

# **Aviation Investigation Final Report**

Location:	Kenai, Alaska	Accident Number:	ANC04LA060
Date & Time:	June 2, 2004, 20:10 Local	Registration:	N5180
Aircraft:	Cessna 180E	Aircraft Damage:	Substantial
Defining Event:		Injuries:	2 None
Flight Conducted Under:	Part 91: General aviation - Personal		

#### Analysis

The airline transport certificated pilot was departing in a tailwheel-equipped airplane. The pilot reported he was aware of a left crosswind that was near the limit for his airplane. The pilot indicated that he applied takeoff power and about 350 feet into the takeoff roll, the tailwheel lifted off the runway. The airplane began to veer to the left and the pilot pulled the engine power to idle and attempted to correct the left turn by application of brakes and flight controls. The airplane ground looped to the left, and the right wing struck the runway. The airplane then nosed over and received damage to the propeller, right wing, the vertical stabilizer, and the rudder. The wind conditions consisted of a direct left crosswind at 14 knots, with gusts to 21 knots.

#### **Probable Cause and Findings**

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's inadequate compensation for a crosswind condition and his failure to maintain directional control which resulted in an inadvertent ground loop and nose over. A factor contributing to the accident was a direct crosswind.

#### **Findings**

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

(F) WEATHER CONDITION - CROSSWIND
(C) COMPENSATION FOR WIND CONDITIONS - INADEQUATE - PILOT IN COMMAND
(C) GROUND LOOP/SWERVE - INADVERTENT - PILOT IN COMMAND
(C) DIRECTIONAL CONTROL - NOT MAINTAINED - PILOT IN COMMAND

Occurrence #2: ON GROUND/WATER ENCOUNTER WITH TERRAIN/WATER Phase of Operation: TAKEOFF - ABORTED

Findings 5. TERRAIN CONDITION - RUNWAY

Occurrence #3: NOSE OVER Phase of Operation: TAKEOFF - ABORTED

#### **Factual Information**

On June 2, 2004, about 2010 Alaska daylight time, a tundra tire-equipped Cessna 180E airplane, N5180, sustained substantial damage when it ground looped and nosed over during an aborted takeoff at the Kenai Municipal Airport, Kenai, Alaska. The airplane was being operated as a visual flight rules (VFR) cross-country personal flight to Fairbanks, Alaska, under Title 14, CFR Part 91, when the accident occurred. The airplane was operated by the pilot. The airline transport certificated pilot, and the sole passenger, were not injured. Visual meteorological conditions prevailed. No flight plan was filed, nor was one required.

During a telephone conversation with the National Transportation Safety Board (NTSB) investigator-in-charge (IIC), on June 2, the pilot reported that he was departing on runway 19R in his tailwheel-equipped airplane. He said he was aware of a left crosswind that was near the limit for his airplane. The pilot indicated that he applied takeoff power, and about 350 feet into the takeoff roll, the tailwheel lifted off the runway. The airplane began to veer to the left and the pilot pulled the engine power to idle and attempted to correct the left turn by application of brakes and flight controls. The pilot said the airplane ground looped to the left, and the right wing struck the runway. The airplane then nosed over and received damage to the propeller, right wing, the vertical stabilizer, and the rudder.

At 1953, an Aviation Routine Weather Report (METAR) at Kenai was reporting in part: Wind, 110 degrees (true) at 14 knots, gusts to 21 knots; visibility, 10 statute miles; clouds and sky condition, clear; temperature, 61 degrees F; dew point, 30 degrees F; altimeter, 29.96 inHg.

#### **Pilot Information**

Certificate:	Airline transport; Flight engineer; Private	Age:	43,Male
Airplane Rating(s):	Single-engine land; Single-engine sea; Multi-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 1 Valid Medicalno waivers/lim.	Last FAA Medical Exam:	February 16, 2004
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	March 10, 2004
Flight Time:	7000 hours (Total, all aircraft), 20 hours (Total, this make and model), 2500 hours (Pilot In Command, all aircraft), 25 hours (Last 90 days, all aircraft), 20 hours (Last 30 days, all aircraft), 3 hours (Last 24 hours, all aircraft)		

## Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	Registration:	N5180
Model/Series:	180E	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	18051077
Landing Gear Type:	Tailwheel	Seats:	4
Date/Type of Last Inspection:	August 29, 2003 Annual	Certified Max Gross Wt.:	2650 lbs
Time Since Last Inspection:	18 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	4866 Hrs as of last inspection	Engine Manufacturer:	Continental
ELT:	Installed, not activated	Engine Model/Series:	0-470R
Registered Owner:	Robert W. Everts	Rated Power:	230 Horsepower
Operator:		Operating Certificate(s) Held:	None

#### Meteorological Information and Flight Plan

Conditions at Accident Site:	Vieual (VMC)	Condition of Light:	Pov
Conditions at Accident Site.	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	PAEN,99 ft msl	Distance from Accident Site:	
Observation Time:	19:53 Local	Direction from Accident Site:	
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	14 knots / 21 knots	Turbulence Type Forecast/Actual:	/
Wind Direction:	90°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29.95 inches Hg	Temperature/Dew Point:	16°C / -1°C
Precipitation and Obscuration:	No Obscuration; No Precipita	ation	
Departure Point:	Kenai, AK (PAEN)	Type of Flight Plan Filed:	None
Destination:	Fairbanks, AK (PAFA)	Type of Clearance:	VFR
Departure Time:	20:10 Local	Type of Airspace:	Class E

## **Airport Information**

Airport:	Kenai Municipal Airport PAEN	Runway Surface Type:	Asphalt
Airport Elevation:	99 ft msl	Runway Surface Condition:	Dry
Runway Used:	19R	IFR Approach:	None
Runway Length/Width:	7575 ft / 150 ft	VFR Approach/Landing:	None

## Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	1 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 None	Latitude, Longitude:	60.573055,-151.244995

#### **Administrative Information**

Investigator In Charge (IIC):	Erickson, Scott
Additional Participating Persons:	Patrick Carty; FAA-AL-ANC FSDO 03; Anchorage, AK
Original Publish Date:	October 28, 2004
Last Revision Date:	
Investigation Class:	<u>Class</u>
Note:	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=59375

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.