

### MEMORANDUM FOR RECORD

Allison Diaz Air Safety Investigator Office of Aviation Safety – Eastern Region

Date: January 7, 2015 NTSB Accident Number: ERA15FA085 Persons Contacted: Jonathan Desouza and Robert J. Baker, Esq.

### The following is a summary of the interview conducted on this date regarding the aforementioned accident:

- Mr. Desouza was receiving instruction from CFI Luis Aviles when the accident occurred.
- He stated that he had 37 hours of flight time, and was nearing his private pilot checkride.
- The accident flight was Stage 3, lesson 2 in the Palm Beach Helicopters' training syllabus, and the purpose of the flight was to practice maneuvers in preparation for an upcoming stage check.
- Prior to the accident, they had conducted 2 or 3 steep approaches and a maximum performance takeoff. The autorotation immediately preceding the accident was the first autorotation of the flight.
- When conducting traffic pattern operations at LNA, they would typically turn crosswind at 500 feet, and climb to a traffic pattern altitude of 1,000 feet before beginning the approach or autorotation.
- He recalled flying the traffic pattern at an airspeed of 70 knots.
- He could not recall the rotor rpm indication during the autorotation, and could not recall if carburetor heat was used during the maneuver.
- He stated that about 100 feet above the ground, the CFI yelled, "We're going down, we're going down." At this time, the CFI was at the controls.
- He stated that on the downwind leg of the traffic pattern, the CFI had his cell phone out and appeared to be using the FaceTime app. It looked like the CFI was showing the individual on the other end of the call the view outside of the helicopter. He could not recall when the phone was put away.

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- He stated that, when performing an autorotation, a touchdown spot would be selected during the base to final legs of the traffic pattern.
- On the accident flight, he could not recall any conversations between himself and the CFI that took place prior to entering the autorotation, or what the selected touchdown point for the autorotation was. He could also not recall who initiated the autorotation.
- He recalled that, as the CFI attempted to recover, there was no response from the engine when the throttle was rolled on, and it was "like it stalled out."
- He stated that he remembered the helicopter pitching forward when no response was received from the engine.
- He stated that, at the beginning of the accident flight, he had chosen to wait for other traffic to depart, which the CFI "wasn't happy about."
- He further described the CFI as someone who "wanted things done right," and said he "worked hard" and was "professional." If he was experiencing personal issues of some kind, he would not have allowed them to interfere with the flight.

END



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Date: December 30, 2014 NTSB Accident Number: ERA15FA085 Persons Contacted: Jonathan Desouza

The following is a summary transcription of a recorded interview conducted by Detective Joseph Greco, Palm Beach County Sheriff's Office, on December 31, 2014 approximately 0800. Questions posed by Det. Greco depicted in bold typeface; answers given by Mr. Desouza follow:

How long have you been a student at Palm Beach Helicopter? [Since] September How many hours do you think you have total? Instruction time, probably right around 36 hours. When you go up in the aircraft with an instructor, are you the one that's taking off, is he just basically sitting and instructing, watching over? Yeah pretty much. So you're in control from the time you pretty much leave the ground and return? He's the pilot in command, but yes pretty much he just tells me what maneuvers to do [on the] controls, I'll do the maneuver and he'll take controls back. How often do you fly with that instructor [Mr. Aviles]? He's my primary instructor, it's him and one other guy. That morning that you guys left, how long were you in the air, like 45 minutes, an hour? What's your normal... That morning we were set to fly from 9 to 1. Were you experiencing any problem with the aircraft at all? No, not really. Not at all really. Not that I recall offhand. Do you remember what maneuvers you were practicing? Autorotations. It's pretty much a simulated engine failure. Simulated engine failure? Ok. And how do you do that?

That maneuver [unintelligible] about 1,000 feet, and then we'll drop the collective, give it right pedal, aft cyclic, and roll off the throttle.

### What does the right pedal do?

Just trims it. When you take away collective it swings the nose to the left so it just compensates it. Puts it back straight.

### Drop collective, right pedal...

Aft cyclic, slow the bird down, keep the nose high. Look for 65 knots, then roll off the throttle to take away the engine rpm.

#### And the nose stays up?

Yeah. And that's about it, really.

### And how far do you drop from 1,000 feet?

Drop to about 100. Then at 100 you start doing your checks. Looking at your exterior, then at 40 feet you flare, that means when you come down, you do like...come down, come down, come down, 100 feet look around, then you count 3, 2, 1, flare, flare, flare, and then you just lay it down on the ground.

### **Ok.** And that's what you guys were practicing on the north side of the airport? Yeah.

#### And that was something that you were in control of at the time, doing that?

I really do not recall. I just remember him saying "We're going down," and he had the controls. I have no idea. I don't know if the engine cut off or if the engine didn't turn back on or...

### So the engine actually gets shut down? Do you remember if it shut down?

You roll off the rpm and bring it to pretty much idle. So I don't know if he rolled it back on and the engine just wasn't there, or something.

## When you were dropping down, were you keeping...did it feel like you were going down much faster, or did everything appear normal as you were coming down?

It appeared pretty normal.

### Pretty normal, then at 100 foot...

Something happened, the engine didn't turn back on or...I just remember him saying, "We're going down, we're going down" and then that's all I really remember, just him saying that and then seeing the ground and then after that I woke up in the back of the trauma hawk and I probably only glimpsed it for like 3 seconds and then I woke up here.

### So you started in September at the flight school, you've got 36 hours of instruction plus the ground time.

Yeah. I was right about the time for my license. I had about 3 or 4 more instruction classes and then it was going to be time for my checkride to get my license.

### Are you familiar with the Robinson, that aircraft, is that the only one you practice on? Yeah.

What is your weight by chance?

175

### What is the maximum weight of that aircraft?

Maximum weight, 1370

#### What will it actually carry payload wise?

I think the empty weight's about 900, so that'd put us at 470. Luis weighed 190.

# Do you have any other information that'll help us understand what happened at all, or, there's no other aircraft involved in this, you guys weren't trying to avoid another aircraft at all?

No

### You were just practicing –

Autorotations

### Autorotations. And that was at the north side...is that a common place to practice around that area?

Yeah. We make a [radio] call, we say like "helicopter one mike mike is simulated engine failure to runway 15 and taxiway delta or bravo" so we make our intentions pretty clear for aircraft around.

### Have you ever done the autorotations before?

Yeah, definitely.

### And that's just to simulate the engine stall, and basically gliding it in?

Yeah. 'Cause as long as you keep forward air movement through the rotors it will stay spinning and stay hovering.

### So does the nose pitch down or stay up?

You wanna hit 65 knots so you pretty much pitch the nose down and you keep that air moving through it. 'Cause if you don't have 65 knots, you won't have enough power in the rotors to do a flare. And the flare's pretty much how you land. You come down, 100 feet, 3, 2, 1, flare, flare flare...

#### And how does a helicopter flare? Is it through the pedals somehow?

Just pull aft. You pull aft at first to level you out, but then at the bottom you pull more aft and that's what brings you back.

### Ok. Any other information you have to help us?

Honestly I do not know what happened. I honestly do not know. I don't know if I hit my head, but it's pretty much blank. The only thing I remember is Luis saying, "we're going down, we're going down." That's the only thing I remember.

### Ok. And that was at like the 100-foot mark, where you realized you didn't have control of the aircraft?

Yeah. I'm pretty sure by that time he had the controls.

So you were practicing the autorotation, dropping down and at 100 foot the aircraft didn't respond and then when he would have taken control and that's when you remember him yelling "we're going down, we're going down" and you don't remember anything after that?

No. Luis is usually pretty good with taking controls when it wasn't a safe situation you know? He'd always just snatch them from me when something wasn't safe or if I was just in the wrong.

END

Jonathan Desouza's description of the December 29, 2014, helicopter incident:

On the day of the incident (dec.29) it started as a regular morning, woke up around 7am to eat and shower and get ready for my 9am lesson. I remember it being a beautiful sunny morning. I usually got to the airport 30-45 minutes before my flights to do the flight plan, check weather, talk to my instructors and do a preflight on the helicopter. This morning seemed like just another routine flight that we've done plenty of times before. When I went to the helicopter that morning I followed the preflight check that is posted in the robinson POH. Luis met me and went through his own preflight all checked out and we were ready to start up 771MM. We went through the start up procedure and took off from the pads and began some hovering exercises right on the taxiway by the pads. Then it was time to get in the pattern and practice approaches (steep, shallow, normal) I check the AWOS and came to the conclusion that I was going to take off on runway 15 so I began making my way down the taxi way running along runway 9-27 then made the turn north on to the taxiway running along 15-33 it took a few minutes to get to the beginning of 15. When we got to the area of departure I realized that the active run way changed to runway 21 and there was a few fixed wing airplanes in the pattern and coming in to land or do touch and go's. At this point I told Luis I was going to put the helicopter down on the grass to observe traffic and wait to talk off. At this time he tells me "you don't have to wait for the traffic just take off left of 21 and make a call" I didn't like being rushed and there was 2 planes on final so I decided to wait for them which made Luis a bit annoved it seemed like to me. So after 2 or 3 minutes we get into the pattern and go over limitations and practice keeping a set speed and altitude for private and commercial PTS that was 75knots and 1000 ft AGL. We did the upwind, crosswind, downwind base then on final we picked a grassy area just to the right of the start of 21 and do a shallow approach, we hit the desired landing zone. We then again came to a hover cleared the airspace with a 360 turn and took off again on 21 to do a normal and steep approach to the same spot. We did the two other approaches then it was time to knock off the next thing on our check list that we went over before the flight, it was supposed to be autoroations. As I'm pushing forward for air speed and going through ETL I saw that Luis had his phone out which was really weird being that after all the times I flew with Luis I've never seen him on his phone while flying with me, I can only think of one time we were checking weather on a cross county flight because there was some nasty weather in Stuart. While on the cross wind leg I looked over at him and the phone I feel like I saw a lady's face on the phone and he was waving to her and showing the view. I remember him looking at the phone not really trying to say much because the helicopter was so loud but more of just spinning the front of the phone around so the front camera could see where we were. Slowly rotating the phone from his face to mine then flipping it 180 so the person or video could see what we were looking at then back to him by this time we were on the downwind portion of the pattern and he asked for the controls which he did pretty often, at that time I handed over the controls and looked south out my door enjoying the view. That was the last thing I remembered, the next thing I remembered was looking over at Luis fighting with the cylic and collective in a panicked state saying "were going down" as I'm looking at the ground in a nose down attitude. It all seemed to happen so fast that I don't

remember hitting the ground I must of blacked out I don't even remember starting the auto which leads me to question if we even made it to the exercise.