National Transportation Safety Board
Aviation Accident Final Report

Location:	POINT LAY, AK	**Accident Number:**	ANC94LA009
Date & Time:	10/08/1993, 1735 AKD	**Registration:**	N811E
Aircraft:	DOUGLAS C-54GDC	**Aircraft Damage:**	Substantial
Defining Event:		**Injuries:**	3 None
Flight Conducted Under:	Part 91: General Aviation - Business		

Analysis

THE CAPTAIN STATED THERE WERE NO RUNWAY CONDITION REPORTS AND A LOCAL CONTACT STATED THE RUNWAY WAS IN GOOD CONDITION. THEY LANDED AND THE BRAKING ACTION WAS NIL. THE CAPTAIN MANEUVERED THE AIRPLANE TO A DRY PATCH OF DIRT ON THE LEFT SIDE OF THE RUNWAY. WHEN THE MAIN GEAR ROLLED ONTO THE DRY PATCH THE AIRPLANE VEERED SHARPLY TO THE LEFT AND DEPARTED THE RUNWAY. BOTH CREWMEMBERS STATED A GO AROUND WAS NOT POSSIBLE. ACCORDING TO LANDING PERFORMANCE CHARTS, THE MINIMUM LANDING RUNWAY LENGTH WAS 4500 FEET ON A DRY HARD SURFACE RUNWAY. THE ACTUAL RUNWAY LENGTH WAS 3500 FEET.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: THE PILOT-IN-COMMAND'S FAILURE TO PERFORM PROPER PREFLIGHT PLANNING BY NOT COMPUTING THE REQUIRED LANDING RUNWAY LENGTH.

Findings

Occurrence #1: LOSS OF CONTROL - ON GROUND/WATER
Phase of Operation: LANDING - ROLL

Findings
1. TERRAIN CONDITION - ICY
2. (C) PREFLIGHT PLANNING/PREPARATION - NOT PERFORMED - PILOT IN COMMAND

Occurrence #2: ON GROUND/WATER ENCOUNTER WITH TERRAIN/WATER
Phase of Operation: LANDING - ROLL

Factual Information

On October 8, 1993, at 1735 Alaska daylight time, a wheel equipped Douglas, C54GDC airplane, N811E, registered to and operated by Brooks Fuel of Fairbanks, Alaska, veered off the left side of the runway after landing at Point Lay, Alaska. The business flight, operating under 14 CFR Part 91, departed Fairbanks, Alaska, with a cargo of unleaded automotive fuel, and the destination was Point Lay. A company flight plan was filed and visual meteorological conditions prevailed. The airplane was substantially damaged and the Pilot-in-Command, Co-Pilot, and the passenger were not injured.

According to the Pilot in Command, there was no runway condition report so they called someone locally at Point Lay and were told that the runway was in good condition. The Captain stated that he applied brakes upon landing and there was some slight braking. As the airplane proceeded down the runway, braking became nil. The Captain attempted to maneuver the airplane toward the left side of the runway onto a visible strip of dirt. The left main gear caught on the dirt and veered the airplane off the left side of the runway.

According to the First Officer they touched down on the end of the ruwnay and the Captain had braking. Shortly there after braking was nil and he said that when the left main gear finally rolled onto the dirt near the left edge of the runway, the airplane made a sharp left turn and left the runway.

Both crewmembers stated that the airplane had progressed far enough down the runway so that a successful go around was impossible.

According to the Alaska Supplement the runway at Point Lay is 3500 feet long and has a field elevation of 20 feet above mean sea level. With the outside air temperature reported as 38 degrees fahrenheit, the density altitude was approximately 19.5 feet. According to the Captian, the landing weight of the airplane was 63,040 pounds.

According to information provided by the Douglas Aircraft Corporation, for a charted gross weight of 63,500 pounds, at sea level, using wing flaps 50, a coefficient of friction of .05 (slippery surface), the landing distance over a 50 foot obstacle listed is 4700 feet. According to the Douglas Aircraft landing performance chart, the minimum effective landing runway length for a dry hard surface was 4500 feet. A distance of 1000 feet greater than the actual landing length of the runway.

Both crewmembers also stated that they had a threshold speed of 94 knots and a touchdwon speed of 87 knots. Douglas Aircraft information shows that the airplane should glide at 110 knots and land at 99 knots.

Pilot Information

Certificate:	Airline Transport; Flight Instructor	**Age:**	48, Male
Airplane Rating(s):	Multi-engine Land; Multi-engine Sea; Single-engine Land; Single-engine Sea	**Seat Occupied:**	Left
Other Aircraft Rating(s):	Helicopter	**Restraint Used:**	Seatbelt, Shoulder harness
Instrument Rating(s):	Airplane	**Second Pilot Present:**	Yes
Instructor Rating(s):	Airplane Multi-engine; Airplane Single-engine; Instrument Airplane	**Toxicology Performed:**	No
Medical Certification:	Class 2 Valid Medical--w/ waivers/lim.	**Last FAA Medical Exam:**	08/05/1993
Occupational Pilot:		**Last Flight Review or Equivalent:**	
Flight Time:	20000 hours (Total, all aircraft), 2400 hours (Total, this make and model), 19500 hours (Pilot In Command, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	DOUGLAS	**Registration:**	N811E
Model/Series:	C-54GDC C-54GDC	**Aircraft Category:**	Airplane
Year of Manufacture:		**Amateur Built:**	No
Airworthiness Certificate:	Provisional; Transport	**Serial Number:**	36080
Landing Gear Type:	Retractable - Tricycle	**Seats:**	3
Date/Type of Last Inspection:	10/04/1994, AAIP	**Certified Max Gross Wt.:**	66700 lbs
Time Since Last Inspection:	20 Hours	**Engines:**	4 Reciprocating
Airframe Total Time:	28585 Hours	**Engine Manufacturer:**	P&W
ELT:	Installed, not activated	**Engine Model/Series:**	R2000-4
Registered Owner:	ROGER W. BROOKS	**Rated Power:**	1450 hp
Operator:	BROOKS FUEL	**Operating Certificate(s) Held:**	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	**Condition of Light:**	Day
Observation Facility, Elevation:	, 0 ft msl	**Distance from Accident Site:**	0 Nautical Miles
Observation Time:	0000	**Direction from Accident Site:**	0°
Lowest Cloud Condition:	Unknown / 0 ft agl	**Visibility**	10 Miles
Lowest Ceiling:	Overcast / 3300 ft agl	**Visibility (RVR):**	0 ft
Wind Speed/Gusts:	10 knots /	**Turbulence Type Forecast/Actual:**	/
Wind Direction:	130°	**Turbulence Severity Forecast/Actual:**	/
Altimeter Setting:		**Temperature/Dew Point:**	3°C
Precipitation and Obscuration:			
Departure Point:	FAIRBANKS, AK (FAI)	**Type of Flight Plan Filed:**	Company VFR
Destination:		**Type of Clearance:**	None
Departure Time:	1500	**Type of Airspace:**	Airport Advisory Area; Class G

Airport Information

Airport:	POINT LAY (PIZ)	**Runway Surface Type:**	Ice
Airport Elevation:	20 ft	**Runway Surface Condition:**	Ice
Runway Used:	23	**IFR Approach:**	None
Runway Length/Width:	3500 ft / 100 ft	**VFR Approach/Landing:**	Full Stop; Traffic Pattern

Wreckage and Impact Information

Crew Injuries:	2 None	**Aircraft Damage:**	Substantial
Passenger Injuries:	1 None	**Aircraft Fire:**	None
Ground Injuries:	N/A	**Aircraft Explosion:**	None
Total Injuries:	3 None	**Latitude, Longitude:**	

Administrative Information

Investigator In Charge (IIC):	GEORGE KOBELNYK	**Report Date:**	12/02/1994
Additional Participating Persons:	FSDO 01 ; FAIRBANKS, AK		
Publish Date:			
Investigation Docket:	NTSB accident and incident dockets serve as permanent archival information for the NTSB's investigations. Dockets released prior to June 1, 2009 are publicly available from the NTSB's Record Management Division at pubinq@ntsb.gov, or at 800-877-6799. Dockets released after this date are available at http://dms.ntsb.gov/pubdms/.		