



U.S. Department
of Transportation
**Federal Aviation
Administration**

Marcelo O. Martin
Aviation Safety Inspector

South Florida Flight Standards District Office 19
[REDACTED] Avenue Suite 120
Miramar, FL 33027

Juan C. Garcia FAA, IIC
Inspectors Statement/Accident Investigation

Registration: N8123Q
Make: 1975 Cessna
Model: U206F
Serial Number: U20603093
PTRS: SO19202101101
ATQA No.: ASO2921001
NTSB No.: ERA21LA011
ACTT/HOBBs: 6377.4
Last Annual Inspection: 08/27/2020
Left Eng. Insp.: 08/27/2020 SMOH: 1377.5
Right Eng. Insp.: 08/27/2020 SMOH: 1377.5
Left Prop Insp.: 08/27/2020 PSOH: 369.6
Right Prop Insp.: 08/27/2020 POSH: 369.6

When: October 09, 2020

Where: Palm Beach County Airport (F45)

What:

Part 91 Operator, operating Cessna U206F, Serial Number U20603093, Registered number N83123Q with two pilots and 5 passengers. Aircraft was departing Palm Beach County Airport (F45) runway 14, aircraft was unable to takeoff, running off runway end crashing into dirt mound flipping 180 ° degrees into a water marsh pond. Both pilots and 2 passengers sustained severe injuries, all passengers are family members, 4 adults and 3 children. Aircraft destroyed in crash. Aircraft N8123Q is owned by 8123Q LLC, [REDACTED] Olympia, WA.

Who:

PIC Pilot:

Joseph Leroy Allen (Senior/Father)

[REDACTED]

Edinburgh, IN 46124-9686

FAA Certificate Number: [REDACTED]

Last FAA Medical Examination: 04/04/2019

SIC Pilot:

Joseph Leroy Allen (Jr. Son)

[REDACTED]

Edinburgh, IN 47203-1001

FAA Certificate Number: [REDACTED]
Last FAA Medical Examination: 11/13/2017

Passengers:

Angela Allen - Adult
Diane Allen - Adult
Abraham McCarty – Child
Logan Allen - Child
Heidi Allen - Child

E-mailed statement from Joseph Leroy Allen:

My name is Joseph Allen and I was Co-pilot of N8132Q on 10/8/2020. I recently received my multi engine land add on rating and have around 140 hours of total flight time. Upon arriving at the airport I helped unload our rental car then left to return the vehicle. During which time my father, also Joseph Allen and the PIC, performed the Pre-Flight. When I returned to the airport my family and I got in the airplane and buckled my 2 younger children in car seats and my oldest in a booster seat. For weight and balance we had most of the luggage loaded in the nose of the plane, then passengers seated so the heavier passengers were seated forward. My father was in pilot seat, myself in right seat, my mother Diana Allen sat rear facing on the right side, my wife Angela Allen was also rear facing on the left side, then the my oldest son in 3rd row left seat, younger son 3rd row right seat, then my 2 year old daughter was on the lavatory seat.

Once we were all buckled in our seats my father proceeded to start the plane. When the avionics came on I tuned in the local AWOS and listened for the weather which indicated runway 14 for best wind and VFR conditions. I then tuned in clearance delivery and proceeded to pick up our IFR clearance. Once cleared my father began taxiing us to 14 while I programmed our flight plan into the avionics. My father performed the run up checks where I did not notice any indications of any issues. Once the run up check were complete I again contacted clearance delivery for our release. There were a few planes in the pattern, and we had to wait for a small plane on final to land.

Once the small plane landed and proceeded off the runway I announced our self over the CTAF that we were taking 14 for a North bound departure. My father then taxied to the edge of the runway and lined up with the center line. While taxiing onto the runway I double-checked the trim setting was in the take-off position which also gave me a clear view of the pilot side yoke, where I again did not see any indications of any issues or the presence of the control lock.

When we were lined up on the runway my father applied full brakes and then full power to both engines. Once at full RPM he released the brakes and we began our take off roll. Shortly into the take-off roll I remember feeling a slight shudder which seemed to be coming from the controls. It only lasted a split second, but was out of the ordinary. As we continued our take off roll I sat in my normal position with my legs crossed and my arms in my lap so I do not obstruct the controls. As we continued down the runway i was looking out of the plane and got a feeling we were picking up quite a bit of speed and should be rotating. I

looked down at the Copilot airspeed indicator and saw we were passing through blue line. I then looked at my father to see what was going on as we should have already rotated. I remember him saying [REDACTED] and then looking down at the control yoke on either side. I believe he was looking for the control lock or anything that was obstructing the controls.

I then looked at the runway, which we were quickly running out of. I grabbed the controls on the Copilot side and attempted to pull back to rotate the plane, but the elevator was firmly stuck in its position. Upon realizing this I pulled both throttles to idle and applied maximum brakes to abort the take off. I'm estimating we were doing between 120-130knts when I aborted the take off.

Continuing to apply full brakes we ran off the end of the runway and through the grass, where I remember seeing a mound of dirt I knew we were going to hit. In the position I last remember, the right main gear was going to impact this mound more than the left. Upon impacting the mound I believe I hit the dash and was knocked out. When I woke up I remember water coming in the pilot window which I thought I needed to open the emergency exit. As I moved aft I discovered my mother on the floor in the aisleway. I turned the emergency exit handle and attempted to push it open, however it was stuck. I tried kicking with both my legs and it would not open. I then proceeded further aft to the main door and opened it up. Once open someone was already outside and I started handing my children out of the plane. Once we were all out we waited for EMS.

Inspector Summary of Aircraft Damage and Final Analysis:

SIC stated his father was PIC flying the aircraft while he was programming flight plan into the avionics. SIC stated his father, PIC taxied on runway 14 applied full brakes and then full power to both engines. SIC stated once at full RPM PIC released the brakes and they began take off roll and shortly into the take-off roll SIC stated he feeling a slight shudder which seemed to be coming from the controls and lasted a split second, but was out of the ordinary.

As the aircraft continued the take-off roll and picking up speed SIC looked down at the copilot airspeed indicator and saw they passed through blue line. SIC stated he looked at his father the PIC to see what was going on as they should have already rotated. SIC stated he remember his father saying [REDACTED] and then looking down at the control yoke on either side. SIC believes he was looking for the control lock or anything that was obstructing the controls.

SIC stated he looked at the runway, which was quickly running out of and the SIC grabbed the controls on the copilot side and attempted to pull back to rotate the plane, but the elevator was firmly stuck in its position. SIC stated realizing there was a problem SIC stated he pulled both throttles to idle and applied maximum brakes to abort the takeoff, SIC estimated aircraft speed was between 120-130 knots when attempting aborting the take off. SIC stated the aircraft continuing to apply full brakes, the aircraft ran off the end of the runway and through the grass, seeing and impacting a mound of dirt. SIC stated they impacted and believes he hit the dash and was knocked out.

Aircraft ran off runway end crashing into dirt mound flipping 180 ° degrees into a water marsh pond. The dirt mound is located the right of the runway at a height of 15 feet with other small mounds, containing some large rocks, cut down remains of a utility wooden post perturbing from a small dirt bound. The right fuel tip tank was torn off on impact with dirt mound spilling fuel load. The nose gear was torn off with impact with the dirt mound.

Aircraft was submerged in a nose down position with left wing and cockpit submerged under water. The right engine, right propeller and right wing were torn from aircraft on impact coming to rest slightly submerged under water next to aircraft right side. The right wing fuel tank was found topped off. The right propeller assembly with three propellers was not located after 2 day search. The right propeller could be located at the bottom of the marshy pond which is dark, very muddy and covered with heavy vegetation. The left fuel tip tank was torn from left wing, found 25 feet on the surface of the marshy pond with no fuel inside.

Removal of the aircraft from marshy water found the left wing and engine was torn from fuselage but still connected by rigging cabling, electrical wiring and tubing. The right wing structure with right engine was still intact but torn from fuselage but still connected by rigging cabling, electrical wiring and tubing. The elevator was torn from attachment location and repositioned vertically on left side next to vertical stabilizer and rudder. The elevator rigging was still intact and still operational. The yoke control movement inside the cockpit found the forward and aft movement positive with some minor resistance probably due to the elevator damage and position from impact. The inputs in the cockpit control yoke demonstrated movement in the elevator. The control lock holes for both left and right sides yoke's had no signs of elongation or damage. All engine\propeller power and control levers all found full forward against the control stops. The flap control lever found at 0° degrees. The left/right rudder pedals for both PIC/SIC demonstrated positive movement with rudder movement.

The control lock was located on the left side of the cockpit under the far left rudder/brake pedal covered in mud. The control lock had no signs of damage just usage indications. The control lock had 24 inch yellow ribbon with a small cross section red material at connection point to the metal control lock. Aircraft cabin had no heavy luggage just small personal bags for passengers. No luggage was found inside rear left/right engine cowling baggage compartments, the nose cargo compartment was found with 5 luggage items all water logged, unable to get a correct weight, luggage to be dried out to get proper weight.

Inspection of aircraft yoke control rigging by Cessna representative found no issues. The aircraft flooring was opened and holes opened up along empennage exposing the control rigging. Yoke control was operated and rigging observed for function, there was no binding or blockage and operated normal. There was some damage to the other rigging support structures but the damage was from crash impact not affecting the operation of the elevator control.

PIC(father) has not provided a statement he is still hospitalized due to his injuries, all statements have been provided thru the SIC(son) which is a joint statement between PIC and

SIC. SIC was asked by the NTSB if proper preflight was accomplished and if PIC left the control lock installed, SIC could not answer those questions. The inspection of N8123Q elevator flight control system found no issues to indicate there was a malfunction, [REDACTED]

[REDACTED]

[REDACTED]

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8. AIRPORT NAME

PALM BEACH COUNTY AIRPORT

16. POWER PLANT MAKE/MODEL/SERIES

CONT MOTOR IO 520 SERIES

33. NARRATIVE

PART 91 OPERATOR, OPERATING CESSNA U206F, SERIAL NUMBER U20603093, REGISTERED NUMBER N83123Q WITH TWO PILOTS AND 5 PASSENGERS. AIRCRAFT WAS DEPARTING PALM BEACH COUNTY AIRPORT (F45) RUNWAY 14, AIRCRAFT WAS UNABLE TO TAKEOFF, RUNNING OFF RUNWAY END CRASHING INTO DIRT MOUND FLIPPING 180 ° DEGREES INTO A WATER MARSH POND. BOTH PILOTS AND 2 PASSENGERS SUSTAINED SEVERE INJURIES, ALL PASSENGERS ARE FAMILY MEMBERS, 4 ADULTS AND 3 CHILDREN.

AIRCRAFT DESTROYED IN CRASH. AIRCRAFT N8123Q IS OWNED BY 8123Q LLC, [REDACTED] OLYMPIA, WA.

43. BRIEF EXPLANATION OF ISSUES INVOLVED

SIC STATED HIS FATHER WAS PIC FLYING THE AIRCRAFT. SIC STATED, SHORTLY INTO THE TAKE-OFF ROLL SIC STATED FEELING A SLIGHT SHUDDER WHICH SEEMED TO BE COMING FROM THE CONTROLS AND LASTED A SPLIT SECOND. AIRCRAFT TAKE-OFF ROLL PICKING UP SPEED SIC LOOKED DOWN AT AIRSPEED INDICATOR PASSED BLUE LINE. SIC STATED HE REMEMBER HIS FATHER SAYING [REDACTED] AND THEN LOOKING DOWN AT THE CONTROL YOKE ON EITHER SIDE. SIC BELIEVES HE WAS LOOKING FOR THE CONTROL LOCK OR ANYTHING THAT WAS OBSTRUCTING THE CONTROLS. SIC STATED RUNNING OUT RUNWAY GRABBED THE CONTROLS ON THE COPILOT SIDE AND ATTEMPTED TO PULL BACK TO ROTATE THE PLANE, BUT THE ELEVATOR WAS FIRMLY STUCK IN ITS POSITION. SIC PULLED BOTH THROTTLES TO IDLE AND APPLIED MAXIMUM BRAKES TO ABORT THE TAKEOFF, ESTIMATED AIRCRAFT SPEED WAS BETWEEN 120-130 KNOTS. THE AIRCRAFT RAN OFF THE END OF THE RUNWAY AND THROUGH THE GRASS IMPACTING A MOUND OF DIRT. AIRCRAFT RAN OFF RUNWAY END CRASHING INTO DIRT MOUND FLIPPING 180 ° DEGREES INTO A WATER MARSH POND. THE DIRT MOUND IS LOCATED THE RIGHT OF THE RUNWAY AT A HEIGHT OF 15 FEET WITH OTHER SMALL MOUNDS, CONTAINING SOME LARGE ROCKS, CUT DOWN REMAINS OF A UTILITY WOODEN POST PERTURBING FROM A SMALL DIRT BOUND. THE RIGHT FUEL TIP TANK WAS TORN OFF ON IMPACT WITH DIRT MOUND SPILLING FUEL LOAD. THE NOSE GEAR WAS TORN OFF WITH IMPACT WITH THE DIRT MOUND. AIRCRAFT WAS SUBMERGED IN A NOSE DOWN POSITION WITH LEFT WING AND COCKPIT SUBMERGED UNDER WATER. THE RIGHT ENGINE, RIGHT PROPELLER AND RIGHT WING WHERE TORN FROM AIRCRAFT ON IMPACT COMING TO REST SLIGHTLY SUBMERGED

UNDER WATER NEXT TO AIRCRAFT RIGHT SIDE. THE ELEVATOR WAS TORN FROM ATTACHMENT LOCATION AND REPOSITIONED VERTICALLY ON LEFT SIDE NEXT TO VERTICAL STABILIZER AND RUDDER. THE ELEVATOR RIGGING WAS STILL INTACT AND STILL OPERATIONAL. THE YOKE CONTROL MOVEMENT INSIDE THE COCKPIT FOUND THE FORWARD AND AFT MOVEMENT POSITIVE WITH SOME MINOR RESISTANCE PROBABLY DUE TO THE ELEVATOR DAMAGE AND POSITION FROM IMPACT. THE INPUTS IN THE COCKPIT CONTROL YOKE DEMONSTRATED MOVEMENT IN THE ELEVATOR. THE CONTROL LOCK HOLES FOR BOTH LEFT AND RIGHT SIDES YOKE'S HAD NO SIGNS OF ELONGATION OR DAMAGE. ALL ENGINE\PROPELLER POWER AND CONTROL LEVERS ALL FOUND FULL FORWARD AGAINST THE CONTROL STOPS. THE FLAP CONTROL LEVER FOUND AT 0° DEGREES. THE LEFT/RIGHT RUDDER PEDALS FOR BOTH PIC/SIC DEMONSTRATED POSITIVE MOVEMENT WITH RUDDER MOVEMENT. THE CONTROL LOCK WAS LOCATED ON THE LEFT SIDE OF THE COCKPIT UNDER THE FAR LEFT RUDDER/BRAKE PEDAL COVERED IN MUD. THE CONTROL LOCK HAD NO SIGNS OF DAMAGE JUST USAGE INDICATIONS. THE CONTROL LOCK HAD 24 INCH YELLOW RIBBON WITH A SMALL CROSS SECTION RED MATERIAL AT CONNECTION POINT TO THE METAL CONTROL LOCK. AIRCRAFT CABIN HAD NO HEAVY LUGGAGE JUST SMALL PERSONAL BAGS FOR PASSENGERS. NO LUGGAGE WAS FOUND INSIDE REAR LEFT/RIGHT ENGINE COWLING BAGGAGE COMPARTMENTS, NOSE CARGO COMPARTMENT WAS FOUND WITH 5 LUGGAGE ITEMS. INSPECTION OF AIRCRAFT YOKE CONTROL RIGGING BY CESSNA REPRESENTATIVE FOUND NO ISSUES. THE AIRCRAFT FLOORING WAS OPENED AND HOLES OPENED UP ALONG EMPENNAGE EXPOSING THE CONTROL RIGGING. YOKE CONTROL WAS OPERATED AND RIGGING OBSERVED FOR FUNCTION, THERE WAS NO BINDING OR BLOCKAGE AND OPERATED NORMAL. THERE WAS SOME DAMAGE TO THE OTHER RIGGING SUPPORT STRUCTURES BUT THE DAMAGE WAS FROM CRASH IMPACT NOT AFFECTING THE OPERATION OF THE ELEVATOR CONTROL. PIC(FATHER) HAS NOT PROVIDED A STATEMENT HE IS STILL HOSPITALIZED DUE TO HIS INJURIES, ALL STATEMENTS HAVE BEEN PROVIDED THRU THE SIC(SON) WHICH IS A JOINT STATEMENT BETWEEN PIC AND SIC. SIC WAS ASKED BY THE NTSB IF PROPER PREFIGHT WAS ACCOMPLISHED AND IF PIC LEFT THE CONTROL LOCK INSTALLED, SIC COULD NOT ANSWER THOSE QUESTIONS. THE INSPECTION OF N8123Q ELEVATOR FLIGHT CONTROL SYSTEM FOUND NO ISSUES TO INDICATE THERE WAS A MALFUNCTION, [REDACTED]

[REDACTED]

[REDACTED]