



**NATIONAL TRANSPORTATION SAFETY BOARD
Western Pacific Regional Office
Federal Way, Washington**

**Examination Report
June 13, 2016
Santa Paula, California**

Accident

NTSB Accident Number: **WPR16FA118**
IIC: **T. Cornejo**
Aircraft: **N80861 – Experimental VeriEze**

Summary

On May 28, 2016, about 1515 Pacific daylight time, an experimental amateur-built VariEze airplane, N80681, impacted power lines and terrain following a total loss of engine in Santa Paula, California. The owner/airline transport pilot and passenger were fatally injured. The airplane was destroyed in the postcrash fire. Visual meteorological conditions prevailed for the local area flight that departed the Santa Paula Airport (SZP), Santa Paula, California, about 1510.

Two witnesses observed the airplane flying about 200-300 ft above ground level (agl) overhead and heard the engine sputtering. The airplane descended from their view as it passed behind a hill. When the airplane came back into their view, it was in a steep 45° left turn. The airplane struck power lines, and then then impacted the ground; the power lines were about 75-ft tall. Witnesses reported hearing an explosion, and then seeing fire erupt from the accident site.

An ear witness to the accident reported that after the airplane took off, the pilot radioed him that his engine had quit. There were no further communications between the pilot and the ear witness. prevailed, and no flight plan was filed.

PERSONNEL INFORMATION

Pilot-in-Command (PIC)

The pilot, age 61, held an airline transport pilot certificate, with ratings for airplane single- and multi-engine land. He also held a flight instructor certificate for airplane single- and multi- engine,

instrument airplane, and a mechanic certificate for airframe and powerplant. The pilot was issued a Federal Aviation Administration (FAA) second-class medical certificate on July 18, 2015, with the limitation that he must wear corrective lenses. On that date, he reported a 3,500 hours of total flight experience, with 30 hours accrued in the previous six months.

Review of the pilot's personal logbook indicated that he had 2,525.8 total hours of flight experience, with 3.6 hours in the previous six months.

AIRPLANE INFORMATION

The airplane, serial number 1424, was manufactured in 1980, and equipped with a Continental Motors, Inc., O-200-X (experimental), 100-horsepower reciprocating engine. Review of the airplane's maintenance logbook indicated that a condition inspection was completed on May 1, 2016, with no airframe total time noted. Previous entries indicated a total airframe time of 2,576.0 hours and a total engine time of 324.3 hours as of September 30, 2015.

Wreckage and Impact Information

The NTSB and FAA responded to the accident on May 29, 2016. The accident site was in a lemon orchard. The airplane struck powerlines about 162 feet south of the main wreckage. The debris path extended from the powerlines along a magnetic heading of 325-degrees to the main wreckage. The airplane came to rest on a magnetic heading of 140-degrees. The majority of the airplane was consumed by a postcrash fire; all of the major components were accounted for at the accident site.



Photo 01 – Debris path (NTSB)



Photo 02 – Main Wreckage (NTSB)



Photo 03 – Front View of Main Wreckage (NTSB)

TESTS AND RESEARCH

The NTSB and FAA examined the airplane along with a representative from Continental Motors, Inc., who is a party to the investigation. The examination took place at Ray's Aviation in Santa Paula, California, on July 13, 2016.



Photo 04 – Top View of Engine (NTSB)

The engine was manually rotated the engine via the propeller with movement of the intake/exhaust valves/rocker arms observed. However, no compression obtained at the cylinders.

The cylinders were removed and exhibited normal operating signatures.

Propeller was constructed of wood and sustained significant fire damage.

The oil pump was manually rotated with some grinding heard, but it did not bind. The oil pump was disassembled and exhibited normal operating signatures.

The engine case was split in half. The inside of the engine was lubricated with oil.



Photo 05 – Left Half of Engine Case (NTSB)



Photo 06 – Right Half of Engine Case (NTSB)

The Nos 1 and 2 bearings on the left side were black in color.

The tappets - cam lifters. Normal operating signatures.

The top spark plugs removed. Possibly automotive/motorcycle plugs. 3-pronged electrode. Appears to have normal operating signatures.

The camshaft gear had some old nicks.

The crankshaft gear had broken teeth.

The top portions of the of the crankcase gear teeth were in the oil sump.

The carburetor was disassembled. The plastic floats were melted. No other damage was noted to the inside of the carburetor.

The carburetor remained attached to the air box and engine.

The oil filter was disassembled. The paper filter element was fire damaged and fell apart when the filter was inspected.