



RECORD OF CONVERSATION

Timothy W. Monville
Sr. Air Safety Investigator
Eastern Region

Date: August 22, 2017
Person Contacted: Jeevanantham “Jeeva” Manoharan
NTSB Accident Number: ERA17LA242

Narrative:

Mr. Jeevanantham “Jeeva” Manoharan contacted NTSB by phone on July 14, 2017, at 1253 EDT. He called from [REDACTED]. He provided an e-mail address of [REDACTED].

At the beginning of the phone call he 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. He 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; he agreed to the interview without representation.

He advised his date of birth is [REDACTED] and his pilot certificate number is [REDACTED]. He holds an Airline Transport Pilot (ATP) pilot certificate with airplane multi-engine land rating, and a commercial pilot certificate with airplane single engine land rating. He also holds a flight instructor certificate with airplane single engine, airplane multi-engine, and instrument airplane ratings, which was last issued due to an address change on June 8, 2017. He has about 2,800 hours total time, of which about 2,500 were as a flight instructor. He has been teaching at Dean International since 2011, as a full-time instructor. He holds a 1st class medical certificate with no limitations issued January 4, 2017.

With respect to the accident flight, the student (Bhavesh Ramrakhiani) had been taking instrument flight lessons with another instructor, but he took over as his instructor after 2 to 3 hours. He has flown about 4 flights totaling about 10 hours with the student teaching him instrument training.

He provided the following timeline for July 13, 2017:

They had planned to fly a Cessna 152, but because an observer wanted to go, they switched to a Cessna 172. He told his student to preflight the airplane, while he got the book and checked the dates of the annual and 100-hour inspections. He then went to the pilots, and told them what he intended to cover, then he (Jeeva) checked the fuel strainer. He visually looked into each fuel tank and noted the level in each was between 1/2 to 1 inch below the top. He also used a dipstick to measure the level of fuel in the tanks, and reported the left had between 14 and 15 gallons, and the right had 15 gallons, bringing the total capacity to about 30 gallons. When using 8 gph for fuel burn calculations which allows for fuel for engine start, taxi, and run-up, the 30 gallons allowed for 45 minutes reserve. The planned flight duration was between 2.5 and 3.0 hours. He also indicated that fuel was not purchased because it was after hours (2000 hours) and fuel was not available. The airplane records indicated the airplane had been operated for 1.0 hour since the fuel tanks were last filled. For fuel consumption, he plans for 1.5 gallons for engine start, taxi, and run-up.

The preflight inspection also included checking the oil. He indicated that the preflight inspection was ok. The other 2 pilots boarded the airplane, but because the rear seat could not hear audio communications using a headset, the observer decided not to go along.

The engine was started at 2030, and the airplane was taxied to runway 9L. The flight departed Miami Executive Airport (TMB) about 2055, with the fuel selector on both and the mixture full rich, and proceeded in a northwesterly direction. They obtained flight following with air traffic control (ATC), and climbed to 1,500 ft mean sea level (msl), then climbed to 2,000 ft msl. While en route to Fort Lauderdale Executive Airport (FXE), Fort Lauderdale, Florida, they operated the engine between 2,350 and 2,400 rpm and the mixture full rich. The flight proceeded to FXE where the student executed a practice instrument landing system (ILS) approach to runway 9. The student wanted to perform a touch-and-go landing, but other traffic prevented this. The instrument approach terminated with a full stop taxi-back landing. The flight remained on the ground between 15 and 18 minutes, during which time he gave a briefing to the student, and followed the checklist. The flight departed FXE from runway 9, then turned to the northwest and climbed to 2,000 ft msl with the mixture full rich and the power set to between 2,350 and 2,400 rpm. The flight proceeded to Palm Beach International Airport (PBI), where they requested with ATC to execute the RNAV 10L approach. On final approach, they asked ATC for a touch-and-go landing, followed by missed approach and holding, where they did 1 procedure turn. The missed approach and flight to LANCH and 1 procedure turn took between 10 and 15 minutes. At that time, about 2215, they had operated the airplane for between 1.5 and 1.8 hours, and he decided to return to TMB. He asked approach control for flight following to TMB, and flew south flying over Boca Raton Airport. Approach then asked them to descend to remain clear of Class B airspace, where they proceeded east, then south following the shoreline. They maintained about 800 ft msl until reaching Miami Port, then after clearing the port and Class B airspace, climbed at full power (2,700 rpm) to 1,100 ft msl.

When near Key Biscayne with the fuel selector on the same position it had been for the entire flight since the initial takeoff from TMB (both), and the carburetor heat still on from their descent in Fort Lauderdale airspace, they listened to the automated terminal information service (ATIS) for TMB, and about that time, the engine sputtered about 2-3 seconds losing power, then increased briefly to 1,500 rpm before losing power again. He followed the checklist, and

attempted to restore power by pumping the throttle and waited 10 seconds but the engine did not respond. He also checked the magneto switch at the left, right, and both positions but there was no response. One fuel gauge was “dead” or low, while the other fuel gauge indicated about 1/2. He moved the fuel selector to the left position, then back to both, then to the right position, then back to both, waiting an estimated 20-30 seconds each time, but engine power was not restored. The fuel selector then remained in the both position. He believed the power loss was not associated with the magnetos, rather, he thought it was associated with fuel starvation. He also reported that the oil pressure and temperature readings were in the green arc at the moment the engine began sputtering, and the aircraft’s battery was still providing power. He also indicated the propeller never stopped, it continued to windmill.

He declared an emergency with ATC, trimmed the airplane, and maintained airspeed while maneuvering for a road. He asked ATC to have emergency equipment standing by. While maintaining 65-70 knots with the flaps retracted, he spotted tree branches of a large Banyan tree and hit them when the flight was between 20 and 30 ft above ground level, then noticed a light pole which could not have been seen earlier due to trees. The airplane impacted the light pole head-on with the propeller spinner. The airplane landed hard on the ground but did not stall, and stopped within 20 to 30 ft. Before exiting the airplane, he turned off the battery and electrical switches, then he and the student who were both wearing only their lapbelts, exited the airplane. Bystanders soon arrived to render assistance. Because he was unable to find/access his cellular phone, he used a bystanders phone to call Robert Dean and informed him of the accident. First responders then arrived.

He was not injured, but the student, whose nose was bleeding because of contact by the control yoke, was taken to a hospital to be checked out but was released that same night.

He indicated the total flight duration was between 2.6 and 2.7 hours based on the hour meter. He was asked how much fuel should have been on-board at the moment of the loss of power and he indicated between 12 and 15 gallons, with a minimum of 10.

He was asked questions about discrepancies with airplanes operated by Dean International, and whether they have any non-written procedures that advise flight instructors not to write down discrepancies. He indicated that he has been with them a long time, and he always does write down discrepancies and they do not get mad when he does so.

The accident occurred about 2315 EDT.

The digest was e-mailed to him for review on July 19, 2017, at 1234 EDT. He replied on July 20, 2017, at 1748 EDT with comments that were incorporated into the narrative. The corrected digest was e-mailed to him for review on July 21, 2017 at 0918 EDT. He replied the same day at 1739 EDT with, “Yes sir that's all correct. Thanks sir. thanks a lot.”



RECORD OF CONVERSATION

Timothy W. Monville
Sr. Air Safety Investigator
Eastern Region

Date: July 20, 2017
Person Contacted: Bhavesh Ramrakhiani
NTSB Accident Number: ERA17LA242

Narrative:

Mr. Bhavesh Ramrakhiana was contacted by phone on July 14, 2017, at 1432 EDT. He was called at [REDACTED]. He provided an e-mail address of [REDACTED]. His cellular phone is [REDACTED].

At the beginning of the phone call he 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. He 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; he agreed to the interview without representation.

He indicated that his date of birth is [REDACTED]. He holds a private pilot certificate, certificate number [REDACTED] with airplane single engine land rating. He has about 160 hours total time. He holds a 1st class medical certificate with no limitations issued on November 14, 2016. He obtained his private pilot certificate at Dean International. He began his instrument training in April 8, 2017. His first instrument flight instructor was Elizabeth Reyes, but because of her schedule in which she could only fly on Saturday, he switched to his current instructor of Jeevanantham "Jeeva" Manoharan, whom he has made 5 flights with.

The accident flight was his first flight that day. He indicated that he planned to fly a Cessna 152, but his friend wanted to go-along and observe the flight. Because of that, they decided to switch to a Cessna 172. But because the rear seat did not have a jack for a headset, his friend decided not to go. He performed a preflight inspection of the airplane using the checklist, and reported visually checking the fuel tanks for contaminants. After a check of each tank, with no water detected, he poured the sample into its respective tanks. During that time, he inspected each fuel tank, and noted the fuel level was close to the top. He also indicated that both fuel gauges on the lower left portion of the instrument panel showed full. His preflight inspection also included a

check of the oil, which was indicating 6-7 quarts. He was in the left seat, and wore goggles only during the instrument approaches. The weather was VFR, with good visibility.

The flight departed Miami Executive Airport (TMB), Miami, Florida, and flew at 2,000 ft mean sea level (msl) to Fort Lauderdale Executive Airport (FXE), Fort Lauderdale, Florida, with the mixture full rich, and the power set at 2,300 rpm. At FXE, he executed an instrument approach, that terminated with a full stop, taxi back landing. The flight then departed FXE, and flew to Palm Beach International Airport (PBI), where he executed another approach, that terminated with a missed approach, and holding for 2 orbits at 2,500 ft msl. After holding, they elected to return to TMB, and flew over the Fort Lauderdale/Hollywood International Airport (FLL), then flew to the shoreline and descended to 700 ft msl. They eventually climbed to 1,000 ft msl, and when near Key Biscayne, between there and TMB, the engine “shuttered” and the power/rpm dropped. The flight instructor took the controls, and an emergency was declared with air traffic control (ATC), who advised that Miami International Airport (MIA) was located about 8 miles from their present position. Because of their altitude (600-700 ft msl), they were unable to land there and told the controller unable. While heading towards Key Biscayne, Jeeva began troubleshooting in an attempt to restore power, but was unable. The flight instructor landed the airplane, and as a result he sustained a small cut on his nose from hitting the control yoke. In hindsight he said he should have braced for impact. He was asked about whether the airplane had shoulder harnesses installed, and he said he was not sure.

He indicated that when the engine lost power, the left fuel gauge was at the lower red arc, or empty, and the right fuel gauge was bouncing and shaking and was reading between 1/4 and 1/2 capacity.

He was asked to describe what he thought had occurred. He indicated that he thought the left fuel tank was empty, and during the flight, he thought more fuel was coming from the left fuel tank than the right. That condition first became obvious when the engine lost power, and he performed the checklist as instructed by Jeeva, and checked the gauges. The propeller never stopped turning, and they were losing altitude from the moment the engine lost power.

Bhavesh indicated he last flew N80457 on a 1.2 hours flight on June 28, 2017. He did not experience any problems with the airplane during that flight, and he did not recall if the fuel gauges went down equally during that flight.

He indicated that the fuel selector was on the “both” position from the moment of engine start, until the moment the engine lost power. It was not moved until attempts to restore engine power were performed.

The digest was e-mailed to him for review on July 20, 2017, at 1155 EDT. He replied the same day at 1206 EDT, with, “My current instructors name is Jeevanatham "Jeeva". Rest everything is correct according to my knowledge.” His comments were incorporated into the narrative.