



National Transportation Safety Board Aviation Accident Final Report

Location:	Tuluksak, Alaska	Accident Number:	ANC10LA083
Date & Time:	September 3, 2010, 18:30 Local	Registration:	N9942M
Aircraft:	Cessna 207A	Aircraft Damage:	Substantial
Defining Event:	Collision during takeoff/land	Injuries:	1 Serious, 2 Minor
Flight Conducted Under:	Part 135: Air taxi & commuter - Non-scheduled		

Analysis

The director of operations for the operator stated that soft field conditions and standing water on the runway slowed the airplane during the takeoff roll. The airplane did not lift off in time to clear trees at the end of the runway and sustained substantial damage to both wings and the fuselage when it collided with the trees. The pilot reported that he used partial power at the beginning of the takeoff roll to avoid hitting standing water on the runway with full power. After passing most of the water, he applied full power, but the airplane did not accelerate like he thought it would. He recalled the airplane being in a nose-high attitude and the main wheels bouncing several times before the airplane impacted the trees at the end of the runway.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's delayed application of full power during a soft/wet field takeoff, resulting in a collision with trees during takeoff.

Findings

Aircraft	Climb capability - Capability exceeded
Environmental issues	Soft surface - Contributed to outcome
Environmental issues	Wet surface - Contributed to outcome
Personnel issues	(general) - Pilot

Factual Information

On September 3, 2010, about 1830 Alaska daylight time, a Cessna 207A airplane sustained substantial damage during a collision with trees while taking off at the Tuluksak Airport, Tuluksak, Alaska. The airplane was operated by Grant Aviation Inc., Anchorage, Alaska, as a visual flight rules on-demand passenger flight under Title 14, Code of Federal Regulations Part 135, when the accident occurred. The airline transport pilot received serious injuries, and the two passengers received minor injuries. Visual meteorological conditions prevailed, and company flight following procedures were in effect.

During a telephone conversation with the National Transportation Safety Board (NTSB) investigator-in-charge (IIC) on September 4, the director of operations for the operator said it appeared that soft field conditions and standing water on the runway prevented the airplane from accelerating fast enough to lift off in time to clear trees at the end of the runway. He said the airplane came to rest off the end of the runway in the trees, and sustained substantial damage to both wings and the fuselage.

In a written statement to the NTSB dated September 10, the pilot wrote that he did not apply full power at the beginning of the takeoff roll in order to avoid hitting standing water on the runway at full power. He said he applied full power after passing the puddles, but the airplane did not accelerate as he thought it would. He said he recalled the nose of the airplane being in a nose-high attitude, and the main wheels bouncing several times before the airplane impacted trees at the end of the runway.

History of Flight

Takeoff	Runway excursion
Takeoff	Collision during takeoff/land (Defining event)

Pilot Information

Certificate:	Airline transport; Flight instructor	Age:	34, Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	Airplane multi-engine; Airplane single-engine	Toxicology Performed:	No
Medical Certification:	Class 1 With waivers/limitations	Last FAA Medical Exam:	October 28, 2009
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	April 26, 2010
Flight Time:	4545 hours (Total, all aircraft), 245 hours (Total, this make and model), 4365 hours (Pilot In Command, all aircraft), 188 hours (Last 90 days, all aircraft), 83 hours (Last 30 days, all aircraft), 7 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	Registration:	N9942M
Model/Series:	207A	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Normal	Serial Number:	20700756
Landing Gear Type:	Tricycle	Seats:	8
Date/Type of Last Inspection:	August 10, 2010 AAIP	Certified Max Gross Wt.:	
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	29550 Hrs at time of accident	Engine Manufacturer:	CONT MOTOR
ELT:	C91A installed, not activated	Engine Model/Series:	IO-520-F
Registered Owner:		Rated Power:	300 Horsepower
Operator:		Operating Certificate(s) Held:	Commuter air carrier (135), On-demand air taxi (135)
Operator Does Business As:	Grant Aviation	Operator Designator Code:	ENHA

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	PABE, 126 ft msl	Distance from Accident Site:	31 Nautical Miles
Observation Time:	18:30 Local	Direction from Accident Site:	39°
Lowest Cloud Condition:	1700 ft AGL	Visibility	8 miles
Lowest Ceiling:	Broken / 1700 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	8 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	94°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29.57 inches Hg	Temperature/Dew Point:	11° C / 10° C
Precipitation and Obscuration:			
Departure Point:	Tuluksak, AK (TLT)	Type of Flight Plan Filed:	Company VFR
Destination:		Type of Clearance:	None
Departure Time:	18:30 Local	Type of Airspace:	

Airport Information

Airport:	Tuluksak TLT	Runway Surface Type:	Gravel
Airport Elevation:	30 ft msl	Runway Surface Condition:	Soft; Standing water; Wet
Runway Used:	20	IFR Approach:	None
Runway Length/Width:	2461 ft / 30 ft	VFR Approach/Landing:	None

Wreckage and Impact Information

Crew Injuries:	1 Serious	Aircraft Damage:	Substantial
Passenger Injuries:	2 Minor	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Serious, 2 Minor	Latitude, Longitude:	61.096668, -160.968338

Administrative Information

Investigator In Charge (IIC):	Lewis, Lawrence
Additional Participating Persons:	Ben Weststein; FAA FSDO-03; Anchorage, AK
Original Publish Date:	May 11, 2011
Note:	
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=77235

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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](#).