



# National Transportation Safety Board Aviation Accident Final Report

---

|                                |                                      |                         |            |
|--------------------------------|--------------------------------------|-------------------------|------------|
| <b>Location:</b>               | Sedona, AZ                           | <b>Accident Number:</b> | WPR12FA326 |
| <b>Date &amp; Time:</b>        | 07/26/2012, 0830 MST                 | <b>Registration:</b>    | N880LY     |
| <b>Aircraft:</b>               | BEECH B60                            | <b>Aircraft Damage:</b> | Destroyed  |
| <b>Defining Event:</b>         | Runway excursion                     | <b>Injuries:</b>        | 3 Fatal    |
| <b>Flight Conducted Under:</b> | Part 91: General Aviation - Personal |                         |            |

---

## Analysis

Several witnesses observed the airplane before and during its takeoff roll on the morning of the accident. One witness observed the airplane for the entire event and stated that the run-up of the engines sounded normal. During the takeoff roll, the acceleration of the airplane appeared a little slower but the engines continued to sound normal. Directional control was maintained, and at midfield, the airplane had still not rotated. As the airplane continued down the 5,132-foot-long runway, it did not appear to be accelerating, and, about 100 yards from the end of the runway, it appeared that it was not going to stop. The airplane maintained contact with the runway and turned slightly right before it overran the end of the runway. The airplane was subsequently destroyed by impact forces and a postaccident fire. The wreckage was located at the bottom of a deep gully off the end of the runway.

Postaccident examination of the area at the end of the runway revealed two distinct tire tracks, both of which crossed the asphalt and dirt overrun of 175 feet. A review of the airplane's weight and balance and performance data revealed that it was within its maximum gross takeoff weight and center of gravity limits. At the time of the accident, the density altitude was calculated to be 7,100 feet; the airport's elevation is 4,830 feet. For the weight of the airplane and density altitude at the time of the accident, it should have lifted off 2,805 feet down the runway; the distance to accelerate to takeoff speed and then to safely abort the takeoff and stop the airplane was calculated to be 4,900 feet. It is unknown whether the pilot completed performance calculations accounting for the density altitude.

All flight control components were accounted for at the accident site. Although three witnesses indicated that the engines did not sound right at some point during the runup or takeoff, examination of the engine and airframe revealed no evidence of any preexisting mechanical malfunctions or failures that would have precluded normal operation. Propeller signatures were consistent with rotational forces being applied at the time of impact. No conclusive evidence was found to explain why the airplane did not rotate or why the pilot did not abort the takeoff once reaching the point to safely stop the airplane.

## Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The airplane’s failure to rotate and the pilot’s failure to reject the takeoff, which resulted in a runway overrun for reasons that could not be undetermined because postaccident examination of the airplane and engines did not reveal any malfunctions or failures that would have precluded normal operation.

### Findings

|                             |  |
|-----------------------------|--|
| <b>Environmental issues</b> | Fence/fence post - Not specified<br>Sloped/uneven terrain - Contributed to outcome |
| <b>Not determined</b>       | Not determined - Unknown/Not determined (Cause)                                    |

## Factual Information

### HISTORY OF FLIGHT

On July 26, 2012, about 0830 mountain standard time, a Beech B60, N880LY, serial number P-524, was destroyed during a runway overrun following takeoff roll at the Sedona Airport (SEZ), Sedona, Arizona. The airplane was registered to and operated by the pilot under the provisions of 14 Code of Federal Regulations Part 91. The private pilot and two passengers were fatally injured. Visual meteorological conditions prevailed for the planned personal cross-country flight, and no flight plan was filed. The destination was reported to be the Double Eagle II Airport (AEG), Albuquerque, New Mexico. The flight was originating at the time of the accident.

During the investigation four individuals provided the National Transportation Safety Board (NTSB) investigator-in-charge (IIC) with written statements relative to their observations of the accident sequence:

Witness #1, a retired Federal Aviation Administration (FAA) operations supervisor, stated that he was located about 200 feet north of the parallel taxiway and about 1,000 feet southwest of the approach end of Runway 21; he had an unobstructed view of the entire runway. The witness reported that he initially observed the airplane doing a run-up in the run-up area adjacent to Runway 21, that the engines sounded normal, and that the time it took the pilot to complete the run-up was normal. The airplane then took Runway 21 for departure, and the acceleration during the takeoff roll appeared a little slower than normal. The witness added that the engines sounded normal, that directional control was normal, and at mid-field the airplane was still moving on the ground and had not rotated. The witnesses opined, "At that time I began to be concerned." The witness stated that as the airplane continued down the runway it appeared that it wasn't accelerating. The witness further stated that about 100 yards from the departure end of Runway 21 it appeared that the airplane wasn't going to stop. During this time the airplane maintained runway contact and directional control. The witness added that as he observed the airplane go off the end of Runway 21, it appeared to turn slightly to the right, and at the same time he heard a mild bang and the airplane went out of sight. About 30 seconds after losing sight of the airplane, a very large black mushroom cloud, about 200 to 300 feet high, appeared.

Witness #2, who resided at the north end of the departure runway, stated that on the morning of the accident he was sitting outside when he heard an airplane start its takeoff roll, seemingly losing power for a moment and then regaining it; it was not a "run-up". The witness reported that the airplane was definitely taking off, that the drone of the engine was lowered for an instant, and then regained what he thought was a "normal" sound for an engine at full operating power.

Witness #3 reported that while driving along the airport ramp on the north side of the airport, he observed the accident airplane stationary and on the numbers of Runway 21, apparently preparing to take off. The witness further reported that it appeared to him that the left engine was turning at a slower revolutions per minute (rpm) than the right engine, "...as I could see the prop blades on the left engine." The witness stated that the airplane seemed to be holding in the takeoff position for what he considered to be a longer than normal amount of time. The witness opined that he estimated that from the time he first observed the airplane holding on the runway to the start of the takeoff [roll], at least 1 minute had elapsed. He added that it was

his impression at the time that there was some type of an abnormal situation with the airplane due to the slow rpm of the left engine and its extended hold time on the runway. The witness revealed that he then heard the airplane power up to what sounded like full power and start its takeoff roll; the witness stated that he was about 200 to 250 feet from the numbers of Runway 21 at this time. The witness stated that in his opinion both engines sounded normal, with a slight out-of-sync beat, and no different from other twin-engine airplanes of this type at full takeoff power. As the accident airplane passed by his position it accelerated on its takeoff roll, and out of the witness's sight, in what appeared to be a normal takeoff. He subsequently looked around the hangars, and saw the large black plume of smoke.

Witness #4, the Airport Operations Manager, reported that while driving to the north end of the airport to perform maintenance, he entered the taxiway at A-3 behind the accident airplane, which was taxiing to the run up area for Runway 21. On returning via the taxiway, he passed the accident airplane that was on its takeoff roll between A-2 and A-3, and exchanged a hand wave, with whom he believed was the pilot, but could not be entirely certain that it was actually the pilot with whom he exchanged the wave. The witness stated that he subsequently observed the smoke plume coming from the southwest end of the airport, and immediately responded to the accident site, where he observed that the airplane had been consumed by the post-impact fire.

During the investigation local law enforcement personnel provided the NTSB IIC with two additional statements of individuals who had witnessed the accident. Their statements revealed the following:

Witness #5 reported that while towing a helicopter in close proximity to taxiway A-4 he observed the twin-engine airplane taxi into position for departure on Runway 21. As he reached taxiway A-3, he observed the airplane pass his position at a fairly fast rate of speed; the engines were at takeoff throttle and running normal. The witness continued to watch the airplane as it proceeded past taxiways A-5 and A-6, at which time he began to wonder why the pilot had not started to rotate. The witness stated that it appeared to him that the airplane was going at a high rate of speed as it passed [taxiway] A-8. At this time, the witness was at taxiway A-4 and could not detect any engine sound or deceleration [of the airplane]. He continued to watch the airplane as it went off the end of the runway and disappear from sight.

Witness #6 reported that on the morning of the accident she was hiking on the airport loop trail east when she heard the airplane start its takeoff. Shortly thereafter she observed the airplane approaching the end of the runway, and it appeared that it was going to hit the [airport's perimeter] fence. The witness stated that she could hear the engines cutting out before it hit the fence, and that they were cutting out more when the airplane crashed into some big trees.

The airplane wreckage was consumed by the postcrash fire, and was located at the bottom of a steep drop-off at the end of Runway 21.

The airplane was recovered to a secure location for further examination.

#### PERSONNEL INFORMATION

The pilot, age 53, held a private pilot certificate with ratings for airplane single-engine and multiengine land, and instrument airplane. The pilot's most recent third-class FAA airman medical certificate was issued on January 5, 2011, without limitations.

A review of the pilot's computerized logbook records, which were supplied to the NTSB IIC by a family member, revealed that as of July 14, 2012, the pilot had accumulated a total flying time of 663 hours, of which 545 hours were in single-engine airplanes, and 118 hours were in multiengine airplanes. The logbook review further revealed that the pilot had accumulated a total of 62 hours in the accident airplane make and model. It was also noted that the pilot had completed 6 flights into SEZ between March 29, 2011 and May 28, 2012, each in the accident airplane. In the previous 90 days, 30 days, and 24 hours prior to the accident, the pilot had flown a total of 23.2 hours, 5.1 hours, and 0 hours respectively, both in single-engine and multiengine airplanes. Additionally, the pilot had flown the accident airplane 9 hours and 3 hours respectively in the preceding 90 days, 30 days, and 24 hours prior to the accident.

A review of the pilot's training records provided by the SIMCOM Training Center, Scottsdale, Arizona, indicated that the pilot had satisfactorily completed the B60 initial training course on March 6, 2011. Additionally, the pilot had completed his most recent B60 recurrent training on March 23, 2012. In an interview conducted with the accident pilot's simulator instructor on August 15, 2012, the instructor revealed that the pilot was very attentive during training, knew the airplane well, was very disciplined, and was a very good student.

#### AIRCRAFT INFORMATION

The airplane was a Beechcraft model B60, six seat, low-wing, retractable gear airplane, serial number P-524, which was manufactured in 1979. The airplane was powered by two Lycoming TIO-541-E1B4, 380-horsepower engines that were equipped with Hartzell constant-speed, full-feathering, three-bladed propellers.

A review of the airplane's maintenance records revealed that the most recent documented annual inspection was performed on April 9, 2012, at a total airframe time of 3,915.23 hours, and a Hobbs time of 437.3 hours. At the time of the accident, the airplane had been operated about 11 hours since its most recent annual inspection.

Maintenance records also revealed that on September 18, 2008, at an airframe total time of 3,740.5 hours and a Hobbs time of 262.5 hours, Midwest Aviation Services, Inc., Oskaloosa, Iowa, installed a TIO-E1B4 Lycoming engine, serial number L-192-59C in the left position, and a TIO-E1B4 Lycoming engine, serial number L-196-59C in the right position. At the time of installation, both engines had a total time of 2,716.8 hours, a total time since major overhaul of 45.5 hours, and a Hobbs time of 262.5 hours. At the time of the accident, each engine had accumulated about 220 hours since the most recent overhaul.

#### METEOROLOGICAL INFORMATION

At 0835, the SEZ Automated Weather Observing System (AWOS) reported wind calm, visibility 10 miles, sky clear, temperature 26 degrees Celsius (C), dew point 13 degrees C, and an altimeter setting of 30.17 inches of mercury. The density altitude at the time of takeoff was calculated to be 7,100 feet.

#### WEIGHT AND BALANCE

During the investigation, a Beechcraft air safety investigator provided the NTSB IIC with computed weight and balance data that revealed at the time of the accident the airplane was within its center of gravity limits, and was below its maximum gross takeoff weight for the planned flight.

#### PERFORMANCE

During the investigation, a picture of the airplane on its takeoff roll was provided by an unidentified visitor standing on the south side of the airport restaurant looking south toward the runway. An examination of the photograph revealed that the accident airplane was just approaching taxiway A5, or about 2,500 feet from the start of Runway 21. A Beechcraft air safety investigator calculated that the airplane would liftoff at 2,805 feet, and that a takeoff distance of 3,550 feet would have been required to have cleared a 50 foot obstacle. The normal takeoff and initial climb speed would have been 94 knots. Additionally, it was noted that the Accelerate Stop Distance would have been about 4,600 feet from the start of the takeoff roll to a full stop. The length of Runway 21 is 5,132 feet.

#### WRECKAGE AND IMPACT INFORMATION

The airplane traveled the length of Runway 21, then across the asphalt and dirt overrun of 175 feet before impacting the top of an airport perimeter fence and descending into a deep gully. The airplane impacted the bottom of the gully, and was destroyed as a result of impact forces and a postaccident fire.

Two distinct tire tracks were observed on the departure end of Runway 21, both of which travelled across the asphalt surface of the Runway 03 displaced threshold and the dirt overrun. The measured tire tracks were about 11 feet apart, with the left-most track aligned with the runway centerline; the B60 wheel span is 11 feet 3 inches when sitting on the ground and in a stationary position. A black contact mark, which resembled a mark made by the tire sidewall, was observed on the left side of a bent-over fence post. The left-most tire track ended just prior to the bent-over fence post.

The entire airplane wreckage was located at the bottom of the gully. The drop in elevation from the airport perimeter fence to the bottom of the gully was 273 feet. The horizontal distance travelled was 672 feet. The vegetation observed on the slope was disturbed at a point about 50 feet above the wreckage location, but no airplane parts were found at that location, nor were there any ground scars that could be evaluated.

The fuselage, cabin, and center wing section was at rest in an upright orientation on a measured magnetic heading of 165 degrees. A postimpact fire had consumed the majority of the airplane, leaving only some of the heavier aluminum structure and steel components identifiable. Both engines remained connected to their respective nacelles. Both propellers were separated from their respective engines.

The roof and sidewalls of the cabin and the rear fuselage were observed to have been partially consumed by fire; the rear fuselage was separated from the cabin area. The nose area forward of the front pressure bulkhead was crushed and partially consumed by fire. The instrument panel and center console were partially consumed by fire.

An examination of the fuel selector panel revealed that the left fuel selector knob was positioned to the six o'clock position, which is not a selectable position; it was rotated with finger force. The right fuel selector knob was positioned to the twelve o'clock position, which is the ON position; it would not rotate with finger force. The cable control attached to the left fuel selector knob was separated. The cable control remained attached to the left fuel selector valve mounted on the aft side of the front spar in the left wheel well; the valve had been exposed to thermal damage. The right fuel selector cable remained attached to the fuel selector valve assembly and the fuel selector knob.

The left wing was partially consumed by fire and lay forward of the cabin area. It was also

partially separated from the front and aft carry-through spar. The left engine was partially separated from the left wing and was lying inverted and forward of the wing. The engine had been damaged by thermal activity. The propeller was separated from the engine crankshaft. The left flap actuator was separated from the wing structure mount. The actuator body and nut had been consumed, which prevented the flap actuator position from being determined. An inboard section of the flap was partially consumed by fire, and was in a retracted position.

The right wing was partially consumed by fire, and remained partially attached to the carry-through spar. The flap actuator body and nut had been consumed preventing the flap actuator position from being determined. The right engine was partially attached to the right wing, and had sustained fire damage.

The empennage was mostly consumed by fire. The elevator trim actuator and rudder trim actuator were located, and the actuator extension measured. The rudder trim actuator extension was 3-3/8 inches, which corresponds to a neutral tab position. The elevator trim actuator extension was 4-11/16 inches, which corresponded to a neutral tab position. The aileron actuator extension indicated that the left aileron trim tab was positioned 2 degrees trailing edge down.

The flight control cables controlling pitch, yaw and roll were examined. The examination revealed that all cables had continuity from the cabin control assemblies to the respective flight control bellcranks; all bellcranks were partially consumed by fire. Trim cables had continuity from the cabin area to the elevator and rudder control surface areas.

The nose landing gear and strut assembly had impact and fire damage and remained partially attached to the cabin area. The main landing gear wheel and strut assemblies had separated, and were found in the area of the main wreckage. The landing gear extension rods separated from the landing gear actuator drive bellcrank. The landing gear extension housing was partially consumed by fire, which exposed the interior gear mechanism. The relative position of the extension rod ends at the landing gear actuator bellcrank was consistent with the landing gear being in the extended position. The main landing gear wheels, tires, and brake assemblies remained attached to the damaged lower struts. One of the brake rotor disks showed uneven wear, with debris observed in each of the vents. The wheels moved freely on their respective axels.

#### MEDICAL AND PATHOLOGICAL INFORMATION

On July 28, 2012, an autopsy was performed on the pilot at the Office of The Medical Examiner, Yavapai County, Prescott, Arizona. The results of the examination revealed that the cause of death was attributed to blunt force trauma and thermal injury.

Toxicological testing was performed by the FAA's Civil Aeromedical Institute of Oklahoma City, Oklahoma. Cyanide and carbon monoxide were detected in blood. The volatile concentrations revealed 13 (mg/dL, mg/hg) ethanol detected in blood, 11 (mg/dL, mg/hg) ethanol detected in urine, no ethanol detected in brain, N-Propanol detected in urine, N-Propanol detected in blood.

The results were negative for tested drugs.

#### TESTS AND RESEARCH

A postaccident examination of the airplane was overseen by the NTSB IIC. The results of the examination revealed the following:

The rudder gust lock pin and the control column gust lock pin were found in the cabin area. The interconnecting cable for the three gust lock components that interconnect the rudder pin, control column pin, and throttle lock plate together was found only attached to the rudder gust lock pin. The interconnecting cable had two undamaged loops in the cable with nothing attached to those loops. The throttle lever gust lock plate was not located. An examination of the control column gust lock pin holes revealed that none of the holes were deformed, which is consistent with the gust lock pin not being in place during the accident sequence.

### Engine Examinations

Both engines were examined under the supervision of the NTSB IIC by a Lycoming representative at the facilities of Air Transport, Phoenix, Arizona. The results of the examinations revealed the following:

#### Left Engine

The left engine was a Lycoming model TIO-541-E1B4, serial number L-192-59C. The engine remained attached to the engine mount and exhibited thermal damage and impact damage. All engine accessories, including the left and right magneto, vacuum pump, starter, and fuel pump were consumed by fire. The oil pump and oil sump were consumed by fire. The accessory housing was partially consumed by the postimpact fire. All cylinders remained attached to the crank case and exhibited thermal damage.

The oil suction screen appeared to be fire damaged and clear of contaminants. The intake system was consumed by fire. Fuel injectors one, three, and five sustained fire damage. Fuel injectors two, four and six were observed open. The fuel control unit and throttle body exhibited thermal damage. The throttle plate would not move freely by hand. The fuel inlet fuel screen was recovered and observed to be unrestricted. The crankcase exhibited thermal damage. The engine exhaust system remained attached to all cylinders.

The ignition harness was consumed by fire. The top and bottom spark plugs were removed and exhibited various degrees of coloration in the electrode area but were free of oil residue or mechanical damage. All spark plugs exhibited normal wear signatures.

The engine crankshaft could not be rotated due to thermal damage sustained in the postimpact fire. The upper and lower portions of the crankcase were mostly consumed by fire, which allowed for internal component examination. All six connecting rods remained attached to the respective pistons and crankshaft. The camshaft was intact, and the lobes were unremarkable. All intake and exhaust lifters and pushrod assemblies were unremarkable. All intake and exhaust rocker arms were intact. Using a lighted borescope, all six cylinders were examined internally, and were unremarkable. All intake and exhaust valves were unremarkable. All pistons were unremarkable. The turbo charger remained attached to the engine mount. The compressor shroud and associated compressor turbine were consumed by fire. The turbine side of the compressor was intact, and all exhaust clamps were in place. The propeller governor remained attached to the engine at the mounting pad. The governor control rod remained attached to the control arm, and was situated about 1/2 inch from the low pitch, high rpm stop.

The propeller was separated from the engine. All three blades remained attached to the propeller hub.

No evidence of any mechanical or internal failure that would have precluded normal operation was observed during the engine examination.



## Right Engine

The right engine was a Lycoming model TIO-541-E1B4, serial number L-196-59. Examination of the recovered engine revealed that the engine remained attached to the engine mount structure. The engine exhibited thermal damage. All of the engine accessories, including the left and right magneto, vacuum pump, starter, and fuel pump were consumed by fire. The oil pump was fire damaged, and the oil sump was consumed by fire. The accessory housing was partially consumed by the postimpact fire. All cylinders remained attached to the crank case and exhibited thermal damage.

The oil suction screen was not observed. The intake system was consumed by fire. All six fuel injectors were not observed. The fuel control unit and throttle body exhibited thermal damage. The throttle plate would not move freely by hand. The fuel inlet fuel screen was recovered, and observed to be unrestricted. The crankcase exhibited thermal damage. The engine exhaust system remained attached to all cylinders.

The ignition harness was consumed by fire. The top and bottom spark plugs were removed, and exhibited various degrees of coloration in the electrode area, but were free of oil residue or mechanical damage, with the exception of top and bottom number four spark plugs. Top and bottom spark plugs of the number four cylinder sustained damage when removed from the cylinder due to molten aluminum damage. All remaining spark plugs exhibited normal wear signatures.

The engine crankshaft could not be rotated due to fire and thermal damage sustained in the postimpact fire. The lower portion of the crankcase was mostly consumed by fire, which allowed for internal component examination. All six connecting rods remained attached to the respective pistons and crankshaft. The camshaft was intact, and lobes were unremarkable. All intake and exhaust lifters and pushrod assemblies were unremarkable. All intake and exhaust rocker arms were intact.

Using a lighted borescope, all six cylinders were examined internally. Cylinders number one, two, three, five and six were unremarkable. Cylinder number four exhibited molten aluminum debris within the combustion dome. The cylinder was removed and the number four piston appeared to be melted. The cylinder barrel was cut from the cylinder head. All piston rings were intact. The majority of the piston was melted and pooled within the cylinder combustion dome. The remaining pistons were unremarkable. All intake and exhaust valves were unremarkable.

The turbo charger remained attached to the engine mount. The compressor shroud and associated compressor turbine were consumed by fire. The turbine side of the compressor was intact, and all exhaust clamps were in place.

The propeller governor was not observed.

The propeller was separated from the engine. All three blades remained attached to the propeller hub.

No evidence of any mechanical or internal failure that would have precluded normal operation was observed during the engine examination.

## Propellers Examinations

Both propellers were examined under the supervision of the NTSB IIC, by a Hartzell Propeller

Inc. Air Safety Investigation Manager. The results of the investigations revealed the following: Both propellers were rotating and not feathered at the time of impact. An estimate of power output could not be determined aside from evaluation of blade damage. Blade damage to the left propeller suggested impact with low to moderate power. Blade damage to the right propeller suggested impact at low power.

There were no discrepancies noted with either propeller that would preclude normal operation. All damage was consistent with impact damage. (Refer to the Hartzell Propeller examination report, which is included in the public docket for this accident.)

The postaccident examination of the airframe's structure and engines revealed no preimpact failures or malfunctions, which would have precluded normal operation.

## History of Flight

|                |   |
|----------------|---|
| <b>Takeoff</b> | Runway excursion (Defining event)<br>Collision with terr/obj (non-CFIT) |
|----------------|---|

## Pilot Information

|                                  |   |  |                            |
|----------------------------------|---|--|----------------------------|
| <b>Certificate:</b>              | Private   | <b>Age:</b>                              | 53                         |
| <b>Airplane Rating(s):</b>       | Multi-engine Land; Single-engine Land   | <b>Seat Occupied:</b>                    | Left                       |
| <b>Other Aircraft Rating(s):</b> | None  | <b>Restraint Used:</b>                   | Seatbelt, Shoulder harness |
| <b>Instrument Rating(s):</b>     | Airplane  | <b>Second Pilot Present:</b>             | No                         |
| <b>Instructor Rating(s):</b>     | None  | <b>Toxicology Performed:</b>             | Yes                        |
| <b>Medical Certification:</b>    | Class 3 Without Waivers/Limitations   | <b>Last FAA Medical Exam:</b>            | 01/05/2011                 |
| <b>Occupational Pilot:</b>       | No  | <b>Last Flight Review or Equivalent:</b> | 03/23/2012                 |
| <b>Flight Time:</b>              | 663 hours (Total, all aircraft), 94 hours (Total, this make and model), 23 hours (Last 90 days, all aircraft), 5 hours (Last 30 days, all aircraft) |  |                            |

## Aircraft and Owner/Operator Information

|                                      |  |                                       |                 |
|--------------------------------------|--|---------------------------------------|-----------------|
| <b>Aircraft Make:</b>                | BEECH  | <b>Registration:</b>                  | N880LY          |
| <b>Model/Series:</b>                 | B60 NO SERIES  | <b>Aircraft Category:</b>             | Airplane        |
| <b>Year of Manufacture:</b>          |  | <b>Amateur Built:</b>                 | No              |
| <b>Airworthiness Certificate:</b>    | Normal   | <b>Serial Number:</b>                 | P-524           |
| <b>Landing Gear Type:</b>            | Retractable - Tricycle                                 | <b>Seats:</b>                         | 6               |
| <b>Date/Type of Last Inspection:</b> | 04/09/2012, Annual                                     | <b>Certified Max Gross Wt.:</b>       | 6800 lbs        |
| <b>Time Since Last Inspection:</b>   | 10 Hours   | <b>Engines:</b>                       | 2 Reciprocating |
| <b>Airframe Total Time:</b>          | 3924 Hours at time of accident                         | <b>Engine Manufacturer:</b>           | Lycoming        |
| <b>ELT:</b>                          | Installed, activated, did not aid in locating accident | <b>Engine Model/Series:</b>           | TIO-541-E1B4    |
| <b>Registered Owner:</b>             | Patrick R Porter                                       | <b>Rated Power:</b>                   | 380 hp          |
| <b>Operator:</b>                     | Patrick R Porter                                       | <b>Operating Certificate(s) Held:</b> | None            |

## Meteorological Information and Flight Plan

|   |                                  |   |               |
|---|----------------------------------|---|---------------|
| <b>Conditions at Accident Site:</b>     | Visual Conditions                | <b>Condition of Light:</b>                  | Day           |
| <b>Observation Facility, Elevation:</b> | SEZ, 4830 ft msl                 | <b>Distance from Accident Site:</b>         |               |
| <b>Observation Time:</b>                | 0835 MST                         | <b>Direction from Accident Site:</b>        |               |
| <b>Lowest Cloud Condition:</b>          | Clear                            | <b>Visibility</b>                           | 10 Miles      |
| <b>Lowest Ceiling:</b>                  | None                             | <b>Visibility (RVR):</b>                    |               |
| <b>Wind Speed/Gusts:</b>                | Calm /                           | <b>Turbulence Type Forecast/Actual:</b>     | /             |
| <b>Wind Direction:</b>                  |                                  | <b>Turbulence Severity Forecast/Actual:</b> | /             |
| <b>Altimeter Setting:</b>               | 30.17 inches Hg                  | <b>Temperature/Dew Point:</b>               | 26° C / 13° C |
| <b>Precipitation and Obscuration:</b>   | No Obscuration; No Precipitation |   |               |
| <b>Departure Point:</b>                 | Sedona, AZ (SEZ)                 | <b>Type of Flight Plan Filed:</b>           | None          |
| <b>Destination:</b>                     | Albuquerque, NM (AEG)            | <b>Type of Clearance:</b>                   | None          |
| <b>Departure Time:</b>                  | 0830 MST                         | <b>Type of Airspace:</b>                    |               |

## Airport Information

|                             |                      |                                  |         |
|-----------------------------|----------------------|----------------------------------|---------|
| <b>Airport:</b>             | Sedona Airport (SEZ) | <b>Runway Surface Type:</b>      | Asphalt |
| <b>Airport Elevation:</b>   | 4830 ft              | <b>Runway Surface Condition:</b> | Dry     |
| <b>Runway Used:</b>         | 21                   | <b>IFR Approach:</b>             | None    |
| <b>Runway Length/Width:</b> | 5132 ft / 100 ft     | <b>VFR Approach/Landing:</b>     | None    |

## Wreckage and Impact Information

|                            |         |                             |                        |
|----------------------------|---------|-----------------------------|------------------------|
| <b>Crew Injuries:</b>      | 1 Fatal | <b>Aircraft Damage:</b>     | Destroyed              |
| <b>Passenger Injuries:</b> | 2 Fatal | <b>Aircraft Fire:</b>       | On-Ground              |
| <b>Ground Injuries:</b>    | N/A     | <b>Aircraft Explosion:</b>  | None                   |
| <b>Total Injuries:</b>     | 3 Fatal | <b>Latitude, Longitude:</b> | 34.842222, -111.796667 |

## Administrative Information

|  |  |                     |            |
|--|--|---------------------|------------|
| <b>Investigator In Charge (IIC):</b>     | Thomas Little  | <b>Report Date:</b> | 03/19/2014 |
| <b>Additional Participating Persons:</b> | Ernest R Copeland; Federal Aviation Administration; Scottsdale, AZ<br>Mark Platt; Lycoming Engines; Williamsport, PA<br>Paul Yoos; Beechcraft; Wichita, KS |                     |            |
| <b>Publish Date:</b>                     | 03/19/2014   |                     |            |
| <b>Investigation Docket:</b>             | <a href="http://dms.nts.gov/pubdms/search/dockList.cfm?mKey=84460">http://dms.nts.gov/pubdms/search/dockList.cfm?mKey=84460</a>                            |                     |            |

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](#).