



# National Transportation Safety Board Aviation Accident Data Summary

<b>Location:</b>	Whittier, AK	<b>Accident Number:</b>	ANC08FA025
<b>Date &amp; Time:</b>	12/03/2007, 1718 AST	<b>Registration:</b>	N141LG
<b>Aircraft:</b>	Eurocopter Deutschland BK117C1	<b>Injuries:</b>	4 Fatal
<b>Flight Conducted Under:</b>	Part 135: Air Taxi & Commuter - Non-scheduled - Air Medical (Unspecified)		

## Analysis

The commercial helicopter pilot was on a visual flight rules (VFR) 14 Code of Federal Regulations Part 135 EMS (emergency medical service) patient transfer flight from a remote medical clinic in Alaska to a hospital in Anchorage when it collided with the ocean during instrument meteorological conditions. The flight entailed flying over and near ocean waters and mountainous terrain during dusk and night conditions without lighted ground references (such as buildings and street lights) due to the uninhabited topography. With the pilot and patient were a paramedic and a nurse. While crossing over a portion of ocean approaching rising terrain, the helicopter likely encountered low ceilings and snow squalls. With the pilot unable to discern either the shore or the ocean, it is probable he flew the helicopter under control into the ocean. Pieces of the helicopter and the body of the nurse were recovered several days after the accident. The rest of the helicopter and its occupants are presumed to have sunk in the ocean. There were no distress calls received from the pilot, and no history of any significant mechanical issues with the helicopter.

The accident flight was the pilot's first flight from this clinic, and this was his first winter season flying in Alaska. He had expressed his concern to a mechanic prior to the flight about flying over the accident route and water at night, and also told the nurse to bring his night vision goggles (NVGs) to assist him in seeing terrain. The pilot also had NVGs. It is unknown what weather information the pilot had when he elected to accept the flight. He had access to a company computer, and he and other company pilots routinely did their preflight weather planning using it. There is no record that he received any preflight weather briefing from the FAA, nor contacted them for weather information prior to his departure from the clinic, or sought weather updates while en route. It was night VFR when the pilot departed the clinic, but the weather had deteriorated near the accident site in close proximity to his departure time. The nearest reporting station was about 5 miles from the accident site. About 23 minutes before the accident, it was reporting instrument meteorological conditions with snow and low ceilings.

Aerial search efforts had to be delayed due to the poor weather. Neither the operator nor the hospital provided en route weather updates, or primary dispatch services. The hospital's procedure was to call the assigned EMS pilot to request a flight, and the pilot made the decision to either accept or reject the flight. Company procedures required that the pilot complete a risk assessment form prior to taking a flight. There was no risk assessment form found for the accident flight, and company management could not locate other risk assessment forms for previous EMS flights. An exemplar risk assessment form was completed by the NTSB investigator-in-charge using information that the pilot could reasonably expect to have known prior to accepting the flight. That information equated to a "Moderate" risk level, and required company management's concurrence to authorize the flight. Company management was not notified. The pilot was required to phone the hospital communications center at 10-minute intervals via satellite phone while en route, and when he did not call at the required time, a search was initiated.

The operator's main base was in Anchorage, and the EMS facility was in another Alaska town. The operator had not been assigned a principal operations inspector (POI) to oversee their operations

until about 2 months prior to the accident. The POI had not inspected or visited the remote EMS location. Prior to the POI's assignment, the operator did not have a POI assigned for the preceding 22 months, but instead relied on various points of contact (POC) within the local FAA Flight Standards District Office to provide oversight. Investigation disclosed no evidence that any POC had visited the EMS facility. The operator also did not adhere to the proper procedures in training the accident pilot in the use of the NVGs. These discrepancies were not discovered by the FAA until after the accident. NTSB/SIR-06/01 recommended that the FAA require EMS operators to use formalized dispatch and flight-following procedures that include up-to-date weather information and assistance in flight risk assessment decisions. With a formalized dispatch and flight following process, it is probable the helicopter would have been turned around/canceled prior to entering instrument meteorological conditions (IMC), or due to the noncritical nature of the patient, the patient could have waited until an airplane was available that was capable of flying in IMC.

## Flight Events

Enroute - Controlled flight into terr/obj (CFIT)

## Probable Cause

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's decision to continue VFR flight into night instrument meteorological conditions. Contributing to the accident were the operator's failure to adhere to an FAA-approved and mandated safety risk management program, the FAA's failure to provide sufficient oversight of the operator to ensure they were in compliance with the risk management program, the pilot's lack of experience in night winter operations in Alaska, and the operator's lack of an EMS dispatch and flight following system.

## Findings

### Pilot Information

<b>Certificate:</b>	Commercial	<b>Age:</b>	42
<b>Airplane Rating(s):</b>	Single-engine Land	<b>Instrument Rating(s):</b>	Helicopter
<b>Other Aircraft Rating(s):</b>	Helicopter	<b>Instructor Rating(s):</b>	None
<b>Flight Time:</b>	2678 hours (Total, all aircraft), 120 hours (Total, this make and model), 2439 hours (Pilot In Command, all aircraft), 49 hours (Last 90 days, all aircraft), 26 hours (Last 30 days, all aircraft), 2 hours (Last 24 hours, all aircraft)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	Eurocopter Deutschland	<b>Registration:</b>	N141LG
<b>Model/Series:</b>	BK117C1	<b>Engines:</b>	2 Turbo Shaft
<b>Operator:</b>	EVERGREEN HELICOPTERS OF ALASKA INC	<b>Engine Manufacturer:</b>	Turbomeca
<b>Operating Certificate(s) Held:</b>	On-demand Air Taxi (135)	<b>Engine Model/Series:</b>	Arriel 1E2
<b>Flight Conducted Under:</b>	Part 135: Air Taxi & Commuter - Non-scheduled - Air Medical (Unspecified)		

## Meteorological Information and Flight Plan

<b>Conditions at Accident Site:</b>	Instrument Conditions	<b>Condition of Light:</b>	Night
<b>Observation Facility, Elevation:</b>	PAWR	<b>Weather Information Source:</b>	Weather Observation Facility
<b>Lowest Ceiling:</b>	Obscured / 300 ft agl	<b>Wind Speed/Gusts, Direction:</b>	6 knots / , 120°
<b>Temperature:</b>	-6° C	<b>Visibility</b>	1 Miles
<b>Precipitation and Obscuration:</b>	Moderate - Showers - Snow		
<b>Departure Point:</b>	Cordova, AK (CKU)	<b>Destination:</b>	Anchorage, AK

## Wreckage and Impact Information

<b>Crew Injuries:</b>	3 Fatal	<b>Aircraft Damage:</b>	Substantial
<b>Passenger Injuries:</b>	1 Fatal	<b>Aircraft Fire:</b>	None
<b>Ground Injuries:</b>	N/A	<b>Aircraft Explosion:</b>	None
<b>Latitude, Longitude:</b>	60.809722, -148.555278		

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Lawrence Lewis	<b>Adopted Date:</b>	01/15/2009
<b>Note:</b>	The NTSB traveled to the scene of this accident.		
<b>Investigation Docket:</b>	NTSB accident and incident dockets serve as permanent archival information for the NTSB's investigations. Dockets released prior to June 1, 2009 are publicly available from the NTSB's Record Management Division at <a href="mailto:pubinq@ntsb.gov">pubinq@ntsb.gov</a> , or at 800-877-6799. Dockets released after this date are available at <a href="http://dms.nts.gov/pubdms/">http://dms.nts.gov/pubdms/</a> .		

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