



RECORD OF CONVERSATION

Timothy W. Monville
Sr. Air Safety Investigator
Eastern Region

Date: July 29, 2016
Person Contacted: Damon J. Williams
NTSB Accident Number: ERA16LA261

Narrative:

Mr. Williams contacted NTSB by phone on July 21, 2016 at 1331 EDT. He was called at [REDACTED] and left a voice mail message. He returned the call the same day at 1636 EDT, and advised during the brief call that he was not the pilot-in-command (PIC), and was seated in the left seat. He indicated that Mr. Gregg was the PIC and provided a cell phone number for him of [REDACTED]. He indicated he would call on July 25, 2016.

On July 25, 2016, at 0751 EDT, Mr. Williams contacted NTSB. He called from [REDACTED]

At the beginning of the phone call on July 25, 2016, 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 any person NTSB talks with has the right to representation; he agreed to the interview without representation.

He provided a home address of [REDACTED] Ball Ground, Georgia [REDACTED]. His wife's e-mail address is [REDACTED]. His pilot certificate number is [REDACTED]. He holds commercial pilot and flight instructor certificates with rotorcraft helicopter rating. He has about 700 hours total time, of which about 100 hours are in make and model. In the last 90 days, he has accrued about 150 hours. His second class medical certificate with no limitation was issued on February 5, 2016. He is an occupational pilot, flying aerial tours in Bell 206 JetRanger and LongRanger helicopters near the Smokey Mountains. He and Mr. Dobbs (helicopter owner) are friends.

On the day of the accident, he and Mr. Gregg went to look at Mr. Dobbs helicopter. At that time Mr. Dobbs told him to fly it, but Mr. Williams advised Mr. Dobbs that he was not proficient and to fly with Mr. Gregg. With Mr. Dobbs in the left seat and Mr. Gregg in the right seat the flight departed; Mr. Gregg performed two autorotations to touchdown with no issues. Afterwards, Mr.

Dobbs exited the helicopter and told Mr. Williams to get in, which he did; he was seated in the left seat. He was wearing a seatbelt and shoulder harness. The flight departed and Mr. Gregg flew around the pattern twice, hovered, and did several “pick-ups and put-downs” in addition to flying around a taxi-way light. After the last touchdown while on the ground with the engine running between 30 seconds and 1 minute, they discussed the correlator vs. the throttle. They planned to test it by advancing the throttle to the center of the green arc and would then pick-up but would not touch the throttle to see the correlator in action. Mr. Gregg rolled on the throttle and Mr. Williams looked up and knew the rpm was climbing but not yet at 100 percent rpm. The helicopter started shaking a little bit, which became worse. Mr. Williams recognized the shaking as ground resonance, and told Mr. Gregg to pick up off the ground. Mr. Williams put his hand on the collective to assist raising the collective and noted it was coming up but the helicopter did not leave the ground; Mr. Williams did not touch the throttle. He reported the helicopter would not leave the ground, but when asked reported he believed that the engine did respond when the throttle was advanced.

Mr. Williams estimated about 15 minutes elapsed between their initial departure and the accident. He also indicated that Mr. Gregg flew like the 1,800 hours he reportedly had. He (Mr. Williams was not injured).

The digest was e-mailed to him for review on July 26, 2016, at 0945 EDT. He replied on July 28, 2016, at 0945 EDT, with changes that were incorporated into the narrative. The corrected version was e-mailed to him for review on July 28, 2016, at 1014 EDT. He replied on July 29, 2016, at 1211 EDT with, “Mr. Timothy, Your notes to our conversation appear accurate. If any questions please let me know.

Thanks,
Damon Williams.”



RECORD OF CONVERSATION

Timothy W. Monville
Sr. Air Safety Investigator
Eastern Region

Date: September 16, 2016
Person Contacted: Ron Dobbs
NTSB Accident Number: ERA16LA261

Narrative:

Mr. Ron Dobbs was contacted by phone on July 21, 2016, at 1449 EDT. He was called at [REDACTED]

He indicated that the helicopter is owned by R&B Helicopters, Inc., (FAA records indicates he is the President and CEO of that corporation). He indicated that he knows Mr. Williams well, and provided an e-mail address of [REDACTED]. He was asked where the maintenance records were located and indicated he has possession of them. The mechanic who performs the maintenance is Steve Slater, who can be reached at [REDACTED]. Mr. Slater will be in the area on July 24, 2016. He indicated that the helicopter is insured, and the insurance adjuster is Harry Brooks.

Prior to the accident flight, he performed a preflight inspection of the helicopter and visually looked at the skid dampers and noted they looked good with no leakage. He then flew the helicopter for about 10 to 15 minutes with Mr. Gregg on-board. During that flight which included his (Mr. Dobbs) execution of 2 full-down autorotative landings, the aircraft tracked good. He reported that there was no bounce during any of the landings. After his flight terminated, he departed the helicopter and felt comfortable letting them fly it. Mr. Williams boarded it for their intended flight; both were flight instructors.

With respect to the accident flight with information that he knows, they were sitting on a taxiway discussing the correlator, when a vibration occurred. Throttle was applied to pick the helicopter to a hover, but they were unable.

The digest was e-mailed to him for review on July 26, 2016, at 1431 EDT. He replied on August 2, 2016, at 1411 EDT, with, "Hi Tim, I have no further comments on the accident. Your record of our conversation appears correct. Regards, Ron"



RECORD OF CONVERSATION

Timothy W. Monville
Sr. Air Safety Investigator
Eastern Region

Date: August 2, 2016
Person Contacted: Travis L. Gregg
NTSB Accident Number: ERA16LA261

Narrative:

Mr. Travis L. Gregg was contacted by phone on July 25, 2016, at 0903 EDT. He was called at [REDACTED] and left a voice mail message. He returned the call the same day at 1508 EDT, from the same phone number.

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 advised that the NTSB interest is in safety, and preventing similar type accidents and incidents. He was also informed that any person NTSB talks with has the right to representation; he agreed to the interview without representation.

He provided a mailing address of [REDACTED] Greeneville, TN [REDACTED] and an e-mail address of [REDACTED]. His pilot certificate number is [REDACTED] and he holds commercial and flight instructor (CFI) certificates both with Rotorcraft Helicopter rating. His CFI expires on April 30, 2018. He is an occupational pilot, flying aerial tours in Bell 206 JetRanger and LongRanger helicopters near the Smokey Mountains. He has about 1,800 hours total time, and 200 to 225 hours in the last 90 days. Prior to the accident flight he has never flown the accident make and model helicopter before. He was issued a 2nd class medical certificate with no limitations on March 7, 2016.

He indicated that he works with and is a friend of Damon Williams, who is also a CFI, and was on vacation from his job July 10 thru July 19, 2016.

He provided the following timeline:

July 15, 2016 –

He and Mr. Williams checked the weather in advance of their flight the following day and remembered it indicated the visibility was clear and the ceiling was higher than 10,000 feet.

July 16, 2016 -

He went to the Cherokee County Airport (CNI), located in Canton, Georgia. He indicated that he had not flown a Robinson R22 helicopter in 2 years, and told Mr. Williams that he was not proficient in that make and model helicopter. While there, he and Mr. Williams performed a preflight inspection to a Robinson R22 helicopter, and then departed performing hover work, and approaches. During that flight, they performed three exchanges of the flight controls each with verbal and visual acknowledgement. They then flew to Tom B David Field Airport (CZL), located in Calhoun, Georgia, which is where the owner (Mr. Dobbs) of N6148D kept it. While there, he met for the first time Mr. Dobbs, who indicated to Mr. Williams during that meeting that if they wanted to fly N6148D it was OK to preflight it and fly. He (Mr. Gregg) told Mr. Williams at that time he could not afford to fly it and that he had never flown a Schweizer 269C-1 before, which was equipped with a fully articulated single main rotor system. Mr. Dobbs told Mr. Williams to fly with him in N6148D. They performed a preflight inspection to that helicopter, but both failed to check the maintenance records to see if the helicopter was in annual inspection. Mr. Williams indicated to Mr. Dobbs that he did not want to fly and perform emergency procedures because he was not current. Mr. Dobbs got in the left seat and Mr. Gregg got in the right seat. Mr. Dobbs started the engine, and the flight departed but remained in the traffic pattern. Mr. Dobbs executed two autorotative landings to touchdown and one to a power recovery. After the flight concluded, Mr. Dobbs exited the helicopter and Mr. Williams boarded it.

In advance of their flight (Williams and Gregg on-board), they did not discuss who would be considered pilot-in-command (PIC). Mr. Gregg indicated that he would have never got into the helicopter without a CFI on-board, but also indicated the flight was not an instructional flight. He also indicated that if he had checked the maintenance records and noted the helicopter was out of annual inspection, he never would have flown in the helicopter.

He was seated in the right seat and was wearing the seatbelt and shoulder harness. There was no flight plan filed and no preflight weather briefing. The flight departed and he performed an approach to the airport and also quick stop to a parallel taxiway. At that time Mr. Williams indicated to him to watch the rpm, and asked if he could take the controls. Mr. Williams hovered, and they did a flight control change that was verbalized. He flew for about 10 to 15 minutes in the immediate vicinity of the airport, and then landed the helicopter into the wind (wind was calm) on a parallel taxiway indicating the landing was not hard. The throttle was at idle and Mr. Williams provided him positive critique of his flying session specifically stating that he managed rpm well for his first time in the helicopter. They then discussed the correlator and how it maintains rpm vs a helicopter equipped with a governor. After the discussion with the collective full down and his hand on it, he rolled on throttle, and as the rpm increased, he felt shaking and "boom boom." He noticed a vibration, and 2 really big sounds. Although he had never experienced ground resonance before, he had read about the subject during training and felt what they were experiencing was ground resonance. He began to slowly roll off the throttle, but the vibration increased. At that time Mr. Williams advised him to pick the helicopter to a hover and

placed his hand on the collective. He (Mr. Gregg) rolled on throttle and with the rpm near the green arc, the helicopter began shaking; the helicopter never got off the ground although the collective was raised. It was clear at that point that the main rotor was contacting the tail boom several times. He looked for a main rotor brake, and then noticed Mr. Williams had his head down. He could not locate the rotor brake (was not equipped) and turned off the ignition switch then remained seated. Up to the point of the abnormal vibration he felt like the flight was conducted very professionally. He estimated they were on the ground about 30 seconds to 1 minute with the engine at idle discussing the correlator vs governor. He (Mr. Gregg) was not injured as a result of the accident.

The digest was e-mailed to him for review on July 26, 2016, about 1325 EDT. He replied on August 2, 2016, at 1111 EDT, with, "Mr Monville, I have read your report from our phone interview, and the report is accurate, with the exception of: I was seated in the right seat of the helicopter, not the left seat. Travis Gregg." This change was incorporated into the narrative.



RECORD OF CONVERSATION

Timothy W. Monville
Sr. Air Safety Investigator
Eastern Region

Date: August 24, 2017
Person Contacted: Steve Gleason
NTSB Accident Number: ERA16LA261

Narrative:

Mr. Steve Gleason of Sikorsky Aircraft Corporation was contacted by phone on January 18, 2017, at 0949 EST. He was called at [REDACTED]

He provided the details of an accident in Italy involving a 269 helicopter, in which I was the U.S. Accredited Representative. As a result of research, the Italian investigator(s) learned that dampers that passed on-airframe testing would not pass testing on a bench. As a result of research by Sikorsky, in April 2014 they developed/published Alert Service Bulletin (ASB) C1B-041 that identified a one-time load/stroke inspection of landing gear dampers at an overhaul or repair facility. He also indicated that on October 15, 2014, they changed their damper overhaul procedures, requiring in part a load/stroke inspection as part of the damper overhaul procedures.

He indicated that with respect to the landing gear dampers, a field check on-airframe per section 12 of the Handbook of Maintenance Instructions (HMI) will only show a low charge or if they were leaking in-service, but would not show if a damper was overserviced. Sikorsky (formerly Schweizer) considered developing a maintenance test to detect an overserviced damper, but they could not come up with a plan that was definable. As such, I asked if they could incorporate Alert Service Bulletin (ASB) C1B-041 into section 12 of the HMI.

With respect to the landing gear dampers, he indicated that all damper part numbers vs position were correct. He also indicated that mechanically the front damper caps are different. He offered details concerning the dampers related to section 12 of the HMI:

Left Forward - was undercharged and would have been detected

Right Forward – was undercharged and would have been detected. Based on his experience/past testing, the results were consistent with a higher than normal fluid level.

Left Rear – was slightly undercharged. He surmised it would likely would not have been detected, was likely a little high on fluid, and close to gas charge.

Right Rear – was overcharged. Would not have been detected

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: August 24, 2017
Person Contacted: Steve Gleason/Mike Jones
NTSB Accident Number: ERA16LA261

Narrative:

A conference call was held with Mr. Steve Gleason of Sikorsky Aircraft Corporation, Mike Jones of FAA, and Tim Monville of NTSB on February 2, 2017, at 1230 EST.

Mr. Steve Gleason provided background details indicating they become aware of 1-2 ground resonance accidents each year. In about 50 percent of the cases, all dampers were deficient. Most were overcharged, and some were undercharged, but all tested bad.

Mike Jones indicated that the helicopter Type Certificate Data Sheet (TCDS) lists "Landing Gear Oleo Pressure", and asked Steve whether this could be checked, he indicated it could not. Mike also asked about the change to the damper field check procedure. Steve indicated that Sikorsky developed a load stroke test after overhaul, which was also incorporated into an Alert Service Bulletin (ASB). Mike also asked Steve whether Sikorsky was willing to re-evaluate the on-airframe test procedures for maximum values test limits. Mike indicated that he witnessed the same mechanic perform on-airframe testing per section 12 of the Handbook of Maintenance Instructions (HMI). Steve indicated that the dimensions in the HMI are average. He relayed about a 269 accident in Italy, in which the accident dampers were tested and found to be overcharged; however, as part of the investigation, they were then put on another airframe and tested per section 12 of the HMI. During that subsequent testing they passed. He indicated that the on-airframe testing would only show if the dampers were weak or low, and would not show an overserviced condition.

NTSB asked Steve if an overcharged damper would not be detected in testing of section 12 of the HMI, would they be willing to add a test to that section to find an overcharged damper. He was also asked if they could incorporate the ASB into the HMI. He indicated he would check with engineering and advise. Steve did indicate that related to dampers and ground resonance, since the ASB was published, there were 0 accidents worldwide in 2015, and only 1 on 2016.

Steve confirmed that all landing gear dampers of the accident helicopter (N6148D) were completely dry, with the inside of the boots dry. Therefore, they were improperly serviced. He indicated that typically with fluid loss or leakage, there would be a corresponding pressure loss.

Mike Jones indicated that with respect to an overserviced damper, he made an internal recommendation to the FAA Aircraft Certification Office.

The digest was reviewed with them during the call and they agreed with the content.