



NATIONAL TRANSPORTATION SAFETY BOARD

Office of Aviation Safety
Western Pacific Region

July 26, 2017

ACCIDENT SITE EXAMINATION SUMMARY

WPR17FA166

This document contains 17 embedded images.

A. ACCIDENT

Location: Ogden, Utah
Date: July 26, 2017
Aircraft: N60WB; Beech A36TC
NTSB Investigator-in-Charge: Andrew Swick

On July 26, 2017, about 1240 mountain daylight time, a Beech A36TC airplane, N60WB, collided with the freeway shortly after departing from Ogden-Hinckley Airport (OGD), Ogden, Utah. The private pilot, and three passengers were fatally injured. The aircraft was registered to Peak 2 Peak, LLC., and operated by the pilot under the provisions of 14 *Code of Federal Regulations Part 91* as a personal flight. Visual meteorological conditions prevailed and a flight plan was not filed. The flight was destined for Yellowstone Airport (WYS), West Yellowstone, Montana.

According to an ATC recording, shortly after departing the runway, the pilot reported “Hey, I’m going down, zero-whiskey-bravo.” ATC cleared him for landing and four seconds later, another pilot flying in the area reported seeing the airplane impact the highway.

Witnesses who were general aviation mechanics, located between hangar rows adjacent to the runway at OGD, heard the airplane during its departure. They stated that the sound was unusual which made them look up to see what it was. When the airplane first came into view they stated it was about 100 ft above the ground, and that it should be about 500 feet or higher at that location [which was about 3,700 ft down runway 17]. As the airplane passed by, they noticed the engine sound was underpowered and the tail of the airplane was going up and down, as if the pilot was struggling to keep the airplane at altitude.

Dash-Cam video from a car on a southwest-bound street, captured the accident airplane in flight. The airplane was first observed flying wings level from the right side of the video frame. As it approached the center of the video frame, it entered a right turn and flew away, paralleling the street. Shortly after, the airplane entered a right descending, high banking turn until out of view.

The accident site revealed that the first identified point of contact (FIPC) was the outer edge of the northbound freeway, and came to rest in the median, along the center guardrail. The debris field was about 150 feet long with debris in both north and southbound lanes. The main wreckage remained intact with post-crash fire damage. The wing tip tanks and the leading edge of the wings were crushed, consistent with vertical impact damage. All flight controls were accounted for and flight control continuity was attained. The propeller assembly separated from the engine during the accident sequence and was subsequently relocated about 200 feet further up the freeway from the debris field, after being impacted by a passing tractor trailer. No other vehicles were involved in the accident sequence.

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

B. PARTICIPANTS

Andrew Swick-NTSB IIC
Mark Rushton-FAA IIC
Andrew Hall-Textron Aviation
Nicole Charnon-Continental Motors Group
Les Doud-Hartzell Propeller

C. SUMMARY

Examination of the accident site was conducted on July 26, 2017. All major structural components of the airplane were located at the accident site. The wreckage was recovered to a secure location for further examination.

D. DETAILS OF THE INVESTIGATION

1.0 Accident Site Examination

Main Wreckage: N 41° 10.486, W-112° 1.144' – Elevation: 4,484 feet
Accident site was about 1 mile south of the departure end of runway 17 at OGD.

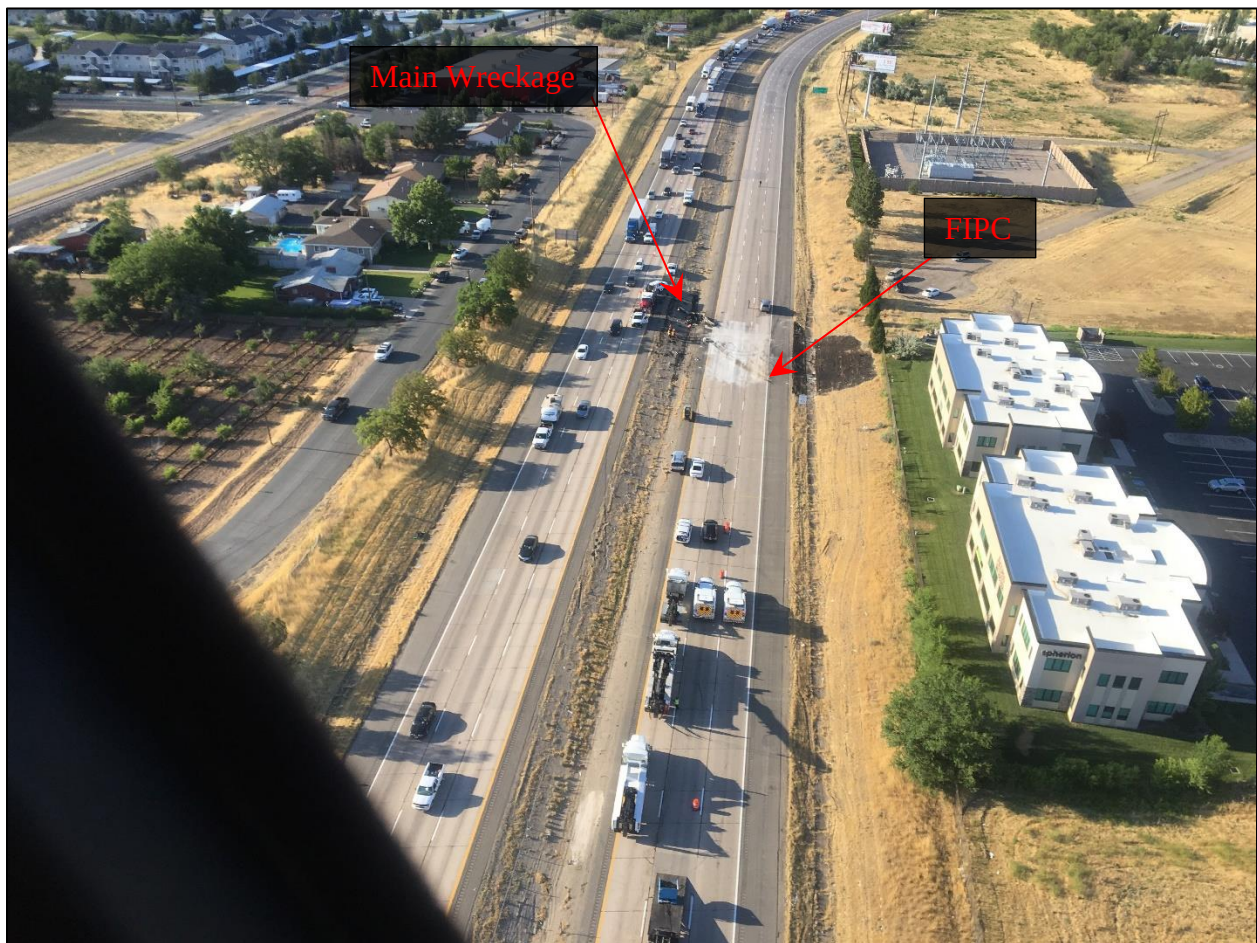


Figure 1-Aerial View of the Accident Site

Examination of the accident site was conducted on July 27, 2017, by the NTSB-IIC, FAA-IIC and Utah State Troopers. The accident site was located on Interstate 15, about one mile south of OGD. The wreckage debris field was spread diagonally across both the north and south-bound lanes. The main wreckage and most of the loose debris was in the north-bound lane. A small brush fire was extinguished on the east ditch.

A FARO scanning unit scanned the accident site at 17 different locations. The debris in north and south-bound lanes were then collected and the lanes cleaned prior to the NTSB IIC arrival. This was authorized by the NTSB IIC, to prepare opening lanes for traffic.



Figure 2-First Identified Point of Contact (view northwest)

The first identified point of contact (FIPC) was near the righthand white fog line and rumble strip of the northbound lanes. The debris field was about 150 feet long with debris in both north and southbound lanes.



Figure 3-Main Wreckage (view north)

The main wreckage came to rest in the median, along the center guardrail. The main wreckage remained intact with post-crash fire damage. The wing tip tanks and the leading edge of the wings were crushed, consistent with vertical impact damage. All flight controls were accounted for and flight control continuity was attained.



Figure 4-Main Wreckage (south view)

The wing tip tanks and the wing's leading edges had crush damage consistent with a nose down aircraft attitude and impact with terrain. Flap jack screws were identified and documented.

The photo shows the accident site and the main wreckage along side the road. The wreckage has impact and thermal damage.



Figure 5-Aft Fuselage and Empennage

The aft fuselage and empennage had excessive thermal damage. The flight control surface mounts remained attached to their respective locations. The rudder control cables were cut during the removal of the bodies from the wreckage. The rudder cables remained attached to the rudder attach points and the remaining rudder moved freely on its lower hinge point. The elevator control tubes were melted and only sections remained. The tube sections moved the remaining elevators sections freely in both directions.



Figure 6-Propeller Marks, (view south)

The propeller assembly separated from the engine during the accident sequence and was subsequently relocated about 200 feet further up the lane from the debris field, after being impacted by a passing tractor trailer. No other vehicles were involved in the accident sequence. The propeller blades remained attached and the spinner separated. Sections of spinner material were found in the debris field. The blades had multidirectional scoring and slight bending to two blades. One blade had aft bending near its midsection and missing material at its tip.



Figure 7-Lower Side of Engine

The engine was found inverted with impact damage to the forward crankcase and cylinders no. 5 and 6. Thermal discoloration was noted throughout the exterior surfaces and thermal damage was found on several components on and near the accessory section. A forward section of the crankshaft separated near the no. 6 connecting rod journal. A section of the cam shaft separated from the engine. The exhaust stacks had impact damage.



Figure 8-Turbocharger and Wastegate Valve

The turbocharger and associated parts separated from the engine and remained attached to one oil feed line. The exhaust pipe was found about 10 ft north of the main wreckage. The v-band clamp that connects the turbocharger and the exhaust pipe was found near the turbocharger. The v-band clamp had its bolt, was safety wired, and the clamp was damaged. The turbocharger turbine rotated freely by hand. The wastegate separated from its mount and was free to move by hand. The overboost valve remained attached to the induction tubing and had thermal damage.



Figure 9-Forward Entry Door

The forward entry door separated from the main wreckage and had impact damage to the forward side. The window separated from the door. The interior surface had thermal damage. The door latches were found in the engaged [out] position. The door handle separated from the door and was found with the main wreckage.



Figure 10-Fuel Trucks and Nozzles at OGD

Kemp Jet Services at OGD was the refueler of the accident airplane prior to the accident flight. The trucks and their fuel nozzles were examined. The paperwork associated with the refueling on the accident date was examined and recorded.



Figure 10-Post-accident Examination

The wreckage was relocated to a city owned hangar at OGD, where the post-accident examination took place on the July 27th, and 28th of 2017. The wing remained intact and the engine was placed on a pallet. Debris from a collection container was sifted through for aircraft parts.



Figure 11-Engine and Loose Engine Parts

The engine and loose parts were photo documented and the loose parts were boxed in preparation for shipment.



Figure 12-Fuel Manifold Valve-Disassembled

The fuel manifold valve was removed from the engine and disassembled. The diaphragm was intact and pliable and the screen was clear of debris. The fuel chamber was clear of fuel and debris.



Figure 13-Upper Sparkplugs

The upper spark plugs were removed from the engine and examined. The electrode areas had (Normal-Worn Out) wear signatures, compared to an AV-27 Champion comparison chart. The electrode areas had light amounts of combustion deposits.

The cylinders were boroscoped and the piston heads and combustion areas had light amounts of combustion deposits.

The aft doors were consumed in the post-accident fire. The handle and lock pins were located.

The fuel selector handle was found in the right tank position and the valve screen was installed correctly and free of debris. The filler caps for both tip tanks were installed and undamaged. The wing tank filler caps separated from the wing structure and were found with the main wreckage. One of the fuel caps was installed in the filler neck and one was loose from the filler neck.

The trim tab actuators had thermal damage. The left elevator trim tab actuator was measured at 1.7 inches extended which equates to about 15 degrees tab down position. The right elevator trim tab actuator was measured at 2.0 inches extended which is beyond the down limit position.

The flap actuators were measured and equated to the up position.

Submitted by: Andrew Swick