

Aviation Investigation Final Report

Location:	KONGIGANAK, Alaska		Accident Number:	ANC99LA051
Date & Time:	April 19, 1999, 14:18 Lo	ocal	Registration:	N414JA
Aircraft:	Britten-Norman	BN-2B-21	Aircraft Damage:	Substantial
Defining Event:	Injuries: 1 None		1 None	
Flight Conducted Under:	Part 135: Air taxi & commuter - Non-scheduled			

Analysis

The certificated airline transport pilot reported that prior to landing he did a visual inspection of the runway. He noted that the runway appeared wet in some areas, but within acceptable limits for landing. He said that during the final stages of the landing roll, while moving at a relatively slow ground speed, the airplane's nose wheel encountered a large, water and mud-filled hole. He said that his postaccident inspection revealed that the nose strut had been bent aft, about 20 degrees from its original position. A subsequent inspection of the runway revealed a large, water-filled hole about 15 inches deep, by 1 foot wide, and 20 feet long in the middle of the runway. The pilot noted that there were no preaccident mechanical anomalies with the airplane. A subsequent inspection revealed that the airplane sustained substantial damage to the nose wheel bulkhead.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The deep, water filled hole in the runway.

Findings

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

Findings
1. (F) AIRPORT FACILITIES, RUNWAY/LANDING AREA CONDITION - ROUGH/UNEVEN

Factual Information

On April 19, 1999, about 1418 Alaska daylight time, a wheel equipped Britten-Norman BN-2B-21 airplane, N414JA, received substantial damage while landing at the Kongiganak Airport, Kongiganak, Alaska. The airplane was being operated as a visual flight rules (VFR) nonscheduled cargo flight under Title 14, Part 135, when the accident occurred. The airplane was registered to, and operated by, Larry's Flying Service, Inc., Fairbanks, Alaska. The solo airline transport pilot was not injured. Visual meteorological conditions prevailed, and a VFR company flight plan was in effect. The flight was a continuation of a cross-country flight that originated at the Bethel Airport, Bethel, Alaska, about 1242.

During a telephone conversation with the National Transportation Safety Board investigator-incharge on April 20, the pilot reported that the accident flight had made a brief stop at two remote villages before departing for the accident airport. He said that prior to landing at Kongiganak, he did a visual inspection of runway 18. He noted that the runway appeared wet in some areas, but within acceptable limits for landing. He said that during the final stages of the landing roll, while moving at a relatively slow ground speed, the airplane's nose wheel encountered a large, water and mud-filled hole. He said that the impact threw water, mud, and stones over the nose, windscreen, engines, and wings. The pilot added that he was able to taxi the airplane to the parking area, to assess the damage. He said that his inspection revealed that the nose strut had been bent aft, about 20 degrees from its original position.

During the pilot's postaccident inspection of runway 18 at Kongiganak, he said he discovered a large hole about 15 inches deep, by 1 foot wide, and 20 feet long in the middle of the runway. After he reported the accident to the flight service station personnel, the runway was closed to all operations until repairs could be accomplished.

The pilot noted that there were no preaccident mechanical anomalies with the airplane.

An FAA ferry permit was issued for a one-time maintenance ferry flight to the operator's main maintenance facility located in Fairbanks, Alaska. A subsequent inspection revealed that the airplane sustained substantial damage to the nose wheel bulkhead.

Pilot Information

Certificate:	Airline transport; Commercial; Flight instructor	Age:	56,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; Instrument airplane	Toxicology Performed:	No
Medical Certification:	Class 1 Valid Medicalw/ waivers/lim	Last FAA Medical Exam:	March 23, 1999
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	
Flight Time:	13000 hours (Total, all aircraft), 900 hours (Total, this make and model), 12500 hours (Pilot In Command, all aircraft), 130 hours (Last 90 days, all aircraft), 100 hours (Last 30 days, all aircraft), 3 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Britten-Norman	Registration:	N414JA
Model/Series:	BN-2B-21 BN-2B-21	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	2107
Landing Gear Type:	Tricycle	Seats:	2
Date/Type of Last Inspection:	February 26, 1999 100 hour	Certified Max Gross Wt.:	6600 lbs
Time Since Last Inspection:	78 Hrs	Engines:	2 Reciprocating
Airframe Total Time:	8825 Hrs	Engine Manufacturer:	Lycoming
ELT:	Installed, not activated	Engine Model/Series:	IO-540-K185
Registered Owner:	LARRY'S FLYING SERVICE	Rated Power:	300 Horsepower
Operator:		Operating Certificate(s) Held:	On-demand air taxi (135)
Operator Does Business As:		Operator Designator Code:	FWRA

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	50 miles
Lowest Ceiling:	Overcast / 5000 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	/	Turbulence Type Forecast/Actual:	/
Wind Direction:	0°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:		Temperature/Dew Point:	4°C
Precipitation and Obscuration:	No Obscuration; No Precipita	ation	
Departure Point:	KWIGILLINGOK , AK (AK85)	Type of Flight Plan Filed:	Company VFR
Destination:		Type of Clearance:	None
Departure Time:	13:45 Local	Type of Airspace:	Class G

Airport Information

Airport:	KONGIGANAK DUY	Runway Surface Type:	Gravel
Airport Elevation:	25 ft msl	Runway Surface Condition:	Holes;Rough;Soft;Wet
Runway Used:	18	IFR Approach:	None
Runway Length/Width:	1880 ft / 35 ft	VFR Approach/Landing:	Full stop

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 None	Latitude, Longitude:	63.030235,-163.539474(est)

Administrative Information

Investigator In Charge (IIC):	Johnson, Clinton		
Additional Participating Persons:	HUGH KEITH (FAA); FAIRBANKS , AK		
Original Publish Date:	June 23, 2000		
Last Revision Date:			
Investigation Class:	<u>Class</u>		
Note:			
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=46244		

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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.