



# National Transportation Safety Board Aviation Accident Final Report

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<b>Location:</b>	KASIGLUK, AK	<b>Accident Number:</b>	ANC93LA059
<b>Date &amp; Time:</b>	05/01/1993, 1415 AKD	<b>Registration:</b>	N6332D
<b>Aircraft:</b>	CESSNA 172	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>		<b>Injuries:</b>	4 None
<b>Flight Conducted Under:</b>	Part 135: Air Taxi & Commuter - Non-scheduled		

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## Analysis

THE PILOT REPORTED THAT HE WAS USING ONLY THE LEFT SIDE OF THE GRAVEL RUNWAY FOR TAKEOFF BECAUSE IT '...WAS IN A LITTLE BETTER CONDITION' THAN THE RIGHT HALF OF THE RUNWAY WHICH WAS VERY WET AND SOFT FROM THE MELTING WINTER SNOW. DUE TO WET SPOTS ON THE LEFT SIDE, SOME OF THE LEFT EDGE CONE MARKERS HAD BEEN MOVED IN TOWARD THE CENTER OF THE RUNWAY, MAKING THE TAKEOFF AREA EVEN NARROWER. DURING LIFTOFF THE AIRPLANE WEATHERVANED DUE TO A CROSSWIND, AND THE LEFT HORIZONTAL STABILIZER & ELEVATOR COLLIDED WITH ONE OF THE 3-FT HIGH RUNWAY EDGE RUBBER CONE MARKERS. THE RUNWAY HAD BEEN REOPENED 4/27 AFTER HAVING BEEN CLOSED FOR 10 DAYS BECAUSE OF THE MELTING SNOW.

## Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: THE PILOT'S POOR JUDGEMENT IN ATTEMPTING A TAKEOFF FROM A NARROW, WET, SOFT GRAVEL RUNWAY WITH A CROSSWIND. THE RUNWAY CONDITIONS AND THE CROSSWIND WERE FACTORS IN THE ACCIDENT.

## Findings

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Occurrence #1: ON GROUND/WATER COLLISION WITH OBJECT  
Phase of Operation: TAKEOFF - ROLL/RUN

### Findings

1. (F) AIRPORT FACILITIES, RUNWAY/LANDING AREA CONDITION - WET
2. (F) AIRPORT FACILITIES, RUNWAY/LANDING AREA CONDITION - SOFT
3. (F) WEATHER CONDITION - CROSSWIND
4. (C) JUDGMENT - POOR - PILOT IN COMMAND

## Factual Information

### HISTORY OF FLIGHT

On May 1, 1993, at 1415 Alaska daylight time, a wheel equipped Cessna 172 airplane, N6332D, operated by RobAir, of Bethel, Alaska, struck a runway edge cone marker during takeoff from the airport at Kasigluk, Alaska. The commercial pilot and three passengers were not injured, and the airplane was substantially damaged. The unscheduled domestic passenger flight, operating under 14 CFR Part 135, was destined for Bethel. Visual meteorological conditions existed, and a VFR flight plan was filed.

During a telephone interview immediately after the accident, the pilot stated the following in part: "The right half of the runway was very wet and soft from the melting winter snow, so I was taking off using the left side only, which was in a little better condition. Because of some soft wet spots on the left side, some of the left edge cone markers had been moved in toward the center of the runway, making the takeoff area even narrower. Just as the airplane was lifting off the runway, it weathervaned to the right because of the right gusty 10 to 15 knot crosswind. This caused the left horizontal stabilizer and elevator to hit one of the 3 foot high runway edge rubber cone markers. I looked back and could not see any significant damage to the airplane, and it seemed to fly stable. Because of the poor condition of the Kasigluk Runway, I decided to continue the flight back to Bethel, which was only about a 13 minute flight. Other considerations were that Bethel had a better runway, and emergency medical personnel if we should need them."

### ADDITIONAL INFORMATION

Bethel is located 24 miles east of Kasigluk. At 1353 on the day of the accident the Bethel weather was 5,000 feet scattered, 60 miles visibility, temperature 45 degrees Fahrenheit, dewpoint 38 degrees Fahrenheit, winds 320 degrees at 11 knots, and altimeter setting 29.56 inches of mercury.

After being closed for 10 days because of the melting snow, the Kasigluk runway was reopened on April 27, 1993, as reported by FAA Bethel NOTAM Number 04/017.

Shortly after the accident the pilot reported that the airplane sustained only minor damage to it's left elevator and horizontal stabilizer. Several days later the damaged components were examined by FAA Inspector Walter G. Zackowitz, FSDO-03, Anchorage, Alaska. He reported the damage to be substantial by NTSB criteria.

Shortly after the accident the operator ceased operation and surrendered his Part 135 Air Taxi Certificate to the FAA.

## Pilot Information

<b>Certificate:</b>	Commercial	<b>Age:</b>	31, Male
<b>Airplane Rating(s):</b>	Multi-engine Land; Single-engine Land; Single-engine Sea	<b>Seat Occupied:</b>	Left
<b>Other Aircraft Rating(s):</b>	None	<b>Restraint Used:</b>	Seatbelt, Shoulder harness
<b>Instrument Rating(s):</b>	Airplane	<b>Second Pilot Present:</b>	No
<b>Instructor Rating(s):</b>	None	<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>	Class 2 Valid Medical--no waivers/lim.	<b>Last FAA Medical Exam:</b>	12/24/1992
<b>Occupational Pilot:</b>		<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>	2400 hours (Total, all aircraft), 500 hours (Total, this make and model), 1 hours (Last 24 hours, all aircraft)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	CESSNA	<b>Registration:</b>	N6332D
<b>Model/Series:</b>	172 172	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>		<b>Amateur Built:</b>	No
<b>Airworthiness Certificate:</b>	Normal	<b>Serial Number:</b>	17272720
<b>Landing Gear Type:</b>	Tricycle	<b>Seats:</b>	4
<b>Date/Type of Last Inspection:</b>	01/02/2000, 100 Hour	<b>Certified Max Gross Wt.:</b>	2300 lbs
<b>Time Since Last Inspection:</b>		<b>Engines:</b>	1 Reciprocating
<b>Airframe Total Time:</b>		<b>Engine Manufacturer:</b>	LYCOMING
<b>ELT:</b>	Installed, not activated	<b>Engine Model/Series:</b>	O-320-D2J
<b>Registered Owner:</b>	GOETHALS, ROBERT M.	<b>Rated Power:</b>	160 hp
<b>Operator:</b>		<b>Operating Certificate(s) Held:</b>	On-demand Air Taxi (135)
<b>Operator Does Business As:</b>	ROBAIR	<b>Operator Designator Code:</b>	QIBC

## 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:	Clear / 0 ft agl	Visibility	60 Miles
Lowest Ceiling:	None / 0 ft agl	Visibility (RVR):	0 ft
Wind Speed/Gusts:	10 knots / 15 knots	Turbulence Type Forecast/Actual:	/
Wind Direction:	270°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:		Temperature/Dew Point:	6° C
Precipitation and Obscuration:			
Departure Point:	(Z09)	Type of Flight Plan Filed:	VFR
Destination:	BETHEL, AK (BET)	Type of Clearance:	None
Departure Time:	1415 ADT	Type of Airspace:	Class G

## Airport Information

Airport:	KASIGLUK (Z09)	Runway Surface Type:	Gravel
Airport Elevation:	100 ft	Runway Surface Condition:	Soft; Wet
Runway Used:	17	IFR Approach:	None
Runway Length/Width:	2100 ft / 35 ft	VFR Approach/Landing:	None

## Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	3 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	4 None	Latitude, Longitude:	

## Administrative Information

Investigator In Charge (IIC):	ROY C DAW	Report Date:	08/18/1994
Additional Participating Persons:	ALLAN R LEE; ANCHORAGE, AK WALTER G ZACKOWITZ; ANCHORAGE, 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 <a href="mailto:pubinq@ntsb.gov">pubinq@ntsb.gov</a> , or at 800-877-6799. Dockets released after this date are available at <a href="http://dms.nts.gov/pubdms/">http://dms.nts.gov/pubdms/</a> .		

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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](#).