



# National Transportation Safety Board Aviation Accident Final Report

---

<b>Location:</b>	Kotzebue, AK	<b>Accident Number:</b>	ANC02LA015
<b>Date &amp; Time:</b>	02/14/2002, 1400 AST	<b>Registration:</b>	N190AJ
<b>Aircraft:</b>	Boeing 727-100	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>		<b>Injuries:</b>	4 None
<b>Flight Conducted Under:</b>	Part 121: Air Carrier - Non-scheduled		

---

## Analysis

During the base to final leg of the circle to land approach, the pilot overshot the centerline of the runway. On short final and at a low altitude, the pilot still had not attained alignment with the centerline of the runway. The pilot made a left turn, and then a right turn, attempting to align the airplane with the runway. During the right turn, he dragged the right wing on the snow-covered ground, damaging the outboard leading-edge slat.

## Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's decision to continue an unstabalized approach to landing. A factor associated with the accident is the pilot's failure to attain proper alignment with the runway.

## Findings

---

Occurrence #1: DRAGGED WING, ROTOR, POD, FLOAT OR TAIL/SKID  
Phase of Operation: CIRCLING (IFR)

### Findings

1. (F) PROPER ALIGNMENT - NOT ATTAINED - PILOT IN COMMAND
2. (C) CONTINUED - PILOT IN COMMAND
3. CLEARANCE - NOT MAINTAINED - PILOT IN COMMAND

## Factual Information

On February 14, 2002, about 1400 Alaska standard time, a Boeing 727-100 airplane, N190AJ, sustained substantial damage during an approach to landing at the Ralph Wien Memorial Airport, Kotzebue, Alaska. The airplane was being operated as an instrument flight rules (IFR) cargo flight under Title 14, CFR Part 121, when the accident occurred. The airplane was operated by Northern Air Cargo, Inc., Anchorage, Alaska, as Flight 20. The airline transport certificated pilot, and the three other crewmembers were not injured. Visual meteorological conditions prevailed, and an instrument flight rules (IFR) flight plan was filed. The flight originated at the Fairbanks Airport, Fairbanks, Alaska.

During a telephone conversation with the National Transportation Safety Board (NTSB) investigator-in-charge (IIC), on February 15, 2002, and a subsequent meeting on February 19, 2002, the director of operations for the operator said that the pilot was making a visual approach. He said that the pilot overshot the centerline of the runway while making the left turn from the base leg to the final segment of the approach. On the final segment of the approach, the pilot made a left, and then a right turn, attempting to realign the airplane with the centerline. During the right turn, the right wing struck the snow-covered ground. The pilot landed the airplane without further incident.

During a meeting with the operator's director of maintenance on February 19, 2002, the director of maintenance said the right wing's outboard leading-edge slat was replaced because of the damage received in the accident, and the right wingtip was repaired. No other portions of the airplane were damaged. He said there were no known mechanical problems with the airplane prior to the accident.

In a written statement, the pilot said he was executing the Vor Dme 2 Rwy 26 approach when he received information from Kotzebue radio that the winds favored runway 8. He told the co-pilot to tell Kotzebue radio they would circle and land on runway 8. The pilot wrote, "on the turn to final, I overshot the centerline of the runway and started correcting to the centerline." He said he was still "slightly correcting to centerline," when his "right wing dipped causing the right main to touch first." He said he was not aware of the wing dragging or the damage, until the flight engineer did a visual inspection of the airplane prior to departure.

In a written statement, the first officer said "... upon rollout of 180 degree turn to runway 8. Yukon 20 was positioned outward from the visual centerline of runway 8 and continued toward runway 8 at an approximate 20-30 degree intercept, 060 to 050 heading. Upon approaching touchdown right wingtip struck ice, snow or combination of both at touchdown."

## Pilot Information

<b>Certificate:</b>	Airline Transport; Flight Instructor; Flight Engineer	<b>Age:</b>	48, Male
<b>Airplane Rating(s):</b>	Multi-engine Land; Single-engine Land	<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>	Yes
<b>Instructor Rating(s):</b>	Airplane Single-engine	<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>	Class 1 Valid Medical--no waivers/lim.	<b>Last Medical Exam:</b>	12/17/2001
<b>Occupational Pilot:</b>		<b>Last Flight Review or Equivalent:</b>	08/27/2001
<b>Flight Time:</b>	10018 hours (Total, all aircraft), 1848 hours (Total, this make and model), 150 hours (Last 90 days, all aircraft)		

## Co-Pilot Information

<b>Certificate:</b>	Airline Transport	<b>Age:</b>	58, Male
<b>Airplane Rating(s):</b>	Multi-engine Land; Single-engine Land	<b>Seat Occupied:</b>	Right
<b>Other Aircraft Rating(s):</b>		<b>Restraint Used:</b>	Seatbelt, Shoulder harness
<b>Instrument Rating(s):</b>	Airplane	<b>Second Pilot Present:</b>	Yes
<b>Instructor Rating(s):</b>		<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>	Class 1 Valid Medical--w/ waivers/lim.	<b>Last Medical Exam:</b>	07/25/2001
<b>Occupational Pilot:</b>		<b>Last Flight Review or Equivalent:</b>	12/05/2001
<b>Flight Time:</b>	8500 hours (Total, all aircraft), 3500 hours (Total, this make and model)		

## Other Flight Crew Information

<b>Certificate:</b>		<b>Age:</b>	
<b>Airplane Rating(s):</b>		<b>Seat Occupied:</b>	Rear
<b>Other Aircraft Rating(s):</b>		<b>Restraint Used:</b>	
<b>Instrument Rating(s):</b>		<b>Second Pilot Present:</b>	Yes
<b>Instructor Rating(s):</b>		<b>Toxicology Performed:</b>	
<b>Medical Certification:</b>		<b>Last Medical Exam:</b>	
<b>Occupational Pilot:</b>		<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>			

## Aircraft and Owner/Operator Information

Aircraft Manufacturer:	Boeing	Registration:	N190AJ
Model/Series:	727-100	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Transport	Serial Number:	18878
Landing Gear Type:	Retractable - Tricycle	Seats:	5
Date/Type of Last Inspection:	02/02/2002, Continuous Airworthiness	Certified Max Gross Wt.:	170000 lbs
Time Since Last Inspection:	41 Hours	Engines:	3 Turbo Fan
Airframe Total Time:	74093 Hours	Engine Manufacturer:	P&W
ELT:	Not installed	Engine Model/Series:	JT8D-7B
Registered Owner:	NORTHERN AIR CARGO INC	Rated Power:	14500 lbs
Operator:	NORTHERN AIR CARGO INC	Air Carrier Operating Certificate:	Flag carrier (121); Supplemental
Operator Does Business As:	Northern Air Cargo Inc.	Operator Designator Code:	NACA

## Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:		Observation Time:	
Distance from Accident Site:		Direction from Accident Site:	
Lowest Cloud Condition:		Temperature/Dew Point:	-14° C / -16° C
Lowest Ceiling:	Overcast / 2100 ft agl	Visibility	3 Miles
Wind Speed/Gusts, Direction:	15 knots, 10°	Visibility (RVR):	
Altimeter Setting:	29.27 inches Hg	Visibility (RVV):	
Precipitation and Obscuration:			
Departure Point:	Fairbanks, AK (PAFA)	Type of Flight Plan Filed:	IFR
Destination:	Kotzebue, AK (PAOT)	Type of Clearance:	IFR
Departure Time:	DT	Type of Airspace:	Class E

## Airport Information

Airport:	Ralph Wien Memorial (OTZ)	Runway Surface Type:	Asphalt
Airport Elevation:	11 ft	Runway Surface Condition:	Snow--dry
Runway Used:	08	IFR Approach:	Circling; Visual; VOR
Runway Length/Width:	5900 ft / 150 ft	VFR Approach/Landing:	Traffic Pattern

## Wreckage and Impact Information

<b>Crew Injuries:</b>	4 None	<b>Aircraft Damage:</b>	Substantial
<b>Passenger Injuries:</b>	N/A	<b>Aircraft Fire:</b>	None
<b>Ground Injuries:</b>	N/A	<b>Aircraft Explosion:</b>	None
<b>Total Injuries:</b>	4 None	<b>Latitude, Longitude:</b>	66.885556, -162.598611

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Lawrence R Lewis	<b>Adopted Date:</b>	06/03/2002
<b>Additional Participating Persons:</b>	David W Lace; Fairbanks FSDO; Fairbanks, AK		
<b>Publish Date:</b>			
<b>Investigation Docket:</b>	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.ntsbt.gov/pubdms/">http://dms.ntsbt.gov/pubdms/</a> .		

The National Transportation Safety Board (NTSB), established in 1967, is an independent federal agency mandated by Congress through the Independent Safety Board Act of 1974 to investigate transportation accidents, determine the probable causes of the accidents, issue safety recommendations, study transportation safety issues, and evaluate the safety effectiveness of government agencies involved in transportation. The NTSB makes public its actions and decisions through accident reports, safety studies, special investigation reports, safety recommendations, and statistical reviews.

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.