



RECORD OF CONVERSATION

Timothy W. Monville
Sr. Air Safety Investigator
Eastern Region

Date: May 7, 2018
Person Contacted: Fritz Heunemann
NTSB Accident Number: ERA17LA067

Narrative:

FAA inspector Fritz Heunemann of the Richmond FAA Flight Standards District Office (FSDO) was contacted by phone on December 12, 2016, at 1105 EST. He was called at [REDACTED] ext. 251. He provided an e-mail address of [REDACTED]

He indicated that he did not go to the accident site. He did give his notes to the FSDO manager. He indicated that per the pilot, the airplane remained suspended in a tree coming to rest about 1 foot from the ground. The airplane came to rest with the left wing low about 90°.

He provided a phone number and e-mail for the pilot as [REDACTED] and [REDACTED]. She is a FAA designated pilot examiner (FAA DPE).

He indicated that after takeoff from runway 27, the pilot experienced a severe engine vibration and noted the exhaust gas temperature (EGT) for the No. 2 cylinder was overtemperature. She turned crosswind, to downwind, and the engine lost either partial power or quit. He indicated that the pilot attempted to land on runway 27, but collided with trees.

The digest was reviewed with him during the call and he agreed with the content.



RECORD OF CONVERSATION

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Sr. Air Safety Investigator
Eastern Region

Date: December 22, 2016
Person Contacted: Linda B. Mathias
NTSB Accident Number: ERA17LA067

Narrative:

Ms. Mathias was contacted by phone on December 12, 2016, at 1136 EST. She was called at [REDACTED] She provided an e-mail address of [REDACTED]

At the beginning of the phone call she was advised that the NTSB is a federal agency mandated by Congress to investigate aircraft accidents, and NTSB has no authority to take any action against any individual. She was also informed that the purpose of an NTSB investigation is for safety only, and any person NTSB talks with has the right to representation; she agreed to the interview without representation.

She provided an address of [REDACTED] Norfolk, Virginia, [REDACTED] She is 5'4" tall, and weighs 150 pounds. She indicated that she holds an airline transport pilot (ATP), and flight instructor certificates. She is also a Designated Pilot Examiner (DPE). At the ATP level she has a rating for airplane multiengine land, and on her ATP certificate holds commercial privileges for airplane single-engine land, and glider. On her flight instructor certificate, she has ratings for airplane single-engine, airplane multiengine, glider, and instrument airplane. Her pilot certificate number is [REDACTED] She holds a third class medical certificate with no limitations issued dated December 18, 2015. She indicated she has approximately 4,950 hours total time, and 290 hours total time in make and model. In the last 90 days she estimated she has accrued between 3 and 4 hours.

The two-seat (side-by-side) tricycle gear airplane is kept in a hangar at KFKN, and is equipped with a 120 horsepower Jabiru engine which is carbureted. The engine was new when installed in the airplane. It is also equipped with a Chelton Flight Systems primary flight display (PFD) and a multifunction display (MFD). Flight controls are installed at both seating locations, and a 10.5-gallon fuel tank is installed in each wing, bringing the total usable fuel capacity to 21 gallons. The canopy, opens forward. The airplane's empty weight is 883 pounds, and the gross weight is

1,425 pounds, which allows for 50 pounds of baggage. At the time of the accident, she estimated the baggage area had no more than 5 to 6 pounds of paperwork, her purse, and approach plates. The airplane total time at the time of the accident is approximately 293 hours, while the total time at the last condition inspection was 291.5 hours. The airplane is also equipped with electrically controlled flaps. The standard speeds in terms of miles per hour for the downwind and base legs are 80 and 75, respectively, and she maintains 75 on final until over the threshold. The airplane V_{so} is 65 mph. The airplane is not equipped with a stall warning horn or light. An Andair fuel selector allows for selection of fuel from either the left or right tank positions.

The pilot-rated passenger (commercial pilot) on board at the time of the accident, Paul Ruehrmund, seated in the right seat, is between 5'10" and 5'11" inches tall. She was not sure of his weight.

She provided the following timeline for December 10, 2016 –

Both fuel tanks were filled with 100 low lead (100LL) fuel while the airplane was in the hangar in anticipation of the Part 91, personal, local flight. She indicated that she was the pilot in command, and they possibly intended to fly to Suffolk Executive Airport located in Suffolk Virginia to execute a localizer approach. When asked if she performed weight and balance calculations before the flight she indicated she did not. She did however indicate that she had flown numerous times in the same configuration (fuel load and passenger) and knew the airplane was within limits; however, she did not recall what the airplane gross weight was in that configuration. She did not have a flight plan filed, but did get a weather briefing via a computer. The weather conditions at the time of the accident consisted of clear skies and a wind from the northwest.

A preflight inspection of the airplane was performed after fueling while the airplane was in the hangar, and the airplane was then pulled out of the hangar. In advance of starting the engine she turned on the auxiliary fuel pump to prime/pressurize the fuel delivery system since it is not equipped with a primer, then turned the fuel pump and battery off and exited the airplane. She manually pulled the propeller through six times, once for each cylinder. She re-entered the airplane, started the engine and taxied to the runway noting the wind was reported to be from 250 degrees at 7 knots. She performed an engine run-up with no discrepancies reported and listen to the AWOS which indicated the wind was calm.

She initiated takeoff from runway 27 with the fuel selector position to the left tank, and after becoming airborne when the flight was at approximately 100 feet above ground level (AGL) she felt a vibration. She immediately observed that all exhaust gas temperature (EGT) readings were higher than normal, but the reading from the No. 2 cylinder was over the maximum red line limit. After noting the EGT readings, she no longer felt the vibration. She noted a partial loss of engine power but kept full throttle applied and informed her passenger that something was not right. She turned crosswind and then downwind, where while maintaining 80 miles per hour, she made a radio call announcing her intention to return. She heard another airplane announce they were on approach, and she was about to inform that pilot of her emergency condition, but she noticed the pilot of that other aircraft turned away. She received a terrain warning indicating her flight was less than 500 feet AGL. She turned onto base leg, and while flying about 200 feet

AGL, she reduced throttle to slow from 80 to 75 miles per hour in preparation to turn onto final. At that moment, the left wing dropped immediately. She indicated she did not feel any airframe buffet, and reported the airplane impacted trees while in the left-wing low attitude, and remained suspended. She was asked during the interview if she feels the airplane stalled, and she indicated it probably did. Both were able to exit the airplane and after she got out of it she called to the airport and informed them of the accident. She indicated that first responders arrived; however, they had trouble locating the accident site because of the woods. She and her passenger walked out of the woods, and were then treated by first responders. She and the passenger were taken to a nearby hospital for treatment of their injuries. She estimated the time of the accident as 1215 EST. She indicated the 121.5 MHz emergency locator transmitter which is located under the floor in the baggage compartment activated; however, it did not help locate the accident site.

There was no postcrash fire, and fuel leaked from the left-wing. She could not tell if there is any fuel remaining in the right wing. There have been no issues with the engine since the airplane was built. She was asked if she ever experienced any fuel issues regarding fuel purchased at FKN; she indicated she had not. She also indicated that there was another airplane fueled from the same source either before or just after her airplane, and she reported there were no issues regarding the fuel with that airplane. The manager of FKN airport is Jimmy Gray.

Her injuries include – [REDACTED]

[REDACTED] She was wearing the 4-point restraint.

His injuries include – [REDACTED]

[REDACTED] He was wearing the 4-point restraint.

The digest was e-mailed to her for review on December 12, 2016, at 1730 EST. By e-mail on December 12, 2016, at 2109 EST, she indicated in part, "...The engine never completely lost power; I kept full throttle until I slowed to turn final." She replied on December 13, 2016, at 0942 EST with comments that were incorporated into the narrative. The corrected digest was e-mailed to her for review on December 13, 2016, at 1105 EST. She replied the same day at 1313 EST, with comments that were incorporated into the narrative. The corrected digest was e-mailed to her for review on December 13, 2016, at 1407 EST. She replied the same day at 1428 EST, with, "Mr Monville, Draft Version 3 appears correct to me. V/R, Linda." She provided comments on 12/19/2016 that were incorporated into the narrative. The corrected digest was e-mailed to her for review on December 21, 2016, at 0804 EST, and she replied the same day at 1631 EST, with, "Yes, I believe this is more accurate now. Thanks, Linda Mathias"



RECORD OF CONVERSATION

Timothy W. Monville
Sr. Air Safety Investigator
Eastern Region

Date: May 7, 2018
Person Contacted: Jimmy Gray
NTSB Accident Number: ERA17LA067

Narrative:

Jimmy Gray, manager of Franklin Municipal-John Beverly Rose Airport (FKN), Franklin, Virginia, was contacted by phone on December 14, 2016, at 1244 EST. He was called at [REDACTED] He provided an e-mail address of [REDACTED]

He indicated that Tom Shelbey has a key to the hangar where N59JL was placed. He indicated that with respect to N59JL, he fueled the airplane on December 12th. He added fuel to the left tank to the top, and to the right tank to the tab. He reported that 5 aircraft were fueled from the same truck before N59JL, and 2 aircraft were fueled from the same fuel truck after N59JL were fueled. He reported that all 7 aircraft have flown. One aircraft (N626SL) that was fueled within 1 hour of N59JL was flown to Florida. A Robinson R22 helicopter (N82644) that was fueled after N59JL also flew. There were no reported issues from any of the other 7 aircraft fueled from the same fuel truck.

Postaccident, he did an accident report for Eastern Aviation Fuels, Inc (Eastern). He also quarantined the fuel, then did API gravity check, and a brown bag test. He reported having the same number postaccident as when the fuel was delivered with respect to the API gravity check. He confirmed that the fuel truck used has a water absorbing filter installed, and he received approval from Eastern to return the truck in service.

He confirmed the airport does not have any security video, and the airport common traffic advisory frequency (CTAF) is not recorded.

He reported that an airplane inbound to FKN at the time of the accident was doing a practice instrument approach. Because of the accident they had to do a missed approach. He indicated that the accident site was located at 36°42'3.74" north and 076°53'20.59" west.

He was asked to provide a picture of the fuel truck and fuel records.

The digest was reviewed with him during the call and he agreed with the content.



RECORD OF CONVERSATION

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Sr. Air Safety Investigator
Eastern Region

Date: May 7, 2018
Person Contacted: Ken Bain
NTSB Accident Number: ERA17LA067

Narrative:

FAA inspector Ken Bain was contacted by phone on December 15, 2016, at 1140 EST. He was called at [REDACTED]

He indicated that during his inspection of the engine, there was no thumb compression from the No. 2 cylinder. He found erosion of the piston at the No. 2 cylinder position. He will pull the No. 2 cylinder, and will check the oil suction screen and oil filter for particles. He will retain the primary flight display (PFD) and the multi-function display (MFD). He will also check the oil quantity. He confirmed there was no induction issue with the No. 2 cylinder. He indicated he would pull another cylinder to confirm if there was any other damage.

The digest was reviewed with him during the call and he agreed with the content.



RECORD OF CONVERSATION

Timothy W. Monville
Sr. Air Safety Investigator
Eastern Region

Date: May 7, 2018
Person Contacted: Steve M. Harness
NTSB Accident Number: ERA17LA067

Narrative:

FAA inspector Steve Harness was contacted by phone on December 27, 2016, at 1116 EST. The phone number was not recorded.

He indicated that he and FAA inspector Ken Bain have examined the engine. He indicated that they have retained components of the No. 2 cylinder, which showed damage. As part of their inspection they did not check the ignition system. They did however perform a visual examination of the spark plugs, and reported the No. 2 cylinder spark plugs were a little oil fouled. He also reported the No. 2 cylinder piston pin was tight. Close examination of the No. 2 cylinder induction and exhaust systems revealed no evidence of leakage. He reported pulling the opposite cylinder and reported no discrepancies. The damage was confined to the No. 2 cylinder.

He has the primary flight display (PFD), multi-function display (MFD), No. 2 cylinder engine parts, and EIS retained. The avionics box weighs 10 pounds. The PFD S/N was 0144, and the MFD S/N was 0145.

He was advised that I would provide documents for shipping the avionics and engine parts to NTSB, DC.

The digest was reviewed with him during the call and he agreed with the content.