



# Aviation Investigation Final Report

<b>Location:</b>	CLARKS POINT, Alaska	<b>Accident Number:</b>	ANC01LA019
<b>Date &amp; Time:</b>	November 14, 2000, 11:00 Local	<b>Registration:</b>	N1681C
<b>Aircraft:</b>	Cessna 180	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>		<b>Injuries:</b>	3 None
<b>Flight Conducted Under:</b>	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

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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

<b>Certificate:</b>	Private	<b>Age:</b>	48, Male
<b>Airplane Rating(s):</b>	Single-engine land; Single-engine sea	<b>Seat Occupied:</b>	Left
<b>Other Aircraft Rating(s):</b>	None	<b>Restraint Used:</b>	
<b>Instrument Rating(s):</b>	None	<b>Second Pilot Present:</b>	No
<b>Instructor Rating(s):</b>	None	<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>	Class 3 Valid Medical-w/ waivers/lim	<b>Last FAA Medical Exam:</b>	August 1, 2000
<b>Occupational Pilot:</b>	UNK	<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>	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

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

## Meteorological Information and Flight Plan

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

## Airport Information

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

## Wreckage and Impact Information

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

## Administrative Information

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

The National Transportation Safety Board (NTSB) is an independent federal agency charged by Congress with investigating every civil aviation accident in the United States and significant events in other modes of transportation—railroad, transit, highway, marine, pipeline, and commercial space. We determine the probable causes of the accidents and events we investigate, and issue safety recommendations aimed at preventing future occurrences. In addition, we conduct transportation safety research studies and offer information and other assistance to family members and survivors for each accident or event we investigate. We also serve as the appellate authority for enforcement actions involving aviation and mariner certificates issued by the Federal Aviation Administration (FAA) and US Coast Guard, and we adjudicate appeals of civil penalty actions taken by the FAA.

The NTSB does not assign fault or blame for an accident or incident; rather, as specified by NTSB regulation, “accident/incident investigations are fact-finding proceedings with no formal issues and no adverse parties ... and are not conducted for the purpose of determining the rights or liabilities of any person” (Title 49 *Code of Federal Regulations* section 831.4). Assignment of fault or legal liability is not relevant to the NTSB’s statutory mission to improve transportation safety by investigating accidents and incidents and issuing safety recommendations. In addition, statutory language prohibits the admission into evidence or use of any part of an NTSB report related to an accident in a civil action for damages resulting from a matter mentioned in the report (Title 49 *United States Code* section 1154(b)). A factual report that may be admissible under 49 *United States Code* section 1154(b) is available [here](#).