Aviation Investigation Final Report

Location:	Venice, LA,	**Accident Number:**	CEN14FA004
Date & Time:	October 9, 2013, 07:20 Local	**Registration:**	N54LP
Aircraft:	Bell 206L 3	**Aircraft Damage:**	Substantial
Defining Event:	Loss of engine power (total)	**Injuries:**	1 Fatal, 3 Serious
Flight Conducted Under:	Part 135: Air taxi & commuter - Non-scheduled		

Analysis

As the helicopter departed from the oil platform's helipad, witnesses heard a "pop" followed by a high-pitch screeching noise coming from the back of the engine. The helicopter nosed-over and dove into the water with the emergency floats extended. Examination of the engine revealed that one of the second-stage turbine disk blades had liberated due to a high-cycle fatigue (HCF) crack. The crack propagated until the blade separated due to material overload, which resulted in extensive damage to all of the third-stage turbine disk blades and most of the fourth-stage turbine disk blades. Metallurgical analysis of the liberated blade revealed no material anomalies.

According to the engine manufacturer, there was no history of second-stage turbine blade failure due to HCF at the same spanwise position as the accident blade. A dynamics analysis of the second-stage turbine wheel revealed no mode crossing within or above the normal engine operating range that would be consistent with HCF initiation at the point where the blade failed. Several potential failure scenarios were also evaluated; however, none yielded any evidence to support the blade failing as it did. The engine was not equipped with an engine-monitoring system that could have identified any anomalies that may have initiated the HCF crack or contributed to the failure of the second-stage turbine blade. Although the surviving passengers stated that the platform was not venting methane at the time of the accident and an eyewitness said he did not see methane being vented, platform operating records revealed that methane was being vented continuously on the day of the accident. However, the actual volume of methane released at the time of the accident and whether it was ingested into the engine on takeoff could not be determined. The HCF crack was a pre-existing condition and was not the result of a sudden ingestion of methane on the day of the accident.

A low-level of diphenhydramine, a sedating antihistamine, was detected in the pilot's blood and urine, but it could not be determined if it impaired the pilot's ability to operate the helicopter.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be:

A total loss of engine power due to the liberation of a second stage turbine blade near the blade root due to a high-cycle fatigue crack and subsequent overload. Although extensive testing and materials analysis was performed, the reason for crack initiation could not be determined.

Findings

Aircraft	Turbine section - Failure

Factual Information

History of Flight

Takeoff	Loss of engine power (total) (Defining event)
Emergency descent	Collision with terr/obj (non-CFIT)

HISTORY OF FLIGHT

On October 9, 2013, about 0720 central daylight time, a Bell 206L-3, N54LP, was substantially damaged when it impacted water shortly after takeoff from the Main Pass (MP) 107D oil platform in the Gulf of Mexico. The commercial pilot was fatally injured and the three passengers were seriously injured. The helicopter was registered to and operated by Panther Helicopters, Inc., Belle Chasse, Louisiana. Visual meteorological conditions prevailed and a company visual flight rules flight plan was filed for the business flight, which was destined for the Belle Chasse Heliport (06LA), Belle Chasse, Louisiana. The flight was conducted under the provisions of 14 Code of Federal Regulations (CFR) Part 135.

The purpose of the flight was a routine crew change at the MP107D oil platform, which consisted of dropping off three oil platform employees, picking up three other employees, then returning to 06LA. The pilot and three passengers departed 06LA about 0633 and flew direct to MP107D. After landing on MP107D, the pilot did not shut down the helicopter and stayed at the controls with the main rotor turning until the crew change was complete.

A witness standing on the MP108E oil platform, which is about 300-to 400 yards from MP107D and affords a clear and unobstructed view of the MP107D platform, saw the helicopter sitting east-southeast on the helipad with its main rotor blades turning. The witness said three people got off the helicopter and three other people got on. He described the weather as " stale " and the wind sock was " limp. "

About 1 to 2 minutes later, the witness observed the helicopter pull up into a 3 to 4-foot-high hover over the helipad and make a slight bearing change toward the east. He said that, at that point, everything was completely normal with the helicopter. The helicopter then moved forward and started to take off toward the east. The witness said as soon as the helicopter cleared the helipad's skirting, he saw a flash and a large (10-foot-high x 10-foot-wide) "poof " or " cloud " of white smoke come from directly under the main rotor blades near the exhaust section of the helicopter. This was followed by a loud, high-pitched, screeching noise, as if the engine were being revved up. The witness said this " poof " of smoke occurred when the helicopter was parallel to a flare boom that extended directly out from the platform and was positioned on the north side of the helipad. The helicopter then nosed over toward the water; cleared the helipad's skirting and did not strike the flare boom as it descended.

The witness said he saw the helicopter's emergency floats fully expand before it impacted the water. The helicopter hit the water hard with the main rotors still turning; became completely submerged and rolled

inverted. The witness could see the helicopter's skids near the surface of the water and noted that one emergency float (he could not recall which) had completely separated from the helicopter.

The witness did not see any occupants coming to the surface and used his very high frequency handheld radio to issue a " may-day-call. " He also directed a field boat, which was at the base of the MP108E platform, to the helicopter. He said that by the time the boat arrived, two deck hands had already stripped down and jumped into the jellyfish-infested water to help the helicopter occupants. They were able to get three of the four occupants out of the helicopter and onto the field boat despite one of the deckhands having an allergic reaction to the jellyfish stings.

The witness said he did not see any methane gas being vented from the flare boom on the morning of the accident; however, he did see a large (size of an automobile) " methane cloud " coming from the flare boom the day before the accident between 12 and 5 pm. The methane cloud was located where he saw the white smoke on the day of the accident. The witness said he has seen methane being vented from the MP107D flare boom on several occasions and that " a lot of gas " is vented several times a week.

In a telephone interview, one of the passengers on the helicopter (Passenger 1), stated that he had just completed a 14-day " hitch " on the MP107D oil platform and was headed back to Louisiana. On the morning of the accident, he and the two other platform employees prepared the platform for a crew change and waited for the helicopter to arrive. Once it had, he loaded his bags and was the last of the three passengers to board the helicopter. He boarded the helicopter via the left rear door and sat in the rear left seat, facing forward. He then donned an inflatable life vest, put on a headset, and fastened his seatbelt making sure it was secure and snug.

Passenger 1 said that once everyone was fastened in, they gave the pilot a " thumbs-up " and the pilot prepared to depart. At this point, everything regarding the flight was " normal. "

He said the helicopter lifted up from the platform and began forward flight. When the helicopter was over the water, he heard a loud noise overhead as if the transmission was coming a part. The passenger who was seated next to him (Passenger 2) asked, " What's that? " to which Passenger 1 responded," hold on. " He reported that they then hit the water with a " big splash. " Before impact, he did not hear any alarms going off in the cockpit and did not remember the emergency floats expanding. The pilot did not say anything during the accident sequence.

Passenger 1 stated that he may have passed out for a few minutes. When he regained consciousness, he realized he was out of his seatbelt (he did not recall unfastening the buckle). The helicopter had rolled on-to its left side, and he tried to find the door. When he tried to stand up, he realized he couldn't feel his legs. At this point, Passenger 2 had opened the right door and was climbing out. Although water was entering the cabin, he and the passenger who seated in the front left seat (Passenger 3) were able to keep their heads above water. There was no movement or response from the pilot.

Passenger 1 said that he remained where he was for a few minutes, and when the helicopter began to roll inverted, he was able to push himself out of the right rear door. He then tried to inflate his life vest, but when he pulled on the inflation-lanyard it would not inflate. He said that he was not familiar with this particular model vest and he did not try to self-inflate. Shortly after, Passenger 3 was able to get out of the helicopter.

Passenger 1 said that while the deckhands were working to extract the pilot, Passenger 2 was dragged to a life-boat via a life-ring.

At this time, Passenger 1 saw a life vest floating in the water. He was able to inflate it and used it to support himself until he was rescued. Passenger 1 said that he was in a " panic state of mind " and did not recall getting onto the boat. He said the platform was not venting methane at the time of the accident.

In a telephone interview, Passenger 2 said that once the helicopter landed, he placed his bags in the cargo bay and walked around the front of the helicopter. He boarded the helicopter and said in the right rear seat, facing forward. He donned the provided inflatable life vest, a headset, and fastened his seatbelt assembly.

He said he did not talk to the pilot or notice anything unusual about his behavior. After all three passengers were onboard, the pilot asked if they were ready to go and they responded they were ready. The employee said the pilot then simultaneously brought the helicopter up off the pad and forward. He described the takeoff as "kind of shaky." He said that on other flights, pilots will normally bring the helicopter into a hover, do an instrument check, and then start forward flight. However, in the three times he had flown with the accident pilot, he always took off without hovering.

Passenger 2 said that once the helicopter moved off the helipad and over the water, there was a " winding noise " then a " pop " sound. His first instinct was that there was a problem with the transmission. He did not hear alarms going off in the cockpit or see any annunciator lights. The helicopter then nosed over at an angle toward the water. Passenger 2 said that as the helicopter descended, the emergency floats expanded just before they hit the water. He then heard moans of pain coming from the other men onboard and that water started to enter the cabin. The helicopter had rolled on to its left side. He then undid his seatbelt and opened the right cabin door. Passenger 2 said he turned left and asked the passenger next to him if he was okay, and he responded that he could not feel his legs. Passenger 2 said that Passenger 1 had come completely out of his seatbelt during the impact.

Passenger 2 exited the helicopter and held onto the helicopter skid because his life vest did not expand when he pulled the inflation-lanyard. He said the that the life vest on Passenger 1 also would not inflate but that the vest on passenger 3 did inflate. He was not sure if the pilot's life vest inflated.

Passenger 2 said that he saw the lift-boat and told the rescuers there were three more people on board. He was able to get onto the life boat, where he laid down until help arrived. He reiterated several times that there was nothing mechanically wrong with the helicopter until they started to take off. He said the platform was not venting methane that morning and the wind was calm.

Passenger 3 stated that it was a normal crew change and the weather was clear with no wind. He did not notice anything unusual with the pilot, who made sure everyone had their seatbelts and life vests on before departure. Passenger 3 said that the pilot then brought the helicopter up into a hover, turned the nose about 90 degrees, and departed. As soon as the helicopter cleared the helipad, he heard a sound "that wasn't normal." The pilot declared a mayday, popped the floats, and the helicopter dove straight in to the ocean. Passenger 3 said the helicopter came to rest upright but was tilted back with the tail down in the water. He remembered looking up and realizing he was alive. He then looked over at the pilot and asked him if he was okay. The pilot responded that he must have broken his back because he could not

feel anything. Passenger 3 then tried to unbuckle the pilot's seatbelt. While he was doing this, he saw the lift-boat and people jumping into the water.

When the rescuers reached the helicopter, they told Passenger 3 that the helicopter was about to roll inverted and he needed to get out. He was instructed to unbuckle his seatbelt and inflate his life vest. Passenger 3 said that when he inflated his vest, he floated up in his seat and a rescuer pulled him out of the helicopter. After he was out, the helicopter rolled inverted to the right toward the pilot.

Passenger 3 said that the pilot saved their lives by expanding the emergency floats because it kept the helicopter from sinking. He said that he had flown with the pilot on four other occasions and he always seemed competent. Passenger 3 said the platform had a flare boom that extended out from the platform by about 50 feet and vented continuously, but he was not sure about the timing of any methane flares on the day of the accident.

In a telephone interview, one of the platform employees who had just been dropped off at the platform for the crew change, stated that he and the two other platform employees arrived at Panther Helicopter's facility in Belle Chasse, Louisiana, on the morning of the accident around 0600. He said when they were ready to board, he got in the front left seat, put on his life vest and fastened his seatbelt. The pilot made sure everyone was wearing their life vests and seatbelts before departure. While en route, the platform employee said he briefly spoke to the pilot and he did not notice anything unusual with his demeanor. He said the helicopter was operating fine and there were no indications of any problems.

The platform employee said that after a normal landing, he exited the helicopter, retrieved his bags from the cargo bay, and went downstairs into the platform housing where he had a quick changeover briefing with the departing-lead. Several minutes later, he heard the helicopter's engine spool up as it prepared to takeoff. Everything sounded normal until he heard a " pop " and a high-pitched whine followed by a low pitch whine as if the engine was spooling down. He described the noise as a turbine or compressor winding down. At that point, he knew something was wrong and ran outside where he saw the helicopter in the water on its right side and one passenger exiting the helicopter. He went back inside and called the Coast Guard, Panther Helicopters, and his senior management.

The helicopter was equipped with a SkyConnect tracking system. The last registered altitude of the helicopter was about 141 feet.

PERSONNEL INFORMATION

The pilot held a private pilot certificate with an airplane single-engine land rating and a commercial pilot certificate for rotorcraft-helicopter. His last Federal Aviation Administration (FAA) second class medical was issued on January 10, 2013. According to the operator, the pilot had accrued a total of 3,450 total hours; of which 3,423 hours were in helicopters, and 177 hours were in the same make/model as the accident helicopter.

The pilot was hired by Panther on June 17, 2013. His training was conducted by Panther in the Bell 206 helicopter. The pilot successfully completed his 14 CFR Part 135.293 and 135.299 FAA check-ride on July 25, 2013.

AIRCRAFT INFORMATION

The accident helicopter was a 1991 Bell 206L-3 with serial number 51466. The single-engine helicopter was powered by an Allison M250-C30P turbo-shaft engine with serial number CAE 895524, which drove a two-bladed main rotor system and a two-bladed tail rotor. The engine had accrued a total of 10,670.8 hours at the time of the accident. The helicopter was configured to carry one pilot and six passengers.

According to the operator, the helicopter was maintained in accordance with the manufacturer's continuous inspection program. The helicopter's last inspection (event 2) was completed on October 3, 2013. The helicopter's total time at the time of the accident was 11,238 hours.

METEOROLOGICAL INFORMATION

At 0600, weather conditions at the Belle Chasse heliport, Belle Chasse, Louisiana, about 72 nautical miles northwest of the accident site were calm wind, visibility 10 miles and clear skies, with a temperature of 65 degrees F.

At 0655, weather conditions at New Orleans Naval Air Station, Louisiana, about 72 miles northwest of the accident site, were calm winds, visibility 10 statute miles with shallow fog, few clouds at 5,000 feet, temperature 57 degrees F, dew point 60 degrees F, and altimeter 30.06 inches of Mercury.

HELIPAD INFORMATION

According to the Bureau of Safety and Environmental Enforcement (BSEE), who has regulatory oversight of offshore operations, the Gulf of Mexico is divided into three primary subdivisions: Western Gulf of Mexico, Central Gulf of Mexico, and Eastern Gulf of Mexico. The three subdivisions are further divided into areas and blocks. The blocks are about 3 miles long and 3 miles wide and are used for oil/gas lease identification. There are over 2,600 offshore production platforms in the Gulf of Mexico region.

The MP 107 D facility (BSEE Complex ID Number 2201) is a fixed, five slot, manned platform located approximately 17 miles off the coast of Louisiana in 61 feet of water. This facility, which was installed in July 2008, and was initially operated by LLOG Exploration Offshore, Inc.,was being operated by Energy XXI GOM, LLC (Energy XXI) at the time of the accident. MP107D features a single helideck (35-feet-long and 35-feet-wide).

WRECKAGE AND IMPACT INFORMATION

The wreckage was recovered and moved to Panther's maintenance facility in Belle Chasse, Louisiana. The National Transportation Safety Board (NTSB) Investigator-in-Charge conducted an examination of the airframe and a visual examination of the engine on October 14, 2013. Also present for the examination were representatives of Panther, Rolls Royce, and Bell Helicopter.

The helicopter was secured and upright on a flatbed trailer. The engine, transmission, and main rotor system remained attached to the airframe. One of the main rotor blades had been cut off for transport and the other blade was fractured during the impact with the water. The section of fractured blade was never located. The tail boom had separated from the fuselage about 12 -inches aft of the tail boom attachment point. The tail rotor assembly had separated aft of the elevator and was never recovered.

The entire windshield on the right side of the helicopter was missing, and a large section of windshield was missing on the left side. The forward and aft passenger doors were removed. The aft cargo bay was crushed upward from the bottom of the fuselage. Salt water corrosion was noted throughout the fuselage and engine.

Flight control continuity was confirmed for the cyclic and the collective to the main rotor system. Partial flight control continuity was established for the anti-torque pedals from the cockpit to the point where the tail boom had separated from the fuselage.

The throttle was locked in the fuel-cutoff position, which was consistent with the setting on the fuel control unit.

Examination of the pilot's four-point shoulder harness/seatbelt assembly revealed that it was secure at all fuselage attach points. The inertial reel was locked, and stretch marks on the belt material were observed in several locations. The latching mechanism functioned normally when manually tested.

The front seat passenger's four-point shoulder harness/seatbelt assembly was also secure at all fuselage attach points and functioned normally when manually tested. The inertial reel was not locked.

The metal seatbox for the front passenger's seat was crushed downward.

All of the rear seat shoulder harness/seatbelt assemblies were secured at their respective fuselage attachment points and the latching mechanisms functioned normally when manually tested.

A visual examination of the engine revealed that it did not sustain much impact damage; however, several large holes were observed in the exhaust collector support stack. A hole was also observed in the cowling on the right side near the area of the support stack. Oil was in the bottom of the engine pan and the forward engine mounts were slightly bent. All engine fuel, oil and pneumatic lines, and b-nut fittings were tight and no leaks were observed. No damage was noted with the transmission.

The engine was removed and shipped to Rolls Royce, where a tear down examination was conducted on November 6-7, 2013, under the supervision of an NTSB investigator. Representatives of the FAA, Rolls Royce, Panther and Bell Helicopter were also present for the examination.

The centrifugal compressor section was disassembled. The #1 and #2 bearings were examined and found to be free of any indications of distress. The compressor impellor vanes exhibited slight indications of rotational rubbing; however, no other indications of foreign object ingestion or other damage were noted.

The gearbox was disassembled. Examination of internal components did not reveal any obvious defects to the gearing. The inside of the gearbox contained a large quantity of the magnesium casing, corrosion deposits and material from the effects of sea water immersion and recovery operations.

The gas generator turbine and power turbine sections were disassembled. The first stage turbine nozzle and disk were undamaged. The second stage turbine disk blades all exhibited tip rub. Several of the blades had hard impact damage and were missing material along the trailing edge. One blade separated near the blade root. All of the third stage turbine disk blades were liberated at the blade roots. All of the

fourth stage turbine disk blades were damaged, with about 320 degrees of the blade shrouds detached. The blades did not breach the turbine cases.

With the approval of the NTSB, metallurgical testing was conducted by the Rolls Royce Failure Analysis laboratory (Indianapolis, Indiana), to further determine the cause of the second stage turbine blade failure. The examination revealed no material anomalies and that the blade failed in high cycle fatigue (HCF) from the trailing edge area 0.300- inch outboard of the wheel rim. Facets covered the origin area up to 0.054- inch from the trailing edge with the final failure being in overload when it separated from the turbine disk. When the second stage blade failed, it subsequently damaged the third stage turbine blades and, in turn, the fourth stage turbine blades were also damaged.

According to Rolls Royce, there were no previous reports of the second stage turbine blades failing in HCF at a similar spanwise location. As a result, Rolls Royce conducted an updated dynamics analysis of the second stage turbine wheel. The results revealed, "…no mode crossing within or above the normal engine operating range (between ground idle and up to 115% speed) that would be consistent with HCF initiation at the observed location of the subject turbine wheel."

Three other potential failure scenarios were also evaluated that could have possibly been attributed to HCF of the second stage turbine blade: 1) normal operation resulting in tip rub, 2) distorted blade geometry as a result of foreign object debris (FOD) sufficient to change the dynamic characteristics of individual blades resulting in a crossing within the normal operating range, and 3) abnormal operation resulting in a combination of one or more of the following: tip rub, an undetermined blade natural frequency being excited, and atypical aerodynamic loading.

The intact second stage turbine blades sustained damage from the blade liberation; tip rub was identified on the leading edge portion of almost every blade tip but not on the trailing edge portion of the blade. Due to a lack of uniform rubbing signatures, it could not be determined if the tip rub observed on the blades existed before the blade separated. According to Rolls Royce, previous fatigue fractures on the turbine blades due to tip rub initiated at the trailing edge close to the turbine wheel rim rather than outboard of the rim. The liberated blade HCF crack/overload was similar to other failures, but the spanwise position where it separated was unique.

There was no FOD- related damaged identified, so it is unlikely that ingestion of debris contributed to the blade failure.

The final failure mode due to abnormal operation (NG over-speed, compressor stall, and distortion), could result in tip rub and/or in aerodynamic conditions that could cause atypical loading on the blade. According to the operator, there were no reports of excessive engine vibration, compressor stall, or engine surges reported before the accident. The engine was not equipped with an engine-monitoring system that could have identified any engine anomalies that may have contributed to the blade failure and subsequent loss of engine power.

ADDITIONAL INFORMATION

At the time of the accident, MP107D was an active oil production platform. One of the natural by-products of oil production is methane, an odorless and colorless gas, which is automatically released into the atmosphere via a boom that extends away from the platform. Venting can occur for several reasons, including temporary equipment upsets or the continuous release of gas in an amount that is too small to

economically capture and sell. In the past, the NTSB has determined that ingestion of methane gas while operating at offshore oil platforms has caused compressor stalls and either a partial or total loss of engine power on turbine engine-equipped helicopters. Since MP107D was an active platform at the time of the accident, the NTSB asked the BSEE to investigate venting around the time of the accident. According to the BSEE, MP107D was a low-production platform that produced less than 2,000 barrels per day and was not required by federal law to meter the volume of gas being vented. Based on records provided by the platform operator, there were no equipment upsets on the day of the accident. Therefore, any methane venting would have been limited to the gas continuously being released or flashed off the condensate during production.

Since MP107D was not federally mandated to meter the volume of methane being released, there was no way to determine the exact volume of methane released at the time of the accident. However, records provided by the platform operator, indicate an estimated 22 million cubic feet per day (MCFPD) was vented on October 9, 2013. BSEE conducted its own independent estimation using the most recent fluid analysis data provided by the operator, which was taken about 6 to 7 months before the accident. According to BSEE, " ...analysis indicates that approximately 49 MCFPD was vented from the MP107D facility on October 9, 2013. The operator's field records indicate a lower, but not unreasonable, vent volume estimate of 22 MCF that day. Based on the volume vented that day and the reason for venting, it appears that specific BSEE approval for this venting was not required under federal regulations. "

Although two of the surviving crewmembers stated that the platform was not venting methane at the time of the accident and an eyewitness said he did not see methane being vented (as he had seen previously at MP107D), platform operating records revealed that methane was being vented continuously on the day of the accident. However, the actual volume released at the time of the accident could not be determined. It could also not be determined whether the methane was ingested into the engine on takeoff.

MEDICAL AND PATHOLOGICAL INFORMATION

Toxicological testing was conducted by the FAA Toxicology and Accident Research Laboratory, Oklahoma City, Oklahoma. The pilot tested positive for Cetirizine (a sedating antihistamine) in his blood and urine. Diphenhydramine, also a sedating antihistamine, was detected in his urine and blood (.024ug/ml, ug/g). In addition, Ibuprofen was detected in the pilot's urine.

Pilot Information

Certificate:	Commercial; Private	**Age:**	47,Male
Airplane Rating(s):	Single-engine land	**Seat Occupied:**	Right
Other Aircraft Rating(s):	Helicopter	**Restraint Used:**	4-point
Instrument Rating(s):	None	**Second Pilot Present:**	No
Instructor Rating(s):	None	**Toxicology Performed:**	Yes
Medical Certification:	Class 2 Without waivers/limitations	**Last FAA Medical Exam:**	January 10, 2013
Occupational Pilot:	Yes	**Last Flight Review or Equivalent:**	July 25, 2013
Flight Time:	3450 hours (Total, all aircraft), 177 hours (Total, this make and model), 3450 hours (Pilot In Command, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Bell	**Registration:**	N54LP
Model/Series:	206L 3 L3	**Aircraft Category:**	Helicopter
Year of Manufacture:	1991	**Amateur Built:**	
Airworthiness Certificate:	Normal	**Serial Number:**	51466
Landing Gear Type:	N/A; Skid	**Seats:**	7
Date/Type of Last Inspection:	October 3, 2013 Continuous airworthiness	**Certified Max Gross Wt.:**	4251 lbs
Time Since Last Inspection:		**Engines:**	1 Turbo shaft
Airframe Total Time:	11238 Hrs at time of accident	**Engine Manufacturer:**	ALLISON
ELT:	Not installed	**Engine Model/Series:**	250-C30 SER
Registered Owner:	PANTHER HELICOPTERS INC	**Rated Power:**	650 Horsepower
Operator:	PANTHER HELICOPTERS INC	**Operating Certificate(s) Held:**	On-demand air taxi (135)

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	**Condition of Light:**	Day
Observation Facility, Elevation:	06LA	**Distance from Accident Site:**	72 Nautical Miles
Observation Time:	06:00 Local	**Direction from Accident Site:**	104°
Lowest Cloud Condition:		**Visibility**	10 miles
Lowest Ceiling:	None	**Visibility (RVR):**	
Wind Speed/Gusts:	/	**Turbulence Type Forecast/Actual:**	/ None
Wind Direction:		**Turbulence Severity Forecast/Actual:**	/ N/A
Altimeter Setting:		**Temperature/Dew Point:**	18°C
Precipitation and Obscuration:			
Departure Point:	MP107D, GM	**Type of Flight Plan Filed:**	Company VFR
Destination:	Belle Chasse, LA (06LA)	**Type of Clearance:**	None
Departure Time:	07:20 Local	**Type of Airspace:**	Unknown

Wreckage and Impact Information

Crew Injuries:	1 Fatal	**Aircraft Damage:**	Substantial
Passenger Injuries:	3 Serious	**Aircraft Fire:**	None
Ground Injuries:	N/A	**Aircraft Explosion:**	None
Total Injuries:	1 Fatal, 3 Serious	**Latitude, Longitude:**	29.549999,-88.699996(est)

Administrative Information

Investigator In Charge (IIC):	Read, Leah
Additional Participating Persons:	
Original Publish Date:	January 14, 2016
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=88184