
Date/Type of Last Inspection:	07/01/2004, Annual	Certified Max Gross Wt.:	7800 lbs
Time Since Last Inspection:	49 Hours	Engines:	2 Reciprocating
Airframe Total Time:	6773.1 Hours as of last inspection	Engine Manufacturer:	Lycoming
ELT:	Installed, not activated	Engine Model/Series:	TIGO-541-E1A
Registered Owner:	Ronald L. Patton	Rated Power:	425 hp
Operator:	Ronald L. Patton	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	GUP, 6472 ft msl	Distance from Accident Site:	2 Nautical Miles
Observation Time:	0953 MST	Direction from Accident Site:	360°
Lowest Cloud Condition:	Few / 6000 ft agl	Visibility	10 Miles
Lowest Ceiling:	Broken / 7500 ft agl	Visibility (RVR):	
Wind Speed/Gusts:	15 knots / 21 knots	Turbulence Type Forecast/Actual:	/
Wind Direction:	160°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29.99 inches Hg	Temperature/Dew Point:	9°C / 3°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Glendale, AZ (GEU)	Type of Flight Plan Filed:	IFR
Destination:	Newton, KS (EWK)	Type of Clearance:	IFR
Departure Time:	0917 MST	Type of Airspace:	

Airport Information

Airport:	GALLUP MUNICIPAL (GUP)	Runway Surface Type:	
Airport Elevation:	6472 ft	Runway Surface Condition:	
Runway Used:	N/A	IFR Approach:	Visual
Runway Length/Width:		VFR Approach/Landing:	Precautionary Landing

Wreckage and Impact Information

Crew Injuries:	1 Fatal	Aircraft Damage:	Destroyed
Passenger Injuries:	N/A	Aircraft Fire:	On-Ground
Ground Injuries:	N/A	Aircraft Explosion:	On-Ground
Total Injuries:	1 Fatal	Latitude, Longitude:	35.475000, -108.747222

Administrative Information

Investigator In Charge (IIC):	Aaron M Sauer	Report Date:	10/27/2005
Additional Participating Persons:	Bryan Hanson; Federal Aviation Administration; Albuquerque, NM James Malecha; Federal Aviation Administration; Albuquerque, NM Michael McClure; The New Piper Aircraft, Inc.; Vero Beach, FL Mark Platt; Textron Lycoming; Williamsport, PA Tom McCreary; Hartzell Propeller, Inc.; Piqua, OH		
Publish Date:	10/27/2015		
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/ .		

The National Transportation Safety Board (NTSB), established in 1967, is an independent federal agency mandated by Congress through the Independent Safety Board Act of 1974 to investigate transportation accidents, determine the probable causes of the accidents, issue safety recommendations, study transportation safety issues, and evaluate the safety effectiveness of government agencies involved in transportation. The NTSB makes public its actions and decisions through accident reports, safety studies, special investigation reports, safety recommendations, and statistical reviews.

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](#).