

ERA15LA366 - MODIFIED FACTUAL NARRATIVE REPORT

This report was modified on February 28, 2017. Please see the docket for this accident to view the original report.

On September 21, 2015, about 1830 eastern daylight time, a Cessna 172S, N347SP, operated by Certified Flyers, was substantially damaged during a collision with terrain, while maneuvering after takeoff from Butter Valley Golf Port (7N8), Bally, Pennsylvania. The commercial pilot incurred minor injuries. The personal flight was conducted under the provisions of 14 Code of Federal Regulations Part 91. Visual meteorological conditions prevailed and no flight plan was filed for the planned flight to Morristown Municipal Airport (MMU), Morristown, New Jersey.

According to the pilot's written statement, he flew from MMU to 7N8 uneventfully. He then departed 7N8 for a return trip to MMU. During initial climb, about 800 feet above ground level, the airplane experienced a partial loss of engine power, with the tachometer indicating about 1,500 rpm. The pilot attempted to land straight ahead, but due to powerlines, he made a left descending turn. He did not think he would be able to glide the airplane back to the airport and elected to land in a nearby field. During the landing, the landing gear struck a fence and the airplane came to rest inverted in the field.

Review of an emergency medical service (EMS) report revealed: "...bystanders say they heard...[the] engine sputter. From bystanders, the [pilot] flew over the high tension power lines and as the engine cut out tried to turn back towards the direction of Butter Valley. Per bystanders the plane was losing altitude quickly and dropped under the high tension lines. Once just barely clearing them, bystanders say he then had to make it through the high tension towers and did. Then the plane came down in a hard landing..."

The EMS report did not identify the bystanders, but noted who a 911-caller was. During a telephone interview, the 911-caller stated that he was driving a dump truck near a farm with the windows three-fourths down. The accident airplane passed about 20 feet above his truck as it proceeded underneath powerlines and banked right on its side. Shortly thereafter, it impacted the crest of a hill. The caller added that it appeared the pilot was "having fun or showing off." The caller further stated that he could hear the engine operating, but could not make a determination of the power setting. He drove to the accident site, called 911, and attempted to assist the pilot.

Another witness stated she was at her residence when she noticed a white single-engine airplane circling near her home. It was executing sharp turns, diving and then pulling up. She added that the engine sputtered and stalled at least once, but then started again, which she believed occurred when the airplane was pulling up. She further stated that she was concerned that the airplane might hit her house because it was flying low. The witness did not see the impact, but noted that it looked like the pilot was reckless or trying to do stunts.

According to a third witness, who worked at 7N8, he saw a white airplane with a blue and yellow stripe land between 1800 and 1830. The airplane approached faster and in a tighter traffic pattern than other airplanes that he typically observed land at the airport. The airplane made a sharp turn over parked airplanes on its approach to the runway. The airplane's right wing then dipped low over the runway, but did not contact it. The wings subsequently leveled as the engine noise increased. The witness added that

the airplane must have touched down further down the runway as he did not see it land, but saw it taxiing back on the runway for another takeoff. He did not see the subsequent takeoff.

~~Another~~A fourth witness, who lived near the accident site, stated that he was in his backyard between 1815 and 1830, when he heard a small airplane, which he observed was white and yellow flying toward his property at a lower altitude than normal. The witness added that the airplane seemed to be flying erratically and at one point was "flying on its side." The witness further stated that he was concerned for the safety of the airplane and his house as he watched the abnormal flight, during which the pilot seemed to be flying aggressively for several minutes. He did not witness the impact, but added that he did not hear any abnormal engine sounds.

A ~~fifth~~third witness, who also lived near the accident site, reported that he was sitting in his living room and noticed an airplane that was not flying normally. Specifically, one wing was pointed toward the ground and the other pointed toward the sky. The airplane then disappeared behind a fence row and dust rose in the air. The witness assumed the airplane had crashed and attempted to drive to the site and offer assistance; however, he soon saw emergency responders and concluded that they would assist.

A ~~sixth~~fourth witness stated that he was working on a farm near the accident site at the time of the accident. He was operating a skid-loader at the time, and could not hear the airplane's engine noise or the lack of it. He watched the airplane fly in a 90-degree right bank turn for about 10 seconds, "wingtip to wingtip," as it maneuvered underneath powerlines and in between two utility towers. After passing under the powerlines, the airplane leveled and impacted the ground.

Examination of the wreckage by a Federal Aviation Administration (FAA) inspector revealed substantial damage to the right wing and that the right main landing gear had collapsed, consistent with a right wing low impact. He observed impact marks in the soybean field, consistent with a high-angle right bank turn toward and under the powerlines. The inspector also noted a strong odor of fuel at the accident site. When the airplane was subsequently up-righted and recovered, the inspector observed that both fuel tanks were almost full.

A fuel sample was recovered from the engine driven fuel pump after the wreckage was recovered to a storage facility. A small amount of dirt was noted on the outside of the fuel line near the pump fitting; however, the fuel sample was consistent with 100-low-lead aviation gasoline and absent of any visible contamination. A successful test-run of the engine was subsequently performed. A fuel supply was plumbed from a container to the engine driven fuel pump due to a damaged lower fuel sump. The engine did not start on the first attempt as the electric fuel pump was damaged in the accident and could not supply fuel to prime the engine. Ether was then used as primer for the engine on the second attempt. During the second attempt, the engine started immediately and ran continuously without hesitation at multiple power settings, including full power. The engine was run for several minutes and then shut down.

Toxicology testing performed by the FAA's Bioaeronautical Research Laboratory on blood and urine specimen obtained during the pilot's initial postaccident medical care identified alprazolam in urine and blood (0.123 ug/ml) as well as its metabolite, alpha-hydroxyalprazolam in urine. Lorazepam was identified in urine and blood (0.03 ug/ml). In addition, sertraline and its metabolite desmethylsertraline were identified in urine and blood and ondansetron was found in urine.

The pilot's most recent first-class medical certificate was issued on April 7, 2015. On the application for that certificate, he reported no medical conditions or medications to the FAA.

Alprazolam is a benzodiazepine medication available as a Schedule IV controlled substance used to treat anxiety disorder and panic disorder. It is commonly marketed with the name Xanax. The drug information includes this instruction to providers: "Because of its CNS depressant effects, patients receiving alprazolam tablets should be cautioned against engaging in hazardous occupations or activities requiring complete mental alertness such as operating machinery or driving a motor vehicle." The usual therapeutic dose range is between 0.0060 and 0.0200 ug/ml; levels above 0.100 are considered toxic.

Lorazepam is another benzodiazepine medication available as a Schedule IV controlled substance, indicated for the treatment of anxiety disorders or for the short-term relief of the symptoms of anxiety or anxiety associated with depressive symptoms. It is commonly marketed with the name Ativan. Lorazepam carries specific warnings including, "Use of benzodiazepines, including lorazepam, both used alone and in combination with other CNS depressants, may lead to potentially fatal respiratory depression. Use of benzodiazepines, including lorazepam, may lead to physical and psychological dependence. As with all patients on CNS-depressant drugs, patients receiving lorazepam should be warned not to operate dangerous machinery or motor vehicles and that their tolerance for alcohol and other CNS depressants will be diminished. The usual therapeutic range is between 0.1600 and 0.2700 ug/ml. Sertraline is an antidepressant marketed with the name Zoloft.