



Record of Conversation

Fabian Salazar
Air Safety Investigator
National Transportation Safety Board
Investigator in Charge

NTSB Accident Number: WPR21LA070
Aircraft Registration & Make/Model: N261MD / SilverLight AR-1
Accident Location: Heber, Utah
Accident Date: December 16, 2020

David Seace
Pilot / Experimental aircraft mechanic employed at SilverLight LLC
December 21, 2020

In a telephone interview with Mr. Seace, he stated that he was a mechanic on experimental aircraft and was employed by SilverLight LLC. He estimated that he had 1000 hours flying experience in the AR-1 gyroplane. He stated that he has helped the owner of SilverLight in test flying and adjusting gyroplanes. He stated that the company is building the third gyroplane with a Rotax 915iS and that the engine is quite a powerhouse.

He stated that Dr. Mauro (the owner) came to the shop twice for the builder's assist. The owner had spoken to another customer and that customer stated that Mr. Seace helped him assemble his gyroplane after it was shipped from the factory to his home, so the owner asked Mr. Seace if he would come out to Utah and do the same. He stated that when he did go to Heber, Utah to assist the owner, and the owner could not provide him eight hours access to the gyroplane due to previous commitments.

When he did train with the owner, on Saturday, he stated that the owner wasn't efficient with the brakes. They overcame that challenge by modifying the brake handle with a knob from the back seat and attached it to the front brake handle. This aided the owner's grip, and he was then able to hold the brakes while the pre-rotator system was engaged. On that Saturday the owner was able to practice prerotating and charging forward. The goal was to observe that the airspeed and rotor RPM increase together. Mr. Seace stated that the owner was able to prerotate the rotor system and charge forward without overrunning the rotor blades. He said, "that was the extent of that day."

On Sunday, Mr. Seace was in the back seat, and he flew the traffic pattern with the owner shadowing him on the controls. After they landed, Mr. Seace gave the controls to the owner. He said the owner “showered down on the throttle.” Mr. Seace told the owner that was a totally unnecessary amount of throttle, and Mr. Seace took some of the throttle out. Mr. Seace said that the owner also had the [control] stick buried to the right. Mr. Seace stated that after they had gotten into the air, they were fine.

Mr. Seace observed the pilot turn early on the downwind leg and stated that he would like the owner to extend the downwind leg so that the owner had time to get the aircraft stable. He said that the owner replied with the statement “let me do it my way”. The owner then grabbed the controls from Mr. Seace and made an aggressive turn. Mr. Seace stated the gyroplane immediately accelerated to 100 knots and the owner then asked him, “what is wrong with this aircraft?” to which Mr. Seace stated, “there is nothing wrong with the aircraft, it’s you Sir”. They then landed and had a debrief. Mr. Seace stated that he told the owner that if he was not going to listen, there was no sense in him being there. Mr. Seace stated that after that conversation, the owner performed wonderfully. He said that he did have to remind him on every takeoff “reduce power, reduce power, reduce power.”

Mr. Seace stated that he met the owner’s son, who was a gyroplane owner and pilot. Mr. Seace asked the owner if he could go out on a flight with the son in the AR-1 and the request was denied.

Mr. Seace stated that he thought the total time he worked with the owner was about 1 hour 45 minutes on Saturday, and about 2.5 hours in the air on Sunday and about 4 hours on the ground training in prerotating and accelerating.

When asked about the Rotax 915iS engine Mr. Seace stated that it was a fabulous flying aircraft. He stated that he did fly it from the front seat once while the gyroplane was in Zephyrhills, Florida. He said that it had a prerotator issue that was corrected.

When asked about a solo pilot applying power for takeoff. He replied that a pilot should apply power in: “1 Mississippi, 2 Mississippi, 3 Mississippi, 4 Mississippi, 5 Mississippi” he said the throttle should not be shoved in any type of situation to promote a blade flap. He reiterated, “Do not shower down on the throttle.”

When asked about prerotator RPM, he stated that if the belt and everything is all hooked up, and the pilot has a good grip, they have seen 190 to 200 RPMs on that gyroplane. He also said that they recommend 180 to 190 RPM. He said that once the pilot has the prerotate RPMs to 180, that is when the pilot releases the prerotator and slowly brings the control stick back while accelerating slowly. At this point the pilot should see the airspeed and the rotor RPM’s coming up together. If the two are not rising together than the pilot is either underpowered or overpowered. He then stated that once the gyroplane is accelerating down the runway, the nose will want to come up, and the pilot should push the nose back down. He said that the AR-1 with the canopy, breaks ground at about 40 to 50 knots. He said that there is no problem climbing out

at full power. He stated that the canopy plane climbs out at 70 knots very nicely. He stated that there is no need to apply full power on the ground and that doing so increases your chance of over running the rotor blades.

Mr. Seace stated that there is no P-factor for the pilot to be worried about due to the large rudder. He added that if you takeoff with the correct airspeed and rotor speed, the takeoff is pleasant and non-eventful. He stated that on the takeoff roll, the pedals are neutral. When asked about taking off with full power he stated that if you do, there is a 50:50 chance of outrunning your rotor blades. He added that there are generally two types of blade flaps in the gyroplane world. One, the low RPM blade flap that will take the joystick out of your hands and two, the pilot applies full throttle and the blades do not accelerate at all, causing a massive blade flap.

When questioned about the rudder on the AR-1, and how it is controlled, Mr. Seace stated that the rudder is controlled only by the pedals. When questioned about why someone would takeoff with near full rudder deflection to one side or the other, Mr. Seace stated that the only reason would be the pilot.

When asked if the rotor system was unloaded, would there be any fuselage roll, Mr. Seace stated that there are two types of pushovers, with power and without. He stated that if you were to pushover with power the engine would cause a torque roll to the right.

When asked about the maintenance logbooks for the aircraft, Mr. Seace stated that he was certain that the logbooks were in the gyroplane and should be in the bag underneath the pilot's seat. He stated that he observed the owner place the books back in the gyroplane after they reviewed them for a discussion about annual inspection requirements.



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Richard Dal Canto
Son of Pilot
December 22, 2020

In a telephone interview with the son of the pilot, he stated that his father received his private pilot's certificate, and later received his commercial, instrument certificates and multi-engine land rating. He was also a certificated Flight Instructor. He flew a Cessna 421 but sold it and bought a Cavalon gyroplane about five years ago. He flew the Cavalon for about 2 years. He later sold the Cavalon because of the tendency for the gyroplane to "duck walk" on landing if the runway alignment was off. Mr. Dal Canto stated that he bought his Magni M24 about two years ago and flew with his father in it for about one year.

Mr. Dal Canto stated that his father was still as sharp as he ever was, intellectually, and he only noticed slight motor skill degradation (depth perception or reaction) in the last year.

Mr. Dal Canto stated that he was trained to use a traditional method of taking off in a gyroplane by keeping the control stick full aft and as the gyroplane accelerates down the runway, allow the nose wheel to rise about 6 inches off of the runway; holding it there until the gyroplane lifts off of the runway. He stated that, in the Magni, his father could not perform that technique very well and preferred to hold the nose wheel on the runway. Mr. Dal Canto stated that his father's technique risked getting the ground speed ahead of the rotor RPM which could lead to excessive rotor flapping. He then stated that, after reviewing the video, he believed his father did not allow that to happen and balanced on the mains for a nice takeoff. He then added that the PIO's others had observed in the video, were, in his opinion, minor pitch corrections.

Mr. Dal Canto stated that he and his father would have debates as to which takeoff method was safer and he stated that his father believed that his method was safer. He did agree that his father's method had the potential for gaining excess or unwanted groundspeed. He stated that when his father used that technique, he observed lower rotor RPM's than when he used his technique, and he did not like that.

When asked about his takeoff technique, he stated that he allows the gyroplane to lift off the ground on its own. He stated that if you apply aft control stick and lift the gyroplane off of the runway at about 30 knots, the drag will overcome the thrust and the gyroplane would settle back down on the runway. He stated that the only other thing he observed with his father's flying was that he occasionally flew uncoordinated, or out of trim. He said that he was super-anal about yaw control and his father wasn't.

He stated that he had never seen his father fly in a manner like the dramatic pitch up and hard right turn, as seen in the video.

When asked about his father's flying skills after a takeoff, he stated that he had no other concerns, except the flying in trim. When asked if he had ever seen his father displace the control stick left or right during a takeoff, he replied to the negative.

When asked about the pilot and the previous 72 hours, he stated that his father was feeling well in both mental and physical condition. He stated that he was excited and happy on the Friday when the mechanic from SilverLight was at the airport for the final assembly and training. He also mentioned that his father would go snow skiing every morning.

With regards to the gyroplane, AR-1 training, Mr. Dal Canto stated that he was at the airport on Sunday and Davy [David Seace] stated that "he had no concerns with the owner's safety or flying" and "I am not worried at all with you".

When asked if he was aware that his father and Davey had a discussion where Davey stated "if you are not going to listen to me then there is no reason for me to be here", he stated that he had not heard that due to leaving to preflight his gyro.

When asked about a potential father/son adversarial relationship, he stated that it would be a guess, but his father probably didn't care for the son, or a newer pilot telling him how to fly.



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Abid Farooqui
Manager, SilverLight LLC

In a telephone interview, Mr. Farooqui stated that they built and assembled the gyroplane in the company shop in Florida. He stated that he had told the owner he needed to get the paperwork correct after the gyroplane was relocated to Utah. He said that it was a requirement for an experimental, amateur built aircraft, operating instructions, phase one flight criteria.

He stated that he put six hours in the accident gyroplane and David “Davey” Seace had two. He said that it still had about 32 hours remaining on the Phase 1. The owner stated that he was going to put the remaining hours on the gyroplane in Utah. The gyroplane was then trucked to Utah. Mr. Farooqui offered to send a mechanic who was also a pilot [Mr. Seace] to assist in reassembling the gyroplane after shipping it to Utah. He said that to make it legal to operate in Utah, the SLC FSDO would have to approve the changes in the operating limitations. He said that the owner had the gyroplane for a week before Davey showed up, but he did not think the owner had the paperwork corrected.

He said that Davey went with him to show him how the gyroplane operated with two people. He said that Davey reported only flying with the owner for two hours. He said that they finalized the gyroplane on Friday, flew it on Saturday and were supposed to fly it again on Sunday but the owner did not show. He stated that Davey was not a CFI, just a very experienced pilot.

Mr. Farooqui stated that Mr. Dal Canto contacted him about June, inquiring about purchasing an AR-1. Mr. Dal Canto travelled to the SilverLight factory, located in Zephyrhills, Florida, to

participate in the construction of the gyroplane to meet build requirements. He stated that the owner wanted the Rotax 915iS engine due to the high altitude of Heber Valley airport and the desire for better performance than his other gyroplane that had the Rotax 914 engine. He stated that Mr. Dal Canto completed the FAA builder's checklist.

He said that Davey travelled to Utah on Friday (December 11, 2020). He said the gyroplane arrived a week earlier, about 5 or 6 December.