



NATIONAL TRANSPORTATION SAFETY BOARD

Office of Aviation Safety

Western Pacific Region

September 30, 2018

Field Notes

WPR18F276

ACCIDENT:

Location: Silver City, ID

Date: 09/30/2018

Aircraft: Cessna 210M, Registration Number: N732MN, Serial #: 21061628

NTSB IIC: Jack Vanover

EXAMINATION PARTICIPANTS:

Jackie Vanover
Aviation Accident Investigator
National Transportation Safety Board
Federal Way, WA 98003

Robert Nance
Principle Avionics Inspector
Federal Aviation Administration
Boise, Idaho

Kurt Gibson
Air Safety Investigator
Continental Motors Group
Mobile, AL 36615

Henry Soderlund
Senior Air Safety Investigator
Textron Aviation
Wichita KS

HISTORY OF FLIGHT

On September 30, 2018, about 0837 mountain daylight time, a Cessna 210M airplane, N732MV, impacted mountainous terrain about 4.5 miles northwest of Silver City, Idaho. The private pilot and both passengers were fatally injured. A post-impact fire ensued, and the airplane was destroyed. The airplane was registered to T and C Aircraft Corporation and operated by the pilot as a Title 14 *Code of Federal Regulations* part 91 as a personal flight. Visual meteorological conditions prevailed at the accident site about the time of the accident and no flight plan was filed. The flight originated from Sunrise Skypark Airport (ID40), Marsing, Idaho about 0810 and was destined for Murphy Airport (1U3), Murphy, Idaho.

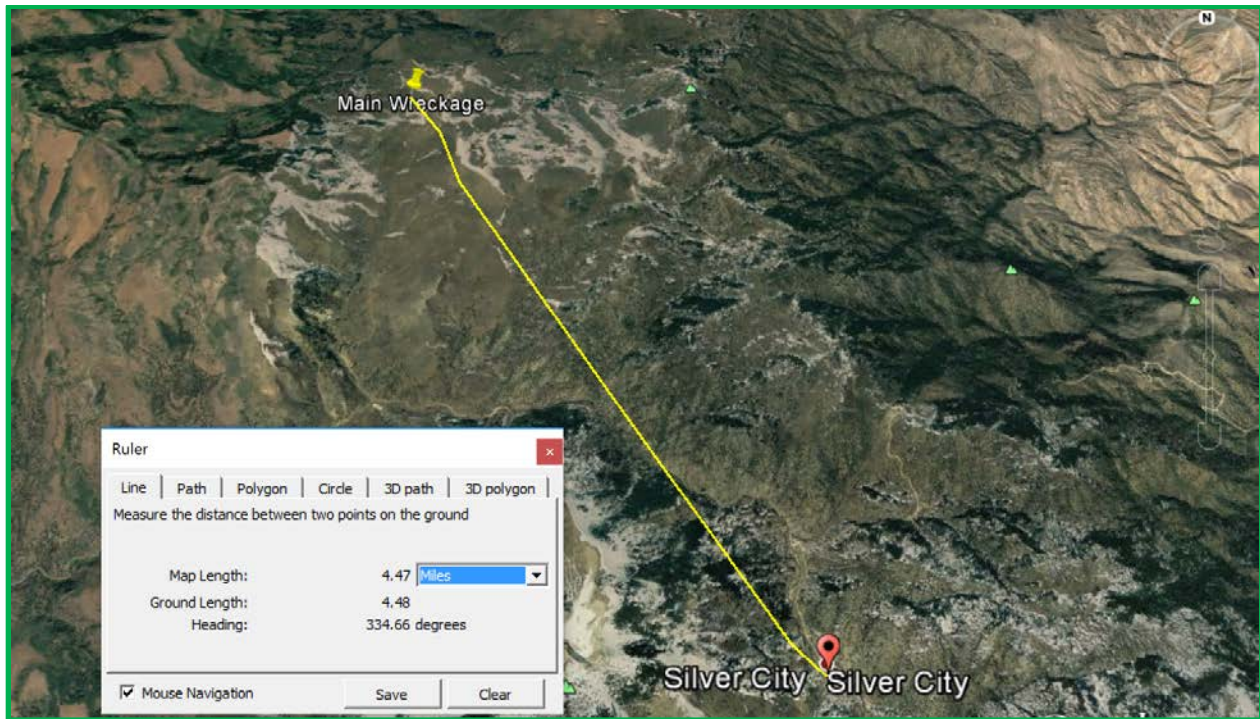


Figure 1: View of accident location relative to nearest city.

According to Mike Reed, he flew the airplane down to Reno for the Reno Air Races and returned the airplane on September 17, 2018. Before he returned the airplane, he filled it up. Mike spoke with Helen Malmberg (Girlfriend of the Pilot), she informed him that the airplane had not been flown since Mike returned it. Based on this information, the airplane should have been full fuel before the accident flight departure.

According to family members of the pilot, the two passengers on board had won the flight in a raffle drawing.

A witness located approximately 6.5 miles north of the accident reported seeing a white airplane about 0830, about 500 ft above the ground flying south.

Two witness that were out hunting, 1 mile west of the accident site, saw the accident airplane fly up a draw that runs south to north and then cross over a mountain in a generally west to east direction. They lost visual of the airplane and then saw a plum of smoke soon after. They went to their vehicle, drove to an area of phone reception and called 911.

The Idaho State Communication office was notified at 0859 by the Air Force Rescue Coordination Center (AFRCC) that an active ELT was detected about the accident site. THE AFRCC detected a signal at 0837, two minutes after the last radar return.

A friend of the accident pilot was also notified by the Idaho Division of Aeronautics and flew out to the area. While in the area, about 1 mile east of the accident site, about 6,500 ft, his onboard Garmin 3XG showed wind was from the southwest at 38 knots.

PERSONNEL INFORMATION

The pilot, age 73, held a private pilot certificate for airplane single-engine land, and a third-class airman medical certificate issued December 1, 2016, with the limitation that he "must have available glasses for near vision.". The pilot's logbook was not recovered at the time of this examination. During his last medical exam, he reported 4,420 total flight hours with 150 hours being in the last six months. The pilot was operating under the provisions of BasicMed.

BasicMed Course Date: 12/4/2017 and BasicMed CMEC Date: 12/1/2017.

AIRCRAFT INFORMATION

The six-seat, high-wing single-engine airplane, serial number 21061628, was manufactured in 1976, and equipped with a turbocharged Teledyne Continental TSIO-520-R engine, serial number 269561-R and equipped with a McCauley model D3A34C402-C constant speed propeller (Serial No's. A-NA106, B-NA099, C-NA106). Review of the airplane's maintenance logbooks indicated that an annual inspection had been performed on August 13, 2018, at a total airframe time of 6,801.1 and a tachometer time of 827.2 flight hours. At that time, the engine had accumulated 827.2 flight hours since new. The tachometer read 1,059.8 hours at the accident site.

Brought Forward →

Make:	<u>TCM</u>	Date:	<u>8/13/2018</u>
Model:	<u>TSIO-520-R</u>	Tach:	<u>827.2</u>
S/N:	<u>506907</u>	TSN:	<u>1047.2</u>
Reg. Number:	<u>N6038B</u>		

Engine Logbook

Performed a 100 Hour/Annual inspection using a checklist meeting the minimum requirements of FAR 43 appendix D. Opened, inspected, engine as necessary. Drained oil and replaced oil filter with new AA48108-1 Filter, no excessive contaminants noted. Filled with 10 quarts. Phillips XC 20W50 oil. Cylinder compressions check as follows: #1: 76/80, #2: 68/80, #3: 72/80, #4: 68/80, #5: 73/80, #6: 72/80. Cleaned, gapped and inspected spark plugs. Checked and adjusted magneto timing as necessary. Checked for compliance with applicable AD's in effect on this date. See AD log. Routine inspection and miscellaneous maintenance. Post inspection engine run-up, leak check and control functions were found normal. I certify that this engine was inspected in accordance with an annual inspection and was determined to be in airworthy condition.

This aircraft and/or component(s) identified above was repaired and/or inspected per current Regulations of the Federal Administration and found to be airworthy with respect to the work performed, subsequently approved to return to service.

Figure 2: View of Annual Engine Entry.

Make:	<u>Cessna</u>	Date:	<u>8/13/2018</u>
Model:	<u>T210M</u>	Tach:	<u>827.2</u>
S/N:	<u>21061628</u>	Total:	<u>6801.1</u>
Reg. Number:	<u>N732MV</u>		

Airframe Logbook

Performed an Annual/ 100 Hour inspection using a checklist meeting the minimum requirements of FAR 43 appendix D. Opened, inspected, and closed airframe, cleaned airframe and engine as necessary. Drained oil and replaced oil filter AA48108-2 Filter, no excessive contaminants noted. Replaced Intake filter with new filter P/N BA 2405. Inspected and tested ELT per 91.207 (d) (1-4), Battery due for replacement before 3/30/2020. Replaced LH outer seat pin and pin guide with new Pin and pin guide. Installed Roll pins in RH aft Passenger seat. Removed Elevator Push pull tube removed paint inspected painted and reinstalled. Removed Fuel Controller P/N:63774-2A17 S/N: A04KA200R sent in for O/H. Installed the same Controller after O/H. Replaced alt-air door hinge with new hinge. Repaired intake tube upstream from filter after reviewing the FARs. The repair is determined to be minor repair. Inspected seat tracks and seat rollers system per AD 2011-10-09 due at Tach 927.2. C/W Exhaust AD 71-09-07R1 and STC SA2012NM ICAAS per Doc# K1250860ICA by performing pressure test inspection Due at tach 927.2. All AD's that are applicable have been complied in effect on this date. See AD log. Performed retract test as per Cessna T210 MM. Post inspection engine run-up, leak check and control functions were found normal. C/W Audio Advisory System STC SA01114CH ICA Manual P/N 6601-ICA Rev1.3. I certify that this aircraft was inspected in accordance with an annual inspection and was determined to be in airworthy condition.

This aircraft and/or component(s) identified above was repaired and/or inspected per current Regulations of the Federal Administration and found to be airworthy with respect to the work performed, subsequently approved to return to service.

Figure 3: View of Airframe Annual Entry.

Make:	<u>McCauley</u>	Date:	<u>8/13/2018</u>
Model:	<u>D3A34C402-C</u>	Tach:	<u>827.2</u>
S/N:	<u>JN363B</u>	TSMO:	<u>870.8</u>
Reg. Number:	<u>N732MV</u>		

Propeller Logbook

Removed Prop for repair. Installed same Prop after repair in reference to McCauley C500 OM. Performed a 100 Hour/Annual inspection using a checklist meeting the minimum requirements of FAR 43 appendix D. Inspected, dressed and painted propeller blades as necessary. Checked for compliance with applicable AD's in effect on this date. Post inspection engine run-up, leak check and control functions were found normal. I certify that this Propeller was inspected in accordance with an annual inspection and was determined to be in airworthy condition.

This aircraft and/or component(s) identified above was repaired and/or inspected per current Regulations of the Federal Administration and found to be airworthy with respect to the work performed, subsequently approved to return to service.

Figure 4: View of Propeller Annual Entry.

WRECKAGE AND IMPACT INFORMATION

The airplane impacted mountainous terrain about 4.5 miles northwest of Silver City, Idaho and a post impact fire ensued.

Investigators from the NTSB, FAA, Textron Aviation, and Continental Motors accessed the wreckage on October 1 thru October 2, 2018. The wreckage was located in a valley that gradually sloped downward in a East to West direction. The wreckage debris field from initial impact to the last found piece of wreckage was approximately 379 feet in an overall South to North orientation. The main wreckage was located at GPS N43.07521 and W116.77118, approximately 6,656 ft elevation. The first identified point of contact with terrain was located at GPS N43.07504 and W116.77114, which contained ground scarring and a fragment of the left wing red navigation light lens. The last piece of debris was a propeller located at GPS N43.076075 and W116.771025.

Description	Lat	Long
Left Wing Tip	43.07502	-116.77112
Large Impact Crater	43.07511	-116.77114
Right Wing Tip	43.07519	-116.77119
Prop Hub and Blade A	43.07513	-116.77118
Blade B	43.07517	-116.77115
Main Wreckage	43.07521	-116.77118
Blade C	43.076075	-116.77114



Figure 5: View of the Initial Impact Point (IIP).

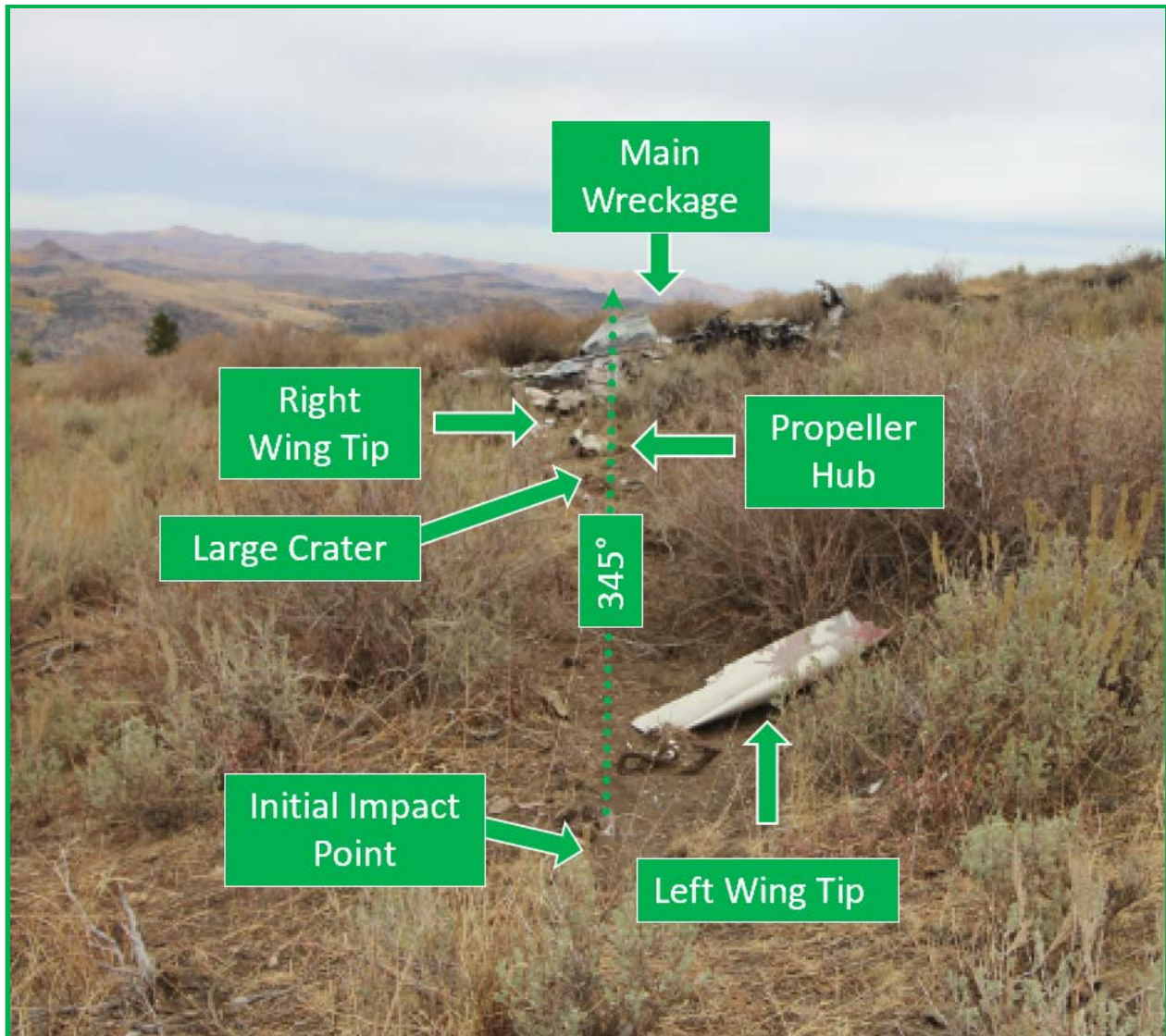


Figure 6: View of Debris Path.

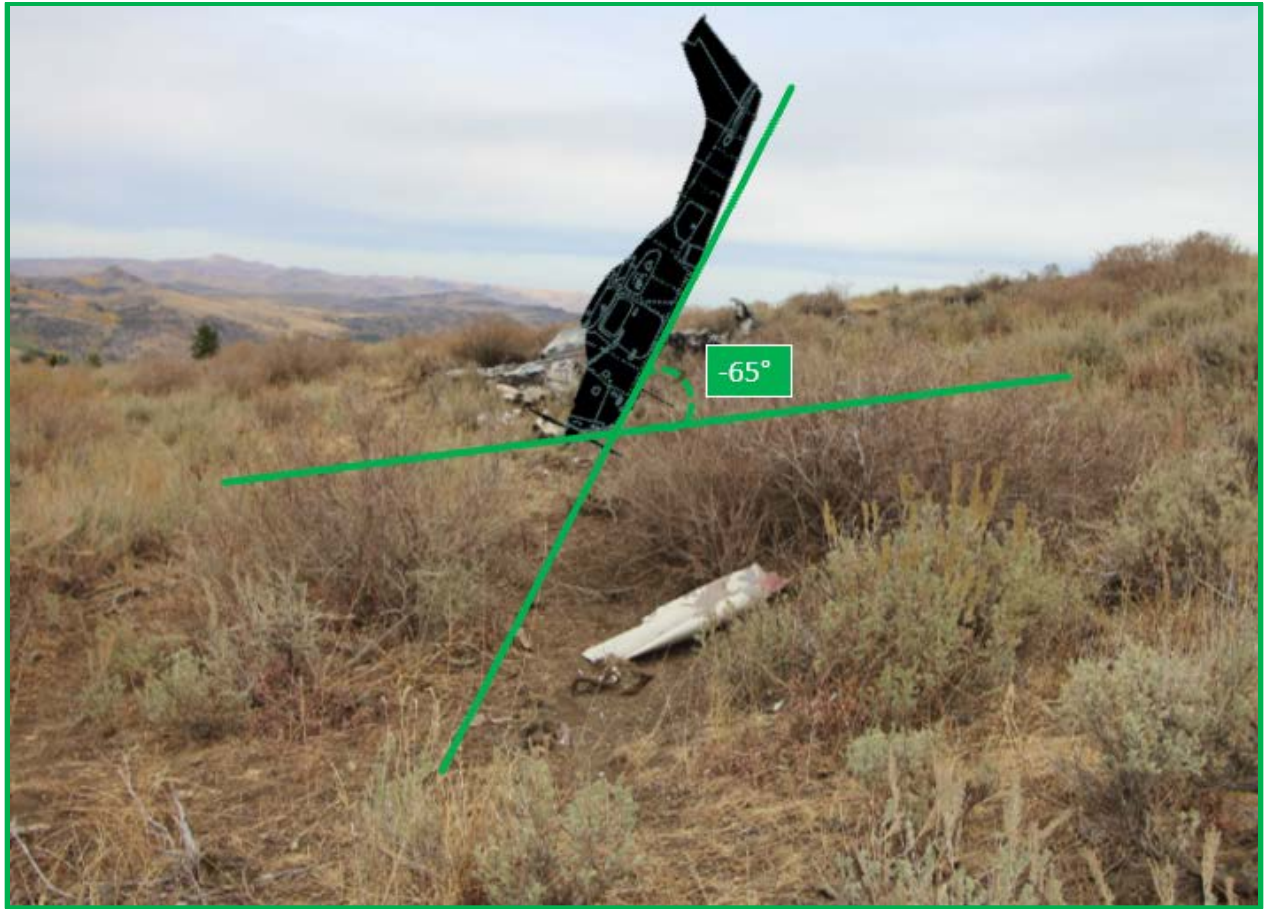


Figure 2: View of Approximant impact angle.

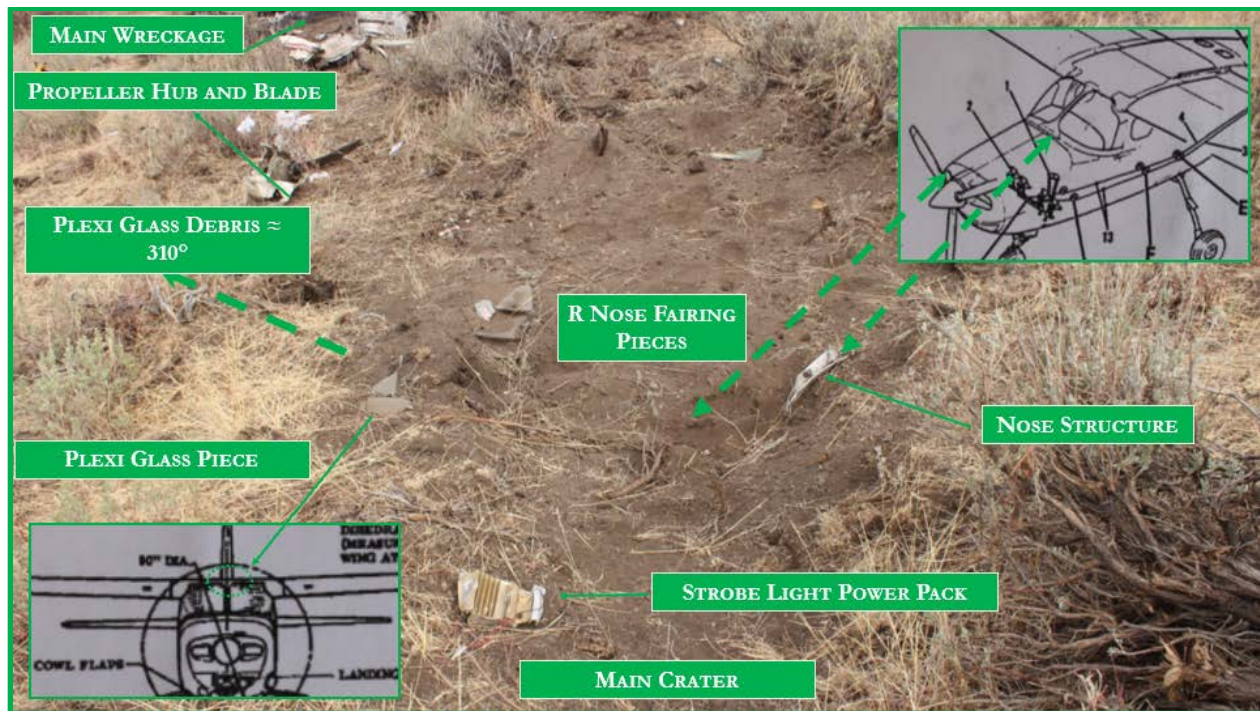


Figure 3: View of Large Impact Crater.

The main wreckage was located between the first point of impact and the last piece of debris. The main wreckage consisted of the fuselage, engine, both wings, and empennage. The fuselage, both wings, and empennage were mostly thermally destroyed during the post impact fire.

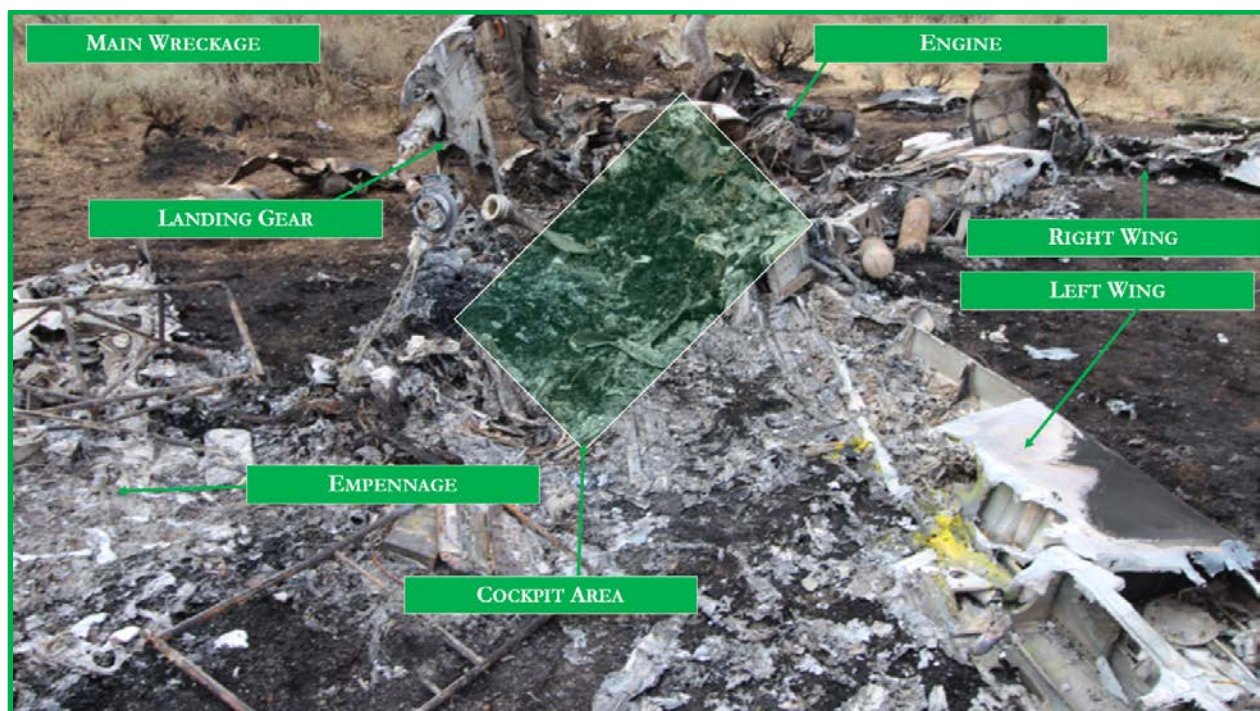


Figure 09: View of Main Wreckage.

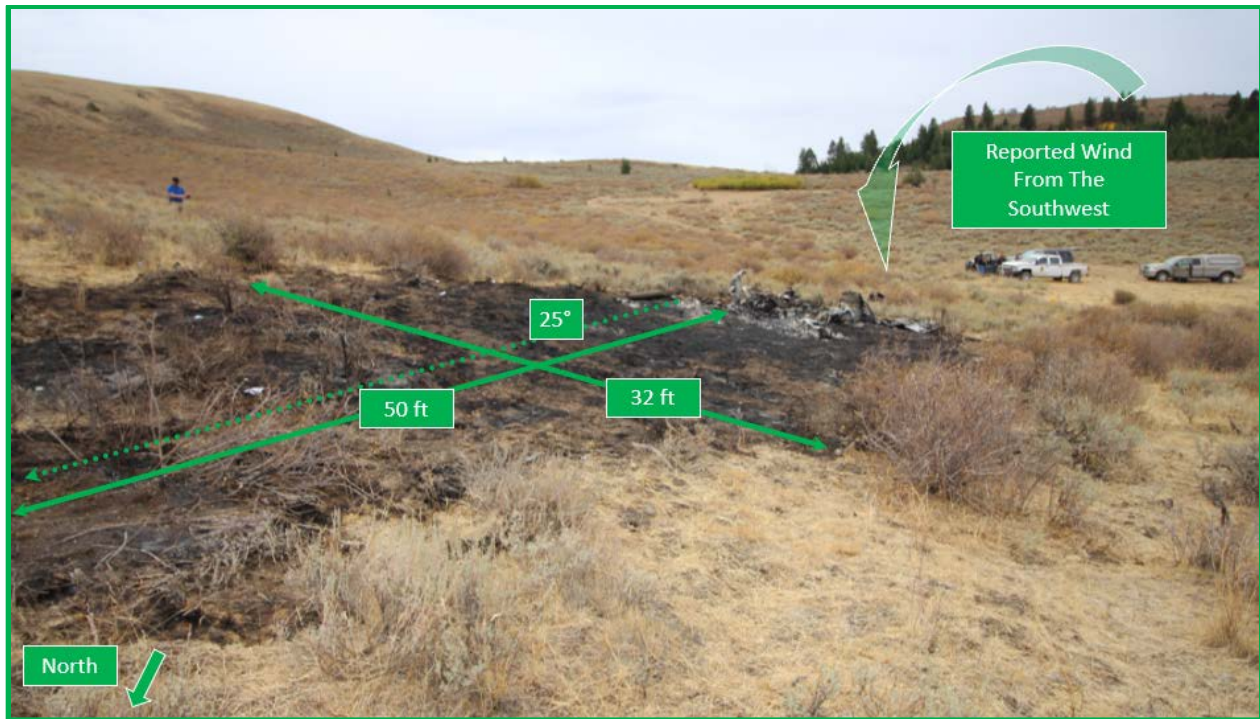


Figure 10: View of Main Wreckage.

The fuel selector was found in the right tank position.

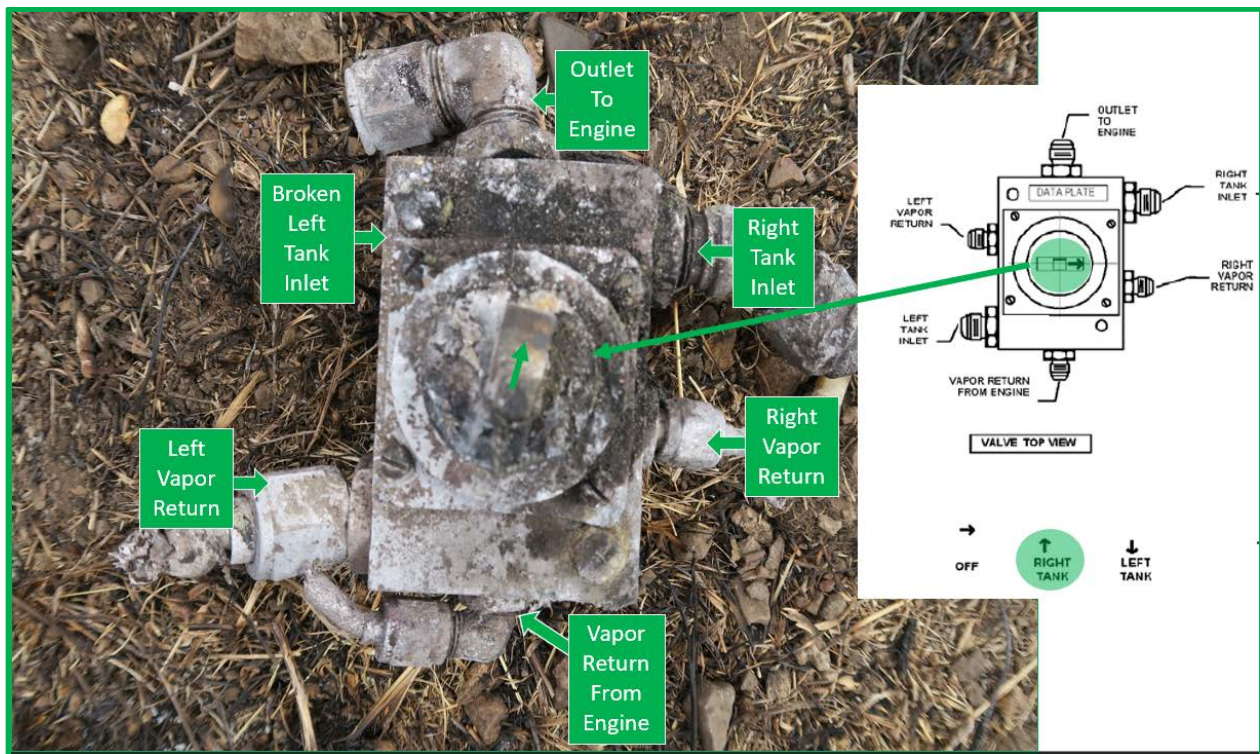


Figure 4: View of Fuel Selector

The landing gear was in the up position. The flap jack actuator was measured approximately 1.8 inches (10° of Flap).



Figure 5: View of flap jack screw.

The left magneto displayed extensive thermal damage. The drive was rotated by hand and no binding was noted. No spark was observed from the primary ignition leads when rotated. The distributor cap was removed, and all of the internal components were thermally destroyed.

The right magneto displayed extensive thermal damage. The drive was rotated by hand and no binding was noted. No spark was observed from the primary ignition leads when rotated. The distributor cap was removed, and all of the internal components were thermally destroyed.

Ignition harness displayed thermal and impact damage. Several primary ignition leads were severed and the insulation was burned on all leads. No anomalies were noted.

The top spark plugs, Tempes URHB32E's, were removed. All six spark plugs exhibited normal wear.

The engine driven fuel pump displayed extensive thermal and impact damage. The drive coupling remained intact, but unable to be manually rotated. The fuel pump was disassembled, and extensive thermal damage was noted.

The throttle and metering assembly displayed extensive thermal and impact damage.

The fuel nozzles were removed, and thermal and impact damage was noted. No's 1, 5, and 6 were blocked and No. 4 was partially blocked.

The Turbo charger was manually rotated on scene and rotational scoring was observed.

The propeller was separated from the crankshaft propeller flange. Blades B and C separated from the propeller hub and were located within the debris field (Blades were labeled A, B, and C for photographic purposes).

Propeller Hub



Figure 7: View of Propeller Hub

Blade A



Figure 8: View of Blade A.

Blade B



Figure 9: View of Blade B.

Blade C



Figure 10: View of Blade C.

MEDICAL AND PATHOLOGICAL INFORMATION

SURVIVAL ASPECTS

Four seatbelt buckles were found latched. Two buckles were found in the aft section of the airframe unlatched.

TESTS AND RESEARCH

ADDITIONAL INFORMATION

2017- the pilot had a ground loop in the accident airplane at sunrise Skypark ID40.