

## **Aviation Investigation Preliminary Report**

Location:	Shaktoolik, AK	Accident Number:	ANC23FA042
Date & Time:	June 16, 2023, 11:35 Local	<b>Registration</b> :	N91361
Aircraft:	Cessna 180	Injuries:	2 Fatal
Flight Conducted Under:	Part 135: Air taxi & commuter - Non-scheduled		

On June 16, 2023, about 1135 Alaska daylight time, a Cessna 180H airplane, N91361, was substantially damaged when it was involved in an accident near Shaktoolik, Alaska. The pilot and passenger were fatally injured. The airplane was operated as a Title 14 *Code of Federal Regulations* (CFR) Part 135 on-demand charter flight.

The airplane was operated by Golden Eagle Outfitters, Inc. in support of a remote bear hunting excursion. Two hunting guides were waiting on a remote off-airport mountain ridgeline airstrip near their camp to be picked up and flown to Unalakleet Airport (PAUN) after a hunting trip. An hour before the accident, the pilot departed with two hunters/clients and told the guides he would be back to pick them up. When the pilot returned, he boarded one of the guides and some of their gear, then arranged to return for the other and the remaining gear.

The guide who witnessed the accident stated the winds "were gusting and changing a lot" and increased during the hour they waited for the pilot's return. He stated he had flown with the pilot many times and had witnessed the pilot perform takeoffs and landings from the airstrip many times.

The airstrip was about 750 feet long and situated atop a down-sloping, rock and grass-covered ridgeline. The airplane normally landed uphill on about a 060° heading, then departed in the opposite direction, downhill, on about a 240° heading. During previous departures, after takeoff, the airplane would dip below the airstrip off the departure end, out of sight, then climb back into view and out of the valley.

The witness watched the initial portion of the downhill takeoff roll, and nothing appeared abnormal, so he turned away and did not watch the remainder of the takeoff. When he did not hear the engine noise during climb out or see the airplane climbing, he ran to the ridgeline's edge and saw the airplane had impacted the tundra 300 ft below the airstrip. He sent an SOS alert from his personal GPS tracker, then hiked down to the airplane to check for survivors.

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A helicopter pilot who responded to the accident site about 45 minutes after the accident said that the winds were "unusual" that day. Winds were variable, gusting 10 to 12 knots from the north, calmed, then gusted 5 knots from the south, and then the pattern repeated.

Examination of the airstrip revealed a small cluster of trees about 2/3 of the distance from the departure end on the runway's left side, and downslope. One 12 ft tree, about 4 inches in diameter, was fractured about 4 ft from its base. The separated portion of the tree was found next to its trunk and displayed fragments of red paint that matched the accident airplane's paint color.



Figure 1 View of the fractured tree with fragments of red paint.

Examination of the wreckage revealed it impacted tundra in a steep nose-down wings level attitude about 1,200 ft. from the broken tree. The wings were displaced by impact, the right wing leading edge was uniformly crushed aft along its span. The upper and lower wing skins were crushed aft in compression. Flight control continuity was established through several breaks to the flight control surfaces. All breaks and separations were consistent with impact and overstress failure. The engine was separated from the airframe and came to rest inverted behind the left wing. The propeller hub was fractured, and the propeller blades were separated from the hub.



Figure 2 View of the airplane where it came to rest.

The right horizontal stabilizer and elevator did not exhibit leading edge impact signatures and the elevator remained attached.

The left horizontal stabilizer displayed a concave dent perpendicular to the leading edge about 1 ft outboard of the stabilizer root. Tree sap and embedded tree fibers were observed in the leading edge of the horizontal stabilizer.



Figure 3 View of the aft crushing on the horizontal stabilizer.

The airplane and its contents were recovered and retained for further examination.

## Aircraft and Owner/Operator Information

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Aircraft Make:	Cessna	Registration:	N91361	
Model/Series:	180 Н	Aircraft Category:	Airplane	
Amateur Built:				
Operator:	Golden Eagle Outfitters, Inc.	Operating Certificate(s) Held:	Commuter air carrier (135)	
Operator Designator Code:				
Meteorological Information and Flight Plan				
Conditions at Accident Site:	VMC	Condition of Light:	Day	
<b>Observation Facility, Elevation:</b>	PFSH,23 ft msl	<b>Observation Time:</b>	10:56 Local	
Distance from Accident Site:	31 Nautical Miles	Temperature/Dew Point:	12°C /6°C	
Lowest Cloud Condition:		Wind Speed/Gusts, Directior	<b>1:</b> 15 knots / , 10°	
Lowest Ceiling:	Overcast / 11000 ft AGL	Visibility:	10 miles	
Altimeter Setting:	29.65 inches Hg	Type of Flight Plan Filed:	CVFR	
Departure Point:	Unalakleet, AK (PAUN)	Destination:	Unalakleet, AK (PAUN)	

## Wreckage and Impact Information

Crew Injuries:	1 Fatal	Aircraft Damage:	Substantial
Passenger Injuries:	1 Fatal	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 Fatal	Latitude, Longitude:	64.528214,-160.08637

## Administrative Information

Investigator In Charge (IIC):	Hill, Millicent
Additional Participating Persons:	Erik Wilson; FAA/FSDO; Fairbanks, AK
Investigation Class:	Class 3
Note:	