



National Transportation Safety Board Aviation Accident Final Report

Location:	Santa Rosa Bch, Florida	Accident Number:	MIA05FA008
Date & Time:	October 20, 2004, 00:43 Local	Registration:	N916SH
Aircraft:	Eurocopter Deutschland BO-105 CBS5	Aircraft Damage:	Destroyed
Defining Event:		Injuries:	3 Fatal
Flight Conducted Under:	Part 91: General aviation - Positioning		

Analysis

The emergency medical services (EMS) airplane was on a positioning flight when it crashed in instrument conditions in the Choctawatchee Bay. Personnel from the Walton County, Florida, Emergency Operations Center, stated that at 0021 they received a call from a hospital in DeFuniak Springs, requesting the Airheart One helicopter to transport a patient to Pensacola, Florida. The dispatcher then contacted the pilot of Airheart One and advised him of the request. The pilot stated he would have to check the weather and get back to him. At 0035, the pilot called back and stated they would take the flight. At 0041, the paramedic on Airheart One called via radio and reported they were airborne with three persons on board, 2 hours 20 minutes of fuel, and an estimated time en route to the hospital of 10 minutes. At 0043, the paramedic reported that due to weather they were returning to base. The dispatcher did not talk with the flight after this. At 0050, the dispatcher cleared the Airheart One call, believing that they were back at base due to the short flight time. At 0610, the relief pilot that was coming on duty called the Emergency Operations Center and advised that Airheart One was not at base. Search and rescue operations were initiated and the wreckage of the helicopter was located in Choctawatchee Bay about 0820. A witness, who was fishing on the northwest side of the Highway 331 bridge reported that between 0030 and 0100, he observed a helicopter flying from south to north parallel to the bridge on the east side. The weather was lightning and thunder and it was just starting to drizzle and rain. He observed the helicopter either fly into a big cloud or fly behind the big cloud. He then saw lightning. He then saw the helicopter making a "U Turn" toward the east and then descend at a 45-degree angle to the water. He observed the helicopter by the red light on the belly. He left shortly after this because of the rain. Recorded radar data from Eglin Air Force Base showed that the flight departed the Walton County Sheriff's Department heliport and was first observed on radar at 0040:37 while at 300 feet, 1/10 of a mile east-southeast of the heliport. The flight climbed to 900 feet, while proceeding north bound, across the bay, flying parallel to Highway 331 Bridge. The flight then descended to between 700 and 800 feet. At 0042:18, the flight initiated a turn to the east and at 0042:49, the last radar contact was recorded when the flight was at 700 feet, flying on an east-southeast heading. This position was about 3/4 mile to the east-northeast of the crash site.

The 2353 Destin-Ft. Walton Beach Airport, automated surface weather observation was visibility 7 statute miles, ceiling 800 feet broken with remarks lightning distant north, ceiling 700 variable 1300. The airport is located 16.2 nautical miles west of the accident site. The Destin 0053 weather was visibility 7 statute miles, ceiling 600 feet broken, 1,500 feet overcast., remarks lightning distant southeast. The 2355 surface weather observation taken at the Valparaiso/Okaloosa-Eglin AFB was visibility 7 statute, clouds 800 feet scattered, ceiling 2,000 feet overcast with thunderstorm, remarks thunderstorm northeast and east moving southeast. The airport is located 20 nautical miles west-northwest of the accident site. Weather radar data obtained from the Eglin AFB Doppler Weather Radar System show that weak weather echoes were present in the area of the accident at the time of the accident. Additionally, an intense to extreme weather echo was present about 10 nautical miles north of the accident site. At the time of the accident Airmet IFR MIAS WA 200145 was in effect for the accident area. The Airmet called for occasional ceilings below 1,000 feet, visibility below 3 miles, precipitation, mist, and fog. The Airmet was issued at 2045 on October 19, 2004, and was valid until 0300 on October 20, 2004. The helicopter operator's operations manual states that the pilot-in-command is responsible for obtaining a weather briefing. The manual establishes weather minimums for night visual flight rules EMS helicopter operations. The minimums are visual ground light reference, enough to properly control the helicopter, and for local flights within 30 nautical miles of base the cloud ceiling should be a minimum of 800 feet agl and visibility greater than 2 miles. For preflight planning the cloud ceiling should be 1,000 feet agl and visibility should be 3 miles. Metro Aviation, Inc. uses a commercial, computer based, weather service at the Santa Rosa Beach base. The system was online at the time of the accident and received data 6 hours before and 6 hours after the accident. The radar and text data on the system was current and the system had been used to check weather throughout the day of the accident. The exact weather products accessed by the accident pilot could not be identified. Post crash examination of the helicopter showed no evidence of precrash mechanical failure or malfunction of the helicopter structure, flight control system, electrical system, hydraulic system, main rotor system and transmission, tail rotor system, and powerplants and drive shafts. There was no evidence of lightning strike on the helicopter. Postmortem examination of the pilot and 2 medical crewmembers and testing of toxicology samples showed no evidence that could be considered causal to the accident.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's spatial disorientation and in-flight loss of control of the helicopter after encountering night instrument meteorological conditions resulting in collision with water during the resultant uncontrolled descent. A factor in the accident was the pilot's decision to attempt the flight when instrument meteorological conditions were forecasted for the area.

Findings

Occurrence #1: LOSS OF CONTROL - IN FLIGHT

Phase of Operation: CRUISE

Findings

1. WEATHER CONDITION - LOW CEILING
2. LIGHT CONDITION - DARK NIGHT
3. (F) WEATHER FORECAST - DISREGARDED - PILOT IN COMMAND
4. (C) AIRCRAFT CONTROL - NOT MAINTAINED - PILOT IN COMMAND
5. (C) SPATIAL DISORIENTATION - PILOT IN COMMAND

Occurrence #2: IN FLIGHT COLLISION WITH TERRAIN/WATER

Phase of Operation: DESCENT - UNCONTROLLED

Findings

6. TERRAIN CONDITION - WATER

Factual Information

History of the Flight

On October 20, 2004, about 0043 central daylight time, a Eurocopter Deutschland BO-105 CBS5, N916SH, call sign Airheart One, registered to and operated by Metro Aviation, Inc., as a Title 14 CFR Part 91 emergency medical services (EMS) positioning flight, from Santa Rosa Beach, Florida, to DeFuniak Springs, Florida, crashed in Choctawhatchee Bay, near Santa Rosa Beach. Instrument meteorological conditions prevailed in the accident area at the time and a company visual flight rules flight plan was filed. The helicopter was destroyed and the commercial-rated pilot, paramedic, and flight nurse were fatally injured. The flight originated from Santa Rosa Beach at 0041.

Personnel from the Walton County, Florida, Emergency Operations Center, stated that at 0021 they received a call from Healthmark Hospital in DeFuniak Springs, requesting the Airheart One helicopter to transport a patient to West Florida Hospital in Pensacola, Florida. The dispatcher then contacted the pilot of Airheart One and advised him of the request. The pilot stated he would have to check the weather and get back to him. At 0035, the pilot called back and stated they would take the flight. At 0041, the paramedic on Airheart One called via radio and reported they were airborne with three persons on board, 2 hours 20 minutes of fuel, and an estimated time en route to Healthmark Hospital of 10 minutes. At 0043, the paramedic reported that due to weather they were returning to base. The dispatcher did not talk with the flight after this. At 0050, the dispatcher cleared the Airheart One call, believing that they were back at base due to the short flight time. At 0610, the relief pilot that was coming on duty called the Emergency Operations Center and advised that Airheart One was not at base. Search and rescue operations were initiated and the wreckage of the helicopter was located in Choctawhatchee Bay about 0820.

A witness, who was fishing on the northwest side of the Highway 331 bridge reported that between 0030 and 0100, he observed a helicopter flying from south to north parallel to the bridge on the east side. The weather was lightning and thunder and it was just starting to drizzle and rain. He observed the helicopter either fly into a big cloud or fly behind the big cloud. He then saw lightning. He then saw the helicopter making a "U Turn" toward the east and then descend at a 45-degree angle to the water. He observed the helicopter by the red light on the belly. He left shortly after this because of the rain.

Recorded radar data from Eglin Air Force Base showed that the flight departed the Walton County Sheriff's Department heliport and was first observed on radar at 0040:37 while at 300 feet, 1/10 of a mile east-southeast of the heliport. The flight climbed to 900 feet, while proceeding north bound, across the bay, flying parallel to Highway 331 Bridge. The flight then descended to between 700 and 800 feet. At 0042:18, the flight initiated a turn to the east and at 0042:49, the last radar contact was recorded when the flight was at 700 feet, flying on an east-southeast heading. This position was about 3/4 mile to the east-northeast of the crash site.

Personnel Information

The pilot held a FAA Commercial Pilot Certificate, last issued on May 21, 1984, with airplane multiengine land, rotorcraft helicopter, instrument airplane, and instrument rotorcraft ratings. The certificate also had private privileges for airplane single engine land. The pilot held a FAA second class medical certificate last issued on February 5, 2004, with the limitations that the holder shall wear corrective lenses. Metro Aviation, Inc. personnel reported that at the time of the accident the pilot had accumulated 12,340 total flight hours with 6,950 total flight hours in rotorcraft. On November 20, 2003, the pilot reported to Metro Aviation, Inc. that he had 420 total instrument flight hours with 69 instrument flight hours in rotorcraft. Logbook records for the pilot were not located after the accident.

The pilot was hired by Metro Aviation, Inc. in November 2003. He became qualified as pilot-in-command on the BO-105 on November 14, 2003. The pilot received a recurrent check flight, as required by 14 CFR Part 135, on April 27, 2004. The pilot received instrument proficiency training in accordance with the Metro Aviation, Inc. training program on September 27, 2004. At the time of the accident the pilot was seated in the right front seat of the helicopter, the designated pilot's seat.

The paramedic was employed by the South Walton Fire District on September 17, 2001. He became a flight paramedic in March 2003. The paramedic was seated in the left front seat of the helicopter at the time of the accident. He conducted all communications between the accident flight and the Emergency Operations Center.

The flight nurse was employed by Sacred Heart Health System in March 2002 and became a flight nurse in January 2003. At the time of the accident the flight nurse was seated aft of the pilot in a side facing seat.

Helicopter Information

The helicopter was a Eurocopter Deutschland BO-105 CBS5, serial number S-769, manufactured in 1987. The helicopter was equipped with two Rolls-Royce/Allison 250-C20B, 420 shaft horsepower engines. At the time of the accident, the helicopter had accumulated 8,846 total flight hours. The helicopter was last inspected on September 11, 2004, 110 flight hours before the accident, when it received a 50-hour, 150-hour, and 30-day inspection in accordance with the Metro Aviation, Inc, FAA approved aircraft inspection program. NTSB records show the helicopter received substantial damage on November 13, 2000, when it was involved in a landing accident at Parumph, Nevada. The aircraft had FAA registration number N911VH assigned to it at the time of that accident.

Meteorological Information

A meteorological study was performed by the NTSB Operational Factors Division. The study showed that at 2353 the Destin-Ft. Walton Beach Airport (KDTS), Destin, Florida, automated surface weather observation was winds 220 degrees at 7 knots, 200 degrees to 280 degrees variable, visibility 7 statute miles, ceiling 800 feet broken, temperature 79 degrees F., dew point temperature 75 degrees F., altimeter setting 29.94 inches of Hg., lightning distant north, ceiling 700 variable 1300. The airport is located 16.2 nautical miles west of the accident site. At 0053 the KDTS automated surface weather observation was winds variable at 6 knots, visibility

7 statute miles, ceiling 600 feet broken, 1,500 feet overcast, temperature 79 degrees F., dew point temperature 75 degrees F., altimeter setting 29.93 inches of Hg., lightning distant southeast.

The 2355 surface weather observation taken at the Valparaiso/Okaloosa-Eglin AFB (KVPS) was winds 210 at 5 knots, visibility 7 statute, clouds 800 feet scattered, ceiling 2,000 feet overcast with thunderstorm, temperature 77 degrees F., dew point temperature 77 degrees F., altimeter setting 29.94 inches Hg., thunderstorm northeast and east moving southeast. The airport is located 20 nautical miles west-northwest of the accident site. The 0055 surface weather at KVPS was winds 230 at 5 knots, visibility 7 statute, clouds at 800 feet scattered, ceiling 1,700 feet broken with thunderstorm, overcast at 4,000 feet, temperature 77 degrees F., dew point temperature 77 degrees F., altimeter setting 29.93 inches Hg., thunderstorm northwest and north moving southeast.

Weather radar data obtained from the Eglin AFB Doppler Weather Radar System show that weak weather echoes were present in the area of the accident at the time of the accident. Additionally, an intense to extreme weather echo was present about 10 nautical miles north of the accident site.

At the time of the accident Airmet IFR MIAS WA 200145 was in effect for the accident area. The Airmet called for occasional ceiling below 1,000 feet, visibility below 3 miles, precipitation, mist, and fog. The Airmet was issued at 2045 on October 19, 2004, and was valid until 0300 on October 20, 2004.

Communications

There were no reported problems with communications between the accident flightcrew and the Walton County Emergency Operations Center. The flightcrew was not in contact with any Air Traffic Control facilities.

Wreckage and Impact Information

The helicopter crashed into Choctawhatchee Bay at position 30 degrees, 24.65 minutes North Latitude, and 86 degrees, 08.510 minutes West Longitude, or about 1.5 miles east of the Highway 331 bridge and ¼ mile southwest of the mouth of the Mitchell River. The wreckage was located in about 10 feet of water. Divers from the Okaloosa County Sheriff's Department, who examined the wreckage under water, reported the main cabin was lying on a northeasterly heading. The engines, transmission, main rotor head, and portions of the main rotor blades were still attached to the main cabin. The skids were separated and one was located about 25 feet northwest of the main cabin. The forward portion of the tail boom was located about 25 feet northeast of the main cabin. The aft end of the tail boom, including the tail rotor gear box and portions of the tail rotor, was located about 50 feet northeast of the main cabin. A 300-foot by 1 mile long floating debris field extended to the southeast of the main wreckage. The water temperature was between 72 and 74 degrees F., and there was about a 3-4 foot deep silt layer on the bottom of the bay.

The wreckage was recovered and taken to the maintenance hangar at the Walton County

Sheriff's Department heliport, Santa Rosa Beach, Florida. Damage to the helicopter's right front cabin floor was consistent with the helicopter impacting the water in a nose low, rolled right attitude. Impact damage was present on the left side of the fuselage. Impact forces separated the lower fuselage structure from the upper fuselage structure. The two remained attached by electrical wire bundles. The airframe fuel system was destroyed by impact forces. The smell of jet fuel was present throughout the wreckage. The separated right hand skid tube and step were recovered. The left skid tube and step were separated but not recovered. The cross tube assemblies remained loosely attached to the lower fuselage structure. The tail boom was separated immediately aft of the fuselage attach ring and was located in two pieces. The electrical system of the helicopter was destroyed by impact forces. There was no evidence of lightning strike on the helicopter.

Examination of the flight control system showed continuity was established for collective, longitudinal and lateral cyclic, and anti-torque. All separation points in the control system were consistent with overstress separation. All attaching hardware was found in place and safety wired.

The four main rotor blade attach points were in place on the rotor head. Portions of three blades were still attached. One blade had separated near the attach point at the rotor head and the intermediate section of the blade was not recovered. The outboard tip section for this blade was recovered. The tip sections for the remaining three blades were separated by impact forces but were not recovered.

The tail rotor had one of the two blades fractured and separated about one quarter span from the blade root. The separated portion was recovered. The tail rotor gearbox rotated freely and the input drive was observed to turn when the gearbox was rotated. The magnetic indicating plug was void of metal. The intermediate gearbox rotated freely and the magnetic indicating plug was void of metal. The tail rotor driveshaft from the main transmission to the first flexible coupling was in place. The first flexible coupling was attached and had signatures consistent with torsional distortion. The intermediate coupling and the long section of tail rotor driveshaft along with the hangar bearing had separated and were not recovered. The aft flexible coupling at the input to the intermediate gear box remained attached to the gearbox and had torsional distortion. The tail rotor driveshaft between the intermediate and tail rotor gear boxes was in place.

The main transmission, main rotor head, and both engines remained attached to the upper fuselage structure. The main transmission was manually rotated and continuity was established from the engine input quills to the rotor head. The freewheeling clutch units operated. The main transmission magnetic indicating plugs were found void of material. All components of the main rotor head operated normally when moved by hand.

The hydraulic power pack was in place and the automated switch over was positioned to the normal No. 1 system position. The power pack was removed from the helicopter and tested at Eurocopter Canada under Transportation Safety Board of Canada oversight. The power pack had sustained minimal damage to an electric wiring harness and some hydraulic lines. The power pack was functionally tested and no preaccident failures or malfunctions were noted. All pumps and actuators operated normally.

All three crew seats were separated from the cabin floor. The left front passenger seat displayed aft and right bending damage. The right front pilot's seat displayed forward bending of the seat support structure. The left facing passenger seat located aft of the pilot's seat displayed forward displacement damage to the seat structure.

The emergency locator transmitter was recovered and found to be full of water. The internal circuit board was covered with water and corrosion and the battery had discharged to 5.6 volts.

The instrument panel had impact damage and many instruments were not recovered. The radio panel was not recovered. The engine control panel was separated and the engine controls were in the forward fly position. The two logo light bulbs located on the horizontal stabilizer and the left navigation light bulb showed filament deformation. Multiple bulbs from the instrument lighting system were examined and did not show filament deformation.

The No. 1 engine and accessories were examined after removal from the helicopter. There was no visible external engine or control damage. The engine had been submerged in salt water. Both gearbox magnetic indicating plugs were found free of material. The N1 drive train rotated by the tachometer drive pad. The N2 drive train rotated by the tachometer drive pad and by hand through the exhaust collector. The engine fuel filter was found full of fuel. All pneumatic and fuel lines were found tight. The engine to transmission drive coupling was attached. Disassembly examination of the engine and accessories was performed at manufacturer facilities under NTSB oversight. No pre-accident failures or malfunctions were observed.

The No. 2 engine and accessories were examined after removal from the helicopter. There was no visible external engine or control damage. The engine had been submerged in salt water. Both gearbox magnetic indicating plugs were found free of material. The N1 drive train rotated by the tachometer drive pad. The N2 drive train rotated by the tachometer drive pad and by hand through the exhaust collector. The engine fuel filter was found full of fuel. All pneumatic and fuel lines were found tight. The engine to transmission drive coupling was found fractured and displayed rotational scoring. Disassembly examination of the engine and accessories was performed at manufacturer facilities under NTSB oversight. No pre-accident failures or malfunctions were observed.

Medical and Pathological Information

Postmortem examination of the pilot, paramedic, and flight nurse was performed by the District 1, Florida, Medical Examiners Office, Fort Walton Beach, Florida. The cause of death for the pilot was reported as traumatic head injuries due to helicopter crash. The cause of death for the paramedic was reported as drowning due to blunt impact head trauma due to helicopter crash. The cause of death of the flight nurse was reported as multiple traumatic injuries due to helicopter crash. No findings which could be considered causal to the accident were reported.

Postmortem toxicology testing on specimens from the pilot was performed by the FAA, Bioaeronautical Sciences Research Laboratory, Oklahoma City, Oklahoma, and the University of Florida, Diagnostic Referral Laboratories, Gainesville, Florida. The tests were negative for carbon monoxide, cyanide, ethanol, and drugs which were tested for.

Postmortem toxicology testing on specimens from the paramedic was performed by the FAA, Bioaeronautical Sciences Research Laboratory, Oklahoma City, Oklahoma, and the University of Florida, Diagnostic Referral Laboratories, Gainesville, Florida. The tests were negative for carbon monoxide, cyanide, and drugs which were tested for. The tests were positive for .01 G/DL ethanol in bile and negative for ethanol in blood and vitreous.

Postmortem toxicology testing on specimens from the flight nurse was performed by the FAA, Bioaeronautical Sciences Research Laboratory, Oklahoma City, Oklahoma, and the University of Florida, Diagnostic Referral Laboratories, Gainesville, Florida. The tests were negative for carbon monoxide, cyanide, and drugs which were tested for. The tests were positive for .02 G/DL ethanol in blood and negative for ethanol in urine and vitreous.

Tests and Research

Metro Aviation, Inc. uses a three code system for pilots to advise flightcrew and flight coordinators of flying status. A "Code Green" indicates current and forecast weather is good visual flight rules and there is no question as to whether a flight can be made. A "Code Yellow" indicates current and forecast weather is marginal and the pilot must check the weather along the intended route of flight before a flight coordinator can accept a flight. Finally, a "Code Red" indicates current weather is below minimums and no flights can be accepted. At the time of the accident, the operation was operating under "Code Yellow".

The Metro Aviation, Inc., General Operations Manual, states that the pilot-in-command is responsible for obtaining a weather briefing no less than upon reporting for duty and every 6 hours thereafter or more frequently as conditions warrant, also prior to a flight for any intended route(s) of flight. The pilot-in-command will maintain timely weather checks throughout the duty period and is responsible for posting appropriate weather codes concerning the weather status for flight. The manual states the pilot-in-command of the aircraft is at all times directly responsible for, and is the final authority as to the operation of his assigned aircraft. The manual also requires as part of preflight duties that a detailed weather briefing must be obtained prior to flight that includes current and forecast weather conditions for the point of departure, en route phase(s), and destination(s).

The General Operations Manual establishes weather minimums for night visual flight rules EMS helicopter operations. The minimums are visual ground light reference, enough to properly control the helicopter, and existing or forecast weather for the duration of the flight should be obtained from a flight service station, weather bureau, automated weather observing system, ect., or the pilot's own observations. For local flights within 30 nautical miles of base the cloud ceiling should be a minimum of 800 feet agl and visibility greater than 2 miles. For preflight planning the cloud ceiling should be 1,000 feet agl and visibility should be 3 miles.

Metro Aviation, Inc. uses a commercial, computer based, weather service at the Santa Rosa Beach base. The service is supplied by Meteorlogix, LLC. A representative of Meteorlogix examined the Meteorlogix computer at the Santa Rosa Beach base after the accident. He stated the system is fed with data via satellite and internet. The system was online at the time of the accident and received data 6 hours before and 6 hours after the accident. The radar and

text data on the system was current and the system had been used to check weather throughout the day of the accident. He stated to NTSB that they could not identify specific weather products that were viewed by the accident pilot prior to the accident.

A report was received by NTSB from another Metro Aviation, Inc. pilot, who stated he had heard there were electrical power outages in the South Walton County area at the time of the accident due to a recent hurricane. The NTSB contacted the Vice President for Corporate Services for Choctawhatchee Electric Cooperative, Inc., the local electric company. He stated that their dispatch center records showed there were no electrical outages in the areas South or North of Choctawhatchee Bay at the time of the accident.

Metro Aviation, Inc. pilots reported to NTSB that on occasion the Sacred Heart Health System, Flight Program Coordinator would question a pilot's decision to not perform a flight because of poor weather conditions. An NTSB Human Performance Investigator and the NTSB Investigator-In-Charge conducted interviews with the Metro Aviation, Inc., Lead Pilot and the 7 pilots based at the Sacred Heart Health Systems operation, the Sacred Heart Health Systems Flight Program Coordinator and Chief Flight Nurse, the Metro Aviation, Inc. Owner, the General Manager, and the Director of Operations, and the accident pilot's wife. The purpose of the interviews was to gather information for evaluating whether the Sacred Heart Health Systems, Flight Program Coordinator's questioning of pilot's decisions might have influenced the accident pilot's decisions on the day of the accident. Most of the pilots interviewed stated that the flight program coordinator had a history of inappropriately involving himself in the weather-related decision making of pilots, and encouraging them to accept and complete more flights. However, the coordinator was not working and on the night of the accident and there is no evidence that he communicated with the accident pilot. Moreover, the lead pilot and most of the other pilots interviewed believed that the accident pilot was experienced, mature, confident in his decisions, and unlikely to have been swayed by the flight program coordinator's actions.

Organization and Management Information

Metro Aviation, Inc. is the holder of an FAA Air Carrier Certificate and is approved for On Demand Flight Operations in accordance with 14 CFR Part 135. The company's principal base of operation is Shreveport, Louisiana. At the time of the accident Metro Aviation, Inc. personnel reported to NTSB that they operated 42 helicopters and 5 airplanes on contracts to hospitals for Emergency Medical Services. They have 29 bases of operation around the United States. They employed 132 pilots, 29 mechanics at out bases, and 25 mechanics at the main base in Shreveport. The base with Sacred Heart Health Systems at Santa Rosa Beach and Marianna, Florida had been in operation since November 2002.

Federal Aviation Administration Oversight

The Air Carrier Certificate for Metro Aviation, Inc. is held at the FAA Baton Rouge, LA, Flight Standards District Office. A review of FAA records and interviews with the Metro Aviation, Inc. Lead Pilot at Santa Rosa Beach, show that since the time Metro Aviation, Inc. started operations at Santa Rosa Beach and Marianna in November 2002, no FAA Inspectors had performed inspections at the Santa Rosa or Marianna bases.

Additional Information

The helicopter wreckage was released by NTSB on October 22, 2004, to David Fry, Director of Operations, Metro Aviation, Inc. Components retained by NTSB for further testing and examination were released to Metro Aviation, Inc.

Pilot Information

Certificate:	Commercial; Military	Age:	62, Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Right
Other Aircraft Rating(s):	Helicopter	Restraint Used:	
Instrument Rating(s):	Airplane; Helicopter	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	Yes
Medical Certification:	Class 2 With waivers/limitations	Last FAA Medical Exam:	February 1, 2004
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	April 1, 2004
Flight Time:	12340 hours (Total, all aircraft), 206 hours (Total, this make and model), 12000 hours (Pilot In Command, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Eurocopter Deutschland	Registration:	N916SH
Model/Series:	BO-105 CBS5	Aircraft Category:	Helicopter
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	S-769
Landing Gear Type:	Skid	Seats:	4
Date/Type of Last Inspection:	September 1, 2004 AAIP	Certified Max Gross Wt.:	5512 lbs
Time Since Last Inspection:	110 Hrs	Engines:	2 Turbo shaft
Airframe Total Time:	8846 Hrs at time of accident	Engine Manufacturer:	Allison
ELT:	Installed, not activated	Engine Model/Series:	250-C20B
Registered Owner:		Rated Power:	420 Horsepower
Operator:		Operating Certificate(s) Held:	On-demand air taxi (135)
Operator Does Business As:		Operator Designator Code:	HDNA

Meteorological Information and Flight Plan

Conditions at Accident Site:	Instrument (IMC)	Condition of Light:	Night/dark
Observation Facility, Elevation:	KDTS, 23 ft msl	Distance from Accident Site:	17 Nautical Miles
Observation Time:	00:53 Local	Direction from Accident Site:	265°
Lowest Cloud Condition:		Visibility	7 miles
Lowest Ceiling:	Broken / 600 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	6 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:		Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29.93 inches Hg	Temperature/Dew Point:	26° C / 24° C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Santa Rosa Bch, FL	Type of Flight Plan Filed:	Company VFR
Destination:	DeFuniak Spgs, FL	Type of Clearance:	None
Departure Time:	00:41 Local	Type of Airspace:	

Wreckage and Impact Information

Crew Injuries:	3 Fatal	Aircraft Damage:	Destroyed
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	3 Fatal	Latitude, Longitude:	30.418056, -86.147781

Administrative Information

Investigator In Charge (IIC):	Kennedy, Jeffrey
Additional Participating Persons:	Philip Fox; FAA FSDO; Birmingham, AL Joseph A Syslo; American Eurocopter, LLC; Grand Prairie, TX Robert Ketchum; Rolls-Royce; Indianapolis, IN David Fry; Metro Aviation, Inc.; Shreveport, LA Chris Delikowski; Metro Aviation, Inc.; Shreveport, LA Jose L Obregon; NTSB; Miami, FL William J Bramble; NTSB; Washington, DC Gregory Salottolo; NTSB; Washington, DC Barbara Zimmerman; NTSB; Washington, DC
Original Publish Date:	February 28, 2006
Note:	The NTSB traveled to the scene of this accident.
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=60398

The National Transportation Safety Board (NTSB), established in 1967, is an independent federal agency mandated by Congress through the Independent Safety Board Act of 1974 to investigate transportation accidents, determine the probable causes of the accidents, issue safety recommendations, study transportation safety issues, and evaluate the safety effectiveness of government agencies involved in transportation. The NTSB makes public its actions and decisions through accident reports, safety studies, special investigation reports, safety recommendations, and statistical reviews.

The Independent Safety Board Act, as codified at 49 U.S.C. Section 1154(b), precludes the admission into evidence or use of any part of an NTSB report related to an incident or accident in a civil action for damages resulting from a matter mentioned in the report. A factual report that may be admissible under 49 U.S.C. § 1154(b) is available [here](#).