



# **Aviation Investigation Final Report**

Location: Bettles, Alaska Accident Number: ANC05CA141

Date & Time: September 11, 2005, 20:25 Local Registration: N58316

Aircraft: Cessna 185F Aircraft Damage: Substantial

**Defining Event:** 2 None

Flight Conducted Under: Part 135: Air taxi & commuter - Non-scheduled

### **Analysis**

The airline transport certificated pilot was conducting a 14 CFR Part 135 on-demand passenger flight in a tailwheel-equipped airplane. The pilot said he flew over the airstrip, and the wind sock indicated a strong right crosswind. As the airplane slowed during the landing roll, he said he lost rudder authority, and the airplane ground-looped to the right. He said the left wing received structural damage when it struck the runway following the collapse of the main landing gear. The pilot said there were no known mechanical anomalies with the airplane prior to the accident.

### **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 gusty crosswind, which resulted in a loss of control and an inadvertent ground-loop during the landing roll. Factors associated with the accident were the ground-loop and gusts.

#### **Findings**

Occurrence #1: LOSS OF CONTROL - ON GROUND/WATER

Phase of Operation: LANDING - ROLL

**Findings** 

1. (F) WEATHER CONDITION - GUSTS

2. (F) WEATHER CONDITION - CROSSWIND

3. (C) COMPENSATION FOR WIND CONDITIONS - INADEQUATE - PILOT IN COMMAND 4. (F) GROUND LOOP/SWERVE - INADVERTENT - PILOT IN COMMAND

Occurrence #2: MAIN GEAR COLLAPSED Phase of Operation: LANDING - ROLL

Findings

5. TERRAIN CONDITION - RUNWAY

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#### **Factual Information**

On September 11, 2005, about 2025 Alaska daylight time, a Cessna 185F airplane, N58316, sustained substantial damage following a loss of control during the landing roll, and subsequent ground-loop at the Prospect Creek Airstrip, 25 miles east of Bettles, Alaska. The airplane was being operated by Jespersen Aircraft Services, doing business as Brooks Range Aviation, Bettles, as a visual flight rules (VFR) on-demand passenger flight under Title 14, CFR Part 135, when the accident occurred. The airline transport certificated pilot and sole passenger were not injured. Visual meteorological conditions prevailed, and company flight following procedures were in effect. The flight originated at the Bettles Airport, Bettles, about 2015.

During a telephone conversation with the National Transportation Safety Board (NTSB) investigator-in-charge (IIC) on September 12, the pilot said that during landing he noted that there was a strong crosswind from the right. He said after touching down, as the airplane slowed, he lost rudder authority, and the airplane ground-looped to the right. He said the left wing was structurally damaged when the left main landing gear collapsed during the ground-loop. The pilot said there were no known mechanical anomalies with the airplane prior to the accident.

#### **Pilot Information**

Certificate:	Airline transport; Commercial; Flight engineer	Age:	44,Male
Airplane Rating(s):	Single-engine land; Single-engine sea; Multi-engine land	Seat Occupied:	
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	
Instructor Rating(s):		Toxicology Performed:	No
Medical Certification:	Class 1	Last FAA Medical Exam:	March 1, 2005
Occupational Pilot:		Last Flight Review or Equivalent:	
Flight Time:	14500 hours (Total, all aircraft), 500 hours (Total, this make and model), 217 hours (Last 90 days, all aircraft), 65 hours (Last 30 days, all aircraft)		

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#### **Aircraft and Owner/Operator Information**

Aircraft Make:	Cessna	Registration:	N58316
Model/Series:	185F	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal; Utility	Serial Number:	18503284
Landing Gear Type:	Tailwheel	Seats:	
Date/Type of Last Inspection:		Certified Max Gross Wt.:	
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:		Engine Manufacturer:	Continental
ELT:	Installed, not activated	Engine Model/Series:	IO-520D
Registered Owner:	Jespersen Aircraft Services	Rated Power:	300 Horsepower
Operator:	Brooks Range Aviation	Operating Certificate(s) Held:	Commuter air carrier (135), On-demand air taxi (135)

## **Meteorological Information and Flight Plan**

Meteorological information			
Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:		Distance from Accident Site:	
Observation Time:		Direction from Accident Site:	
<b>Lowest Cloud Condition:</b>	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	15 knots / 20 knots	Turbulence Type Forecast/Actual:	/
Wind Direction:	90°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:		Temperature/Dew Point:	10°C / 7°C
Precipitation and Obscuration:	No Obscuration; No Precipita	ition	
Departure Point:	Bettles, AK (PPC )	Type of Flight Plan Filed:	Company VFR
Destination:	Bettles, AK	Type of Clearance:	None
Departure Time:		Type of Airspace:	

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## **Airport Information**

Airport:	Prospect Creek PAPR	Runway Surface Type:
Airport Elevation:		Runway Surface Condition:
Runway Used:	36	IFR Approach: None
Runway Length/Width:		VFR Approach/Landing:

## 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:	66.812774,-150.64389

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#### **Administrative Information**

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.

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