Aviation Investigation Final Report

Location:	CLARKS POINT, Alaska	**Accident Number:**	ANC01LA019
Date & Time:	November 14, 2000, 11:00 Local	**Registration:**	N1681C
Aircraft:	Cessna 180	**Aircraft Damage:**	Substantial
Defining Event:		**Injuries:**	3 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The certificated private pilot was landing a tundra tire equipped airplane, on a gravel-covered runway that had about 2 or 3 inches of standing water stretching lengthwise along the right side of the runway. During the landing roll, as the right main wheel entered the water, the pilot applied the brakes, and the right wheel began to hydroplane and stop turning. As the airplane continued down the runway, the right wheel exited the standing water, and contacted the gravel surface of the runway. The pilot explained that the force of the non-rotating wheel contacting the gravel runway sheared the right tire's valve stem, and the right tire instantly deflated. The deflated right tire 'grabbed' and the right axle broke. The right wing struck the runway and sustained substantial damage to the leading edge, and main spar. In his written report to the NTSB, the pilot wrote: 'The air pressure in the tire may have been a little low, due to the cold weather we had earlier.'

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's excessive application of the brakes during landing roll. Factors associated with the accident were water on the runway, low tire pressure, a sheared tire valve stem, and a fractured landing gear axle.

Findings

Occurrence #1: ON GROUND/WATER ENCOUNTER WITH TERRAIN/WATER
Phase of Operation: LANDING - ROLL

Findings
1. (F) TERRAIN CONDITION - WATER
2. (C) BRAKES(NORMAL) - EXCESSIVE - PILOT IN COMMAND
3. (F) LANDING GEAR,TIRE - LOW PRESSURE
4. (F) LANDING GEAR,TIRE VALVE STEM - SHEARED
5. (F) LANDING GEAR,AXLE - FRACTURED

Occurrence #2: GEAR COLLAPSED
Phase of Operation: LANDING - FLARE/TOUCHDOWN

Factual Information

On November 14, 2000, about 1100 Alaska standard time, a tundra tire equipped Cessna 180 airplane, N1681C, sustained substantial damage while landing at the Clarks Point Airport, Clarks Point, Alaska. The airplane was being operated as a visual flight rules (VFR) personal flight under Title 14, CFR Part 91, when the accident occurred. The certificated private pilot, and the two passengers aboard, were not injured. Visual meteorological conditions prevailed, and no flight plan was filed. The flight originated about 1000, from the Naknek Airport, Naknek, Alaska.

During a telephone conversation with the National Transportation Safety Board investigator-in-charge on November 17, the pilot reported that he was landing on runway 26, which required a correction for a strong left crosswind. He added that there was about 2 or 3 inches of standing water stretching lengthwise along the right side of the runway. He said that as the main landing gear touched down, and as the right main wheel entered the water, he applied the brakes. He said that the right wheel began to hydroplane, and stop turning. As the airplane continued down the runway, the right wheel exited the water, and contacted the gravel surface of the runway. The pilot explained that the force of the non-rotating wheel contacting the gravel runway sheared the right tire's valve stem, and the right tire instantly deflated. He said that the deflated right tire "grabbed" and the right axle broke. The right wing struck the runway and sustained substantial damage to the leading edge and main spar.

The pilot submitted a written report to the NTSB dated December 5. In his written report, the pilot wrote: "The air pressure in the tire may have been a little low, due to the cold weather we had earlier."

Pilot Information

Certificate:	Private	**Age:**	48,Male
Airplane Rating(s):	Single-engine land; Single-engine sea	**Seat Occupied:**	Left
Other Aircraft Rating(s):	None	**Restraint Used:**	
Instrument Rating(s):	None	**Second Pilot Present:**	No
Instructor Rating(s):	None	**Toxicology Performed:**	No
Medical Certification:	Class 3 Valid Medical--w/ waivers/lim	**Last FAA Medical Exam:**	August 1, 2000
Occupational Pilot:	UNK	**Last Flight Review or Equivalent:**	
Flight Time:	8000 hours (Total, all aircraft), 1500 hours (Total, this make and model), 60 hours (Last 90 days, all aircraft), 25 hours (Last 30 days, all aircraft), 2 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	**Registration:**	N1681C
Model/Series:	180 180	**Aircraft Category:**	Airplane
Year of Manufacture:		**Amateur Built:**	
Airworthiness Certificate:	Normal	**Serial Number:**	30381
Landing Gear Type:	Tailwheel	**Seats:**	4
Date/Type of Last Inspection:	October 1, 2000 Annual	**Certified Max Gross Wt.:**	2550 lbs
Time Since Last Inspection:	10 Hrs	**Engines:**	1 Reciprocating
Airframe Total Time:	4826 Hrs	**Engine Manufacturer:**	Continental
ELT:	Installed, not activated	**Engine Model/Series:**	O-470-A
Registered Owner:	CLYDE E. CLARK	**Rated Power:**	230 Horsepower
Operator:		**Operating Certificate(s) Held:**	None
Operator Does Business As:		**Operator Designator Code:**	

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	**Condition of Light:**	Day
Observation Facility, Elevation:		**Distance from Accident Site:**	
Observation Time:		**Direction from Accident Site:**	
Lowest Cloud Condition:	Unknown	**Visibility**	5 miles
Lowest Ceiling:	Overcast / 5000 ft AGL	**Visibility (RVR):**	
Wind Speed/Gusts:	15 knots / 20 knots	**Turbulence Type Forecast/Actual:**	/
Wind Direction:	180°	**Turbulence Severity Forecast/Actual:**	/
Altimeter Setting:	29 inches Hg	**Temperature/Dew Point:**	6°C / 3°C
Precipitation and Obscuration:	Moderate - None - Rain		
Departure Point:	NAKNEK , AK (5NK)	**Type of Flight Plan Filed:**	None
Destination:	CLARKS POINT , AK (CLP)	**Type of Clearance:**	None
Departure Time:	10:00 Local	**Type of Airspace:**	Class G

Airport Information

Airport:	CLARK'S POINT CLP	**Runway Surface Type:**	Gravel
Airport Elevation:	10 ft msl	**Runway Surface Condition:**	Wet
Runway Used:	26	**IFR Approach:**	None
Runway Length/Width:	2600 ft / 70 ft	**VFR Approach/Landing:**	Full stop

Wreckage and Impact Information

Crew Injuries:	1 None	**Aircraft Damage:**	Substantial
Passenger Injuries:	2 None	**Aircraft Fire:**	None
Ground Injuries:	N/A	**Aircraft Explosion:**	None
Total Injuries:	3 None	**Latitude, Longitude:**	58.829074,-158.529373(est)

Administrative Information

Investigator In Charge (IIC):	Johnson, Clinton
Additional Participating Persons:	LARRY K PETERSON (FAA); ANCHORAGE , AK
Original Publish Date:	July 10, 2001
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=51022