



INTERVIEW SUMMARY

Elliott Simpson
Aviation Accident Investigator
Western Pacific Region

Interview Date: November 15, 2018
Person Contacted: Jason Hamelin
NTSB Accident Number: WPR19LA010

Narrative:

During a telephone interview Mr. Hamelin stated the following:

- He was issued his A&P certificate in October 2018, and had spent the last three years working at Keystone Aviation building time towards issuance of the certificate.
- He reports directly to Bruce Tanis, the Piston Aircraft Service Manager.
- He was performing maintenance on N413LL during which time he examined the exhaust system in accordance with Lycoming Service Bulletin 521 and found that the crossover pipes on the right side had seized together. He applied Mouse Milk and heat in an effort to get them to disengage, but to no avail. As such, the decision was made to replace them.
- The disassembly took two hours, and after the replacement parts arrived (2-3 weeks later) reinstallation took about 3 hours.
- He installed the pipes in separate sections, setting the crossover pipe first, then installing the right pipe. He did not use a permanent marker to confirm the pipe overlap as indicated in the service bulletin, but instead utilized anti-seize compound, by judging the depth of pipe penetration by the mark the compound left behind, and by measuring the mark with a ruler.
- It took him three attempts to get the pipes properly aligned.
- Access to the area was very limited, and he needed to open the triangular baggage access panel to perform the alignment.
- The work was inspected by Jimmy Ray, after the crossover heatshield was installed.
- It was not possible to inspect the pipe penetration depth with the heatshield in place.
- He has disassembled and reinstalled crossover pipes on the PA46 two times before, about a year prior, and in his experience, they are typically hard to access and disassemble. The first time he

worked on the system was with another mechanic at Keystone and he was essentially signed off to perform the procedure. The second time he worked on his own.



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Interview Date: November 15, 2018
Person Contacted: Jimmy Paul Ray
NTSB Accident Number: WPR19LA010

Narrative:

During a telephone interview Mr. Ray stated the following:

- Mr. Ray is the Chief Inspector and Accountable Manager for Part 135 operations at Keystone Aviation.
- He is retired from the Air Force, where he was a fighter-jet mechanic.
- He started working at Keystone Aviation in 1998, initially as a technician, progressing to become an inspector, and then chief inspector in 2007.
- He has inspected PA46 exhaust crossover pipes dozens of times before and has performed the actual procedure on numerous occasions.
- For N413LL, the initial plan was to work on the fuel pump, which was leaking, however during disassembly damage was observed to the crossover heatshield and clamps, so the decision was made to inspect the crossover pipes.
- His inspection regimen did not begin until the work had been completed and consisted of viewing the assembly through the triangular firewall/baggage access panel, then pulling the tubes to make sure they were secure.
- Because the heatshield was in place, he was not able to visually confirm tube overlap, but rather he trusted that the mechanic had performed the procedure correctly.
- In the past the standard producer has been to gauge tube overlap with anti-seize compound rather than a permanent marker.
- To make sure there was no leak, he also started the engine, and then reached in through the firewall triangle and felt for any blow-by.



INTERVIEW SUMMARY

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Interview Date: October 23, 2018
Person Contacted: Chase Bennett
NTSB Accident Number: WPR19LA010

Narrative:

During a telephone conversation Mr. Bennett stated the following:

- Flight was VFR from 1L8 to SLC. Weather had cleared up by noon and transitioned to the northeast, but he planned a diversion to the west if needed.
- 5 POB, including Mr. Bennet's wife, two children and a friend of his children.
- Both he and his wife sustained injuries, resulting in her being hospitalized. None of the children were injured.
- Preflight and runup all good, with no anomalies noted. Set flaps to 20°.
- Lined up on Runway 01, airplane accelerated normally, rotation at 79 knots. Planned to climb to 7,500 ft msl then began turn to destination. (Field elevation 3,350 ft msl).
- Once positive rate attained, he retracted the landing gear, and got a "three green" indication.
- At 85 knots he set 10° of flaps. At 90 knots set 0° flaps. Airplane continued to climb appropriately.
- Once they reached about 1,000 to 1,200 ft msl he could smell smoke.
- The smell rapidly intensified, and he could then see smoke.
- He began a turn back to the airport, and then the hydraulic failure annunciator then illuminated.
- He assumed the fire was caused by the hydraulic pump continuing to run with the gear retracted, so he selected gear down, in an effort to stop the pump from running. He then got "two greens" for the main landing gear, but not for the nose gear.
- By this time the engine still operating, and the smoke was becoming more intense. He did not recognize the smell, and thinks it may have been a lighter/whitish colored smoke.
- The engine then suddenly stopped producing power. The oil pressure gauge was wavering between 50 and 54 psi.

- By now he had completed the turn, and the smoke was very thick
- His primary focus was maintaining airspeed, and he began to switch the radio frequency to 121.5, but stopped as it was taking too long to do.
- It was becoming hard to see the gauges or out of the window, so he elected to land short.
- About 200 ft agl, he saw a field, and pushed the nose down and maneuvered the airplane for it.
- Just prior to landing he checked the airspeed, and it indicated 83 knots.
- He pulled the yoke just before impact, and the airplane landed hard. The rest is a blur.
- Once the airplane had stopped, he yelled for everyone to get out, and his daughter opened the clamshell door. Everyone egressed unaided.
- The bags in the nose appeared to have been ejected during the impact. None appeared to be fire damaged.
- The week prior to the accident the airplane was not achieving full manifold pressure (limit MP 42 inches) but would instead only get 40 inches during takeoff. He took the airplane to a maintenance facility in Twin Falls, Idaho, but they were unable to find a problem.
- The airplane was an inventory aircraft for Keystone, and the plan was to sell it. It was being operated as a part 91 flight. It had not been operated for a few years, so the company had decided to put some time on it to iron out any squawks, this was one of the reasons he was flying the airplane.
- He serviced the airplane with 60 gallons of fuel at Hurricane.