



Aviation Investigation Final Report

Location:	Talkeetna, Alaska	Accident Number:	ANC14LA058
Date & Time:	July 30, 2014, 22:30 Local	Registration:	N62197
Aircraft:	DEHAVILLAND DHC 2	Aircraft Damage:	Substantial
Defining Event:	Runway excursion	Injuries:	2 None
Flight Conducted Under:	Part 91: General aviation		

Analysis

The airplane had been outfitted with a large, bulk fuel tank to transport fuel to remote sites. After a fuel delivery, the airplane departed from a soft, wet, and muddy sod-covered airstrip that was 1,400 ft long and 50 ft wide with a slight downhill grade. The pilot reported that, during the takeoff run, the airplane failed to become airborne before reaching the end of the airstrip, so he aborted the takeoff. The airplane overran the airstrip and sustained substantial damage to the wings and fuselage.

The operator stated that, before the fuel delivery, the airplane was loaded with about 180 gallons of aviation fuel and that, after arriving at the airstrip, the pilot got out of the airplane, connected a hose and transfer pump system to the bulk fuel tank, and operated the transfer pump for about 5 minutes. Postaccident examination of the wreckage revealed that all 180 gallons of fuel were still in the bulk fuel tank. According to the operator, the pilot did not open the drain valve to allow the tank to drain nor did he verify that the tank was empty before departing. Further, the operator stated that the pilot departed about midfield using only the last 750 ft of airstrip that remained; the estimated takeoff distance for the flight was between 800 and 900 ft.

Probable Cause and Findings

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

The pilot's inadequate preflight inspection that did not detect that the bulk fuel tank was full and led to an unanticipated heavy airplane weight and his failure to use the entire soft, wet, and muddy airstrip length for takeoff, which resulted in a takeoff overrun.

Findings

Personnel issues	Preflight inspection - Pilot
Personnel issues	Aircraft control - Pilot
Environmental issues	Wet/muddy terrain - Contributed to outcome
Environmental issues	Wet/muddy terrain - Effect on equipment

Factual Information

History of Flight

Prior to flight	Aircraft loading event
Takeoff-rejected takeoff	Miscellaneous/other
Takeoff	Runway excursion (Defining event)
Takeoff	Collision with terr/obj (non-CFIT)

On July 30, 2014, about 2230 Alaska daylight time, a de Havilland DHC-2 airplane, N62197, sustained substantial damage when it collided with terrain during an aborted takeoff from a remote airstrip at the High Lake Lodge, about 60 miles northeast of Talkeetna, Alaska. The pilot and one passenger were uninjured. The airplane was registered to Gattis Aircraft, Inc., and operated by Glenn Air, Inc., Palmer, Alaska, under the provisions of 14 Code of Federal Regulations Part 91. Visual meteorological conditions prevailed at the time of the accident. The flight was originating at the time of the accident and was destined for the Wasilla Airport, Wasilla, Alaska.

According to the operator's president/chief pilot, the airplane had been outfitted with a large, internally-mounted bulk fuel tank, used to transport aviation fuel to a company owned remote fuel concession at High Lake Lodge. He added that the dirt and sod-covered airstrip at High Lake Lodge is 1,400 feet long, by 50 feet wide, and it's oriented on an east/west direction, at an elevation of 2,400 feet msl. He noted that the airstrip slopes downward slightly to the east, and at the time of the accident the airstrip was very soft, and covered in mud.

The president/chief pilot related that once the accident airplane arrived at the High Lake Lodge Airstrip, the pilot began to transfer the load of 180 gallons of aviation fuel (100LL) to the storage tank using a hose and pump transfer system. He added that the pilot operated the transfer pump for about 5 minutes, but he inadvertently did not open the drain valve to allow the tank to drain. Believing that the bulk fuel tank had been emptied, he disconnected the hose and pump system, and prepared for departure. The president/chief pilot noted that the accident pilot did not visually check the remaining quantity within the bulk fuel tank.

In his written statement to the National Transportation Safety Board, the pilot reported that after arriving at the High Lake Lodge Airstrip, "the fuel handler" directed the unloading of the fuel load from the bulk tank. He added that once the fuel was unloaded, the fuel handler informed him that the tank was empty, so he departed for the return flight to the Wasilla Airport. The pilot reported that his initial takeoff run was to the east and downhill, so the acceleration appeared normal, likely due to the down-sloping grade of the site. However, as the takeoff roll continued, and the airplane approached the departure end of the site, the airplane did not lift off the ground, so he aborted the takeoff. The airplane subsequently overran the departure end of the site, sustaining substantial damage to the wings and fuselage. The pilot noted that there were no preaccident mechanical malfunctions or anomalies that would have precluded normal operation.

According to the operator's president/chief pilot, a postaccident examination of the airplane's wreckage revealed that the entire 180 gallons of aviation fuel remained in the internally-mounted bulk fuel tank. Additionally, witnesses reported that the pilot departed about midfield, with only 750 feet remaining on the wet, muddy, soft airstrip. The president/chief pilot added that given the aircraft and environmental conditions, the estimated takeoff distance required would have been between 850 to 900 feet.

Pilot Information

Certificate:	Airline transport	Age:	56
Airplane Rating(s):	Single-engine land; Single-engine sea; Multi-engine land; Multi-engine sea	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	3-point
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	Airplane multi-engine; Airplane single-engine	Toxicology Performed:	No
Medical Certification:	Class 1 Without waivers/limitations	Last FAA Medical Exam:	October 2, 2013
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	February 6, 2014
Flight Time:	14000 hours (Total, all aircraft), 75 hours (Total, this make and model)		

Aircraft and Owner/Operator Information

Aircraft Make:	DEHAVILLAND	Registration:	N62197
Model/Series:	DHC 2	Aircraft Category:	Airplane
Year of Manufacture:	1957	Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	1177
Landing Gear Type:	Tailwheel	Seats:	2
Date/Type of Last Inspection:	June 17, 2014 Annual	Certified Max Gross Wt.:	5100 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	12466.1 Hrs at time of accident	Engine Manufacturer:	P & W
ELT:	Installed	Engine Model/Series:	R-985-AN-14B
Registered Owner:	Gatti's Aircraft Leasing	Rated Power:	450 Horsepower
Operator:	Glenn Air Inc.	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	PAEC,1350 ft msl	Distance from Accident Site:	22 Nautical Miles
Observation Time:	02:46 Local	Direction from Accident Site:	268°
Lowest Cloud Condition:	Few / 26000 ft AGL	Visibility	40 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	6 knots /	Turbulence Type Forecast/Actual:	/ None
Wind Direction:	180°	Turbulence Severity Forecast/Actual:	/ N/A
Altimeter Setting:	30.11 inches Hg	Temperature/Dew Point:	22°C / 6°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Talkeetna, AK	Type of Flight Plan Filed:	None
Destination:	Wasilla, AK (IYS)	Type of Clearance:	None
Departure Time:		Type of Airspace:	Class G

Airport Information

Airport:	High Lake Lodge N/S	Runway Surface Type:	Dirt;Grass/turf
Airport Elevation:	2400 ft msl	Runway Surface Condition:	Dry;Rough
Runway Used:	09	IFR Approach:	None
Runway Length/Width:	1400 ft / 50 ft	VFR Approach/Landing:	None

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	1 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 None	Latitude, Longitude:	62.841388,-149.105834(est)

Administrative Information

Investigator In Charge (IIC): Gallo, Mitchell

Additional Participating Persons: Roy Redifer; Federal Aviation Administration; ANC FSDO; Anchorage, AK

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Investigation Class: [Class](#)

Note:

Investigation Docket: <https://data.nts.gov/Docket?ProjectID=89799>

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