

Adam Ferris

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Long Beach, CA. 90814

My Account of the Events of 11/06/20 Regarding the Accident Involving N109EX:

My name is Adam Ferris and I was the Pilot In Command of the Agusta 109 S, Tail number N109EX, on 11/06/20. I was on a Part 135 HAA mission for Helinet Aviation in accordance with our contract with Keck USC Medical Center to transport a medical transplant team, consisting of two team members, assigned to harvest a heart from a donor at Sharp Grossmont Hospital, in Ej Cajon, California, and subsequently return the team and the donated organ to Keck USC.

N109EX was the aircraft assigned to the mission. The aircraft had been pre-flighted by the team assigned to the shift from 0400 to 1400 that day as is standard procedure so that they are prepared for a flight that may arise. That shift did not end up having an assignment in the aircraft that day. I reported to work early to work my normally scheduled shift from 0730 to 1400 designed to overlap with the shifts both before and after it to provide coverage for all of our contracts. After clocking in I checked in with our dispatch desk to see what we had scheduled for that day and was informed I had been assigned to the USC heart team mission with a pickup at the Keck USC at 1100. Having plenty of time to plan my trip, get organized with all necessary equipment and check weather, I pre flighted 109EX again even though it had not yet flown since it had been pre flighted 3.5 hours earlier by my colleagues. I collected my personal belongings and flight bag necessary and positioned them on board, and proceeded to plan my trip including passenger manifest, weight and balance, and risk assessment for the given conditions as per Helinet's approved Safety Management System(SMS).

The ceiling and visibility on the coast line on the 6th was patchy and not consistent and although they did not disqualify flight activity or fail to satisfy required minimums, I choose a route that was much clearer to the east and around through the Lake Elsinore area because it offered very clear conditions and would only add a few extra minutes to our flight time.

I departed the Helinet base at the Van Nuys airport(KVNY) earlier than I had to so that I would be in position when the medical team was ready to depart. I arrived at USC Keck approximately 15 minutes before scheduled pick up time of 1100. When we approached 1100, the two person medical team emerged from the building separately on to the heli deck one at a time, just a few minutes apart. They were the team I was scheduled to transport and I recognized them as team members I had flown before, and who were familiar with the aircraft, as well seatbelts and safety features contained in the briefing necessary to occupy the helicopter. The team was in no particular rush and while I had first been told by security at the hospital that there was a delay, the medical team chalked that up to a miscommunication and assured me they were ready to depart. I confirmed our destination in El Cajon, and I loaded equipment into the cargo area as the team loaded themselves into the helicopter. After doors were closed, I performed my 360 degree final walk around the aircraft to do a final visual check of all doors and cowlings and

general security of the ship. We departed within the next few minutes, taking the route that I had chosen for superior weather conditions and arrived at Sharp Grossmont Hospital approximately 40-45 minutes later within incident or diversion. I informed Helinet Dispatch of my landing, which was acknowledged via text message, so the timeline kept in internal company records should be accurate.

After unloading the medical team, one of them mentioned that if the lung team from another hospital was being fairly quick about their work, with the heart being removed after, that they would potentially be ready to be picked up in 1.5 to 2.0 hours. I noted that, and proceeded to reposition N109EX to Gillespie airport, which was within just a few miles of the hospital, to refuel and standby for the return trip.

I landed at what are referred to as the county pads at Gillespie, called for the fuel truck and received a dispensed fuel that put my total fuel at close to 400KG. I remained with the helicopter the entire time that I was on standby.

After a little more than 2 hours I was informed that the team was ready with the organ and prepared to be taken back to Keck USC. I called dispatch so that they could begin to get me cleared to return to the hospital pad at Sharp Grossmont, which was confirmed before takeoff, and departed shortly after. Helinet's internal timeline documentation should again be the most accurate indication of times reflecting each leg of the trip.

I returned back to the nearby hospital, we loaded the organ and the team and began our return trip, again informing Helinet dispatch via text message prior to departure.

The less favorable conditions along the shoreline route had persisted further into the afternoon than I had thought they would so again I chose a more inland route that had no real ceiling or visibility concerns although this time a bit more west than the first trip. There were no real weather factors on the route that I chose and we made our way back to the medical team's originating hospital. The return trip again took what I would estimate to be between 40-45 minutes.

Weather conditions in the Downtown Los Angeles area were calm with clear visibility at that time on Friday 11/06 and I had conveyed my position reports including altitude, direction and destination through the LA basin common traffic frequency several times since transitioning out of Fullerton airport's airspace, which was the last contact I had with ATC during that leg of the trip. I did note the presence of helicopters from both the news media and law enforcement in the area. I had advised the medical team of our estimated time of arrival so that they may contact the other members of the transplant team already preparing the organ recipient and also so that they may prepare for the landing.

On approach to USC Keck, an approach I had flown often over the past 18 months working for Helinet, I set up for final to the pad from the Southeast. As I began my descent I positioned the nose of the aircraft off to the left of final approach track in order to gain greater visual contact

with the landing zone. I noted that the trees in the park along that approach track and surrounding the USC Keck building displayed no signs of wind that may be a factor in determining approach direction and obstacle avoidance. This was also confirmed by the absence of any wind indication from the windsock that is affixed to the building on the north side of the pad. The sock was limp. As I descended through approximately 400 feet above the pad, I made a call to our Helinet company dispatch, announcing that I was "short final to Keck/USC", which was acknowledged. I made that call as it is often difficult for that radio transmission to be received once we have landed and also, it allows me to focus on the safe shut down of the aircraft and off loading of the medical team and their cargo.

The approach felt normal as I proceeded. It was a steep approach as this profile allows for a slow measured approach that improves obstacle clearance, confirmation of atmospheric conditions and should a problem occur, it provides for the greatest time and opportunity to abort the approach in favor of an alternative.

Landing checks had already been performed at this point and as I decreased speed between 50 and 40 knots IAS, I switched the variable rpm switch located on the collective from 100% to 102%. This is standard of any approach as it allows for greater tail rotor efficiency when operating at lower speeds, or in the hover. This greater rpm option is used on every approach as it helps in the formation of good habits and to utilize the obvious advantage of increased controllability.

As I was completing the approach, through approximately 40 feet above the pad I started to notice a very slight yaw to the right that developed slowly and brought the nose more in line with the ground track of the aircraft. Not wanting to lose the benefit of the nose left approach and the visibility of the landing area, I made a left pedal input to bring the nose back to where it had been for the beginning of the approach. I sensed immediately that that left pedal input was not having the desired effect on the orientation of the nose as a continued slow development of yaw further to the right was observed. I made further input with the left pedal all the way to the pedal stop, full deflection, with no result as the slow yaw continued through what I estimate to be around 30 feet above the pad.

Realizing at this point that the uncommanded yaw was going to continue regardless of my input, I began to cultivate an alternative plan to completing the landing. There are features of the building at USC Keck that are built up above the level of the landing pad, so my first desire was to clear those areas before changing position of the aircraft over the ground. I thought that if that yaw continued I would eventually be turned back around to the direction from which I had come and would be facing the south east again with an opportunity for an open area towards the park and away from the hospital structure. Once that clearance was gained I thought that I could move back away from the landing area and reassess what had occurred on approach. My plan was to eventually increase forward airspeed as soon as the building was clear of my departure path and let the flow of air help to straighten out the helicopter. I never had that opportunity.

Just as the nose of N109EX cleared the building in a continued uncommanded right yaw, and as I was starting to make a cyclic input away from the hospital, the aircraft suddenly and very violently experienced a dramatic increase in right yaw that I instantly knew was going to be uncontrollable. I felt the momentum of the ship shift so severely that my thought process immediately switched to the idea that the helicopter was going to crash and my only option was to help determine where that was going to happen based on what would give myself and my passengers the best possibility for a positive outcome.

I knew that our best chance to survive the accident was going to be if we stayed on top of the landing pad, away from the building and away from the south west corner of the pad which, if we went off the side of the pad, would be the most exposed to the chance that the helicopter would go off the side of the structure and fall several stories down.

As quickly as I could, I “dumped” the collective, forcing the main rotor system to flat pitch while trying to remain in position over the pad. At this point I of course knew it was going to be a hard contact and that with the momentum of the aircraft on yaw axis we would probably end up on our side and be shifting position on the surface of the pad before the helicopter would come to a rest. We made contact with the pad, rolled left, continued spinning to the right on the aircraft side until we eventually came to a stop, thankfully still on top of the pad.

I knew the aircraft had taken severe damage and realized quickly that I had not experienced major injury. I was conscious and aware throughout the accident. I immediately reached up and shut off the electrical system first. I thought if we were leaking fuel, the absence of electricity may keep that fuel from igniting. I yelled back to the passengers to see if they were alright, only to be reminded of the partition between cockpit and cabin of that particular aircraft. If they did respond, I could not hear it over the loud whine of the turbine engines still spinning. I reached down and turned the engine control switches in to the off position, shut off the fuel pumps and the fuel flow cut off switches, all located on the center console. The engines continued to spin. I unlatched my seatbelt and started searching for my prescription glasses that had flown off during the accident. I could not see well without my glasses, but I looked back through the partition window to the cabin and it looked as though my passengers had pulled the window tabs on the right side door that allowed for emergency exit from the aircraft. I felt reassured that they were conscious and active in removing themselves. I did not sense that there was any fire in the aftermath, so I continued to look for my glasses so that I could see and my cell phone so that I could make contact with my company.

Knowing that I would have to get out of the helicopter soon, I noticed that the co pilot side roof bubble had been broken. Wanting to have multiple exits, I gave it a kick with my boot, but it was too rigid even though it was broken and I abandoned that idea. The engines still running on the fuel in the lines, I tried to think of anything else that I could turn off to make that stop. I pulled the manual engine levels, The PLAs, to the off position. I then tried to open the door with the regular lever two or three times. It didn't open so I pulled the door jettison handle, it popped out quickly and I threw the door to the ground outside the helicopter. I looked up through the jettisoned doorway, saw that the back door to the cabin was open and looked inside to confirm my

passengers had exited. Seeing we still had no fire, I went back down into the cockpit to see if I could locate my glasses and phone again, but I never found either one. Someone outside the helicopter began spraying fire retardant which descended in part down in to the cockpit, so I decided it was time to get out. I reached up, hoisted myself out through the pilot side doorway and jumped down off the side of the helicopter on to the surface of the pad and was immediately received by hospital personnel who laid me down, away from the aircraft to assess my injuries. I asked about my passengers and was told that they had both exited the aircraft safely and that they had both refused medical attention. That was of course the greatest relief imaginable.