



# Aviation Investigation Final Report

<b>Location:</b>	CHEVAK, Alaska	<b>Accident Number:</b>	ANC02LA066
<b>Date &amp; Time:</b>	June 30, 2002, 14:50 Local	<b>Registration:</b>	N7384U
<b>Aircraft:</b>	Cessna 207	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>		<b>Injuries:</b>	2 None
<b>Flight Conducted Under:</b>	Part 135: Air taxi & commuter - Non-scheduled		

## Analysis

The airline transport certificated pilot was landing the airplane on a gravel-surfaced runway during an air taxi cargo flight. The pilot told the director of operations that the airplane encountered a downdraft during the landing approach. The airplane landed short of the runway threshold. Airport personnel at the airport reported the airplane collided with the lip of the runway. The nose landing gear assembly was torn off the airplane, and the left main landing gear was folded aft. In the Pilot/Operator Aircraft Accident Report (NTSB form 6120.1/2) submitted by the pilot, the pilot indicated the weather conditions as clear with light turbulence. He reported the wind was 290 degrees at 8 to 10 knots. The remarks section of the FAA's Airport Facility Directory/Alaska Supplement indicates the "runway is trough shaped, low in center and high at both ends. Caution: Strong crosswinds at this location."

## Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's failure to attain the proper touchdown point resulting in an undershoot, and subsequent collision with gravel terrain.

## Findings

Occurrence #1: UNDERSHOOT  
Phase of Operation: LANDING - FLARE/TOUCHDOWN

Findings

1. (C) DISTANCE - MISJUDGED - PILOT IN COMMAND

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Occurrence #2: IN FLIGHT COLLISION WITH TERRAIN/WATER

Phase of Operation: LANDING - FLARE/TOUCHDOWN

Findings

2. TERRAIN CONDITION - LOOSE GRAVEL/SANDY

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Occurrence #3: GEAR COLLAPSED

Phase of Operation: LANDING - FLARE/TOUCHDOWN

Findings

3. LANDING GEAR, NOSE GEAR ASSEMBLY - SHEARED

4. LANDING GEAR, MAIN GEAR ATTACHMENT - FRACTURED

## Factual Information

On June 30, 2002, about 1450 Alaska daylight time, a wheel-equipped Cessna 207 airplane, N7384U, sustained substantial damage when it landed short of the intended runway at the Chevak Airport, Chevak, Alaska. The airplane was being operated as a visual flight rules (VFR) nonscheduled domestic cargo flight under Title 14, CFR Part 135, when the accident occurred. The airplane was operated by Flight Alaska Inc., Anchorage, Alaska. The airline transport certificated pilot, and the sole passenger, were not injured. Visual meteorological conditions prevailed, and a VFR flight plan was filed. The flight originated at the Newtok Airport, Newtok, Alaska, about 1424.

During a telephone conversation with the National Transportation Safety Board (NTSB) investigator-in-charge (IIC), on July 1, 2002, the director of operations for the operator reported the pilot was landing on runway 32 at Chevak. The pilot told the director of operations that the airplane encountered a downdraft during the landing approach. The airplane landed short of the gravel runway threshold. The nose landing gear assembly was torn off the airplane, and the left main landing gear was folded aft.

In the Pilot/Operator Aircraft Accident Report (NTSB form 6120.1/2) submitted by the pilot, the pilot indicated the weather conditions as clear with light turbulence. He reported the wind was 290 degrees at 8 to 10 knots.

The FAA's Airport Facility Directory/Alaska Supplement for Chevak, lists the runway as a gravel surface, 2,610 feet long by 40 feet wide. The remarks section of the directory states, in part: "Unattended. Caution: Runway condition not monitored. ...Caution: Strong crosswinds at this location. ...Runway is trough shaped, low in center and high at both ends."

Airport personnel at Chevak reported the airplane collided with the lip of the runway at the approach end of runway 32.

The closest official weather observation station is Hooper Bay, Alaska, which is located 16 nautical miles west of the accident site. At 1455, an automated weather observation system (AWOS) was reporting in part: Wind, 300 degrees (true) at 11 knots; visibility, 10 statute miles; clouds and sky condition, clear; temperature, 52 degrees F; dew point, 39 degrees F; altimeter, 29.88 inHg.

## Pilot Information

<b>Certificate:</b>	Airline transport; Commercial; Flight instructor	<b>Age:</b>	36, Male
<b>Airplane Rating(s):</b>	Single-engine land; Single-engine sea; Multi-engine land	<b>Seat Occupied:</b>	Left
<b>Other Aircraft Rating(s):</b>	None	<b>Restraint Used:</b>	
<b>Instrument Rating(s):</b>	Airplane	<b>Second Pilot Present:</b>	No
<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 FAA Medical Exam:</b>	March 11, 2002
<b>Occupational Pilot:</b>	Yes	<b>Last Flight Review or Equivalent:</b>	March 18, 2002
<b>Flight Time:</b>	2400 hours (Total, all aircraft), 1600 hours (Total, this make and model), 2400 hours (Pilot In Command, all aircraft), 200 hours (Last 90 days, all aircraft), 150 hours (Last 30 days, all aircraft), 3 hours (Last 24 hours, all aircraft)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	Cessna	<b>Registration:</b>	N7384U
<b>Model/Series:</b>	207	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>		<b>Amateur Built:</b>	
<b>Airworthiness Certificate:</b>	Normal	<b>Serial Number:</b>	20700431
<b>Landing Gear Type:</b>	Tricycle	<b>Seats:</b>	2
<b>Date/Type of Last Inspection:</b>	June 28, 2002 100 hour	<b>Certified Max Gross Wt.:</b>	3800 lbs
<b>Time Since Last Inspection:</b>	36 Hrs	<b>Engines:</b>	1 Reciprocating
<b>Airframe Total Time:</b>	25483 Hrs at time of accident	<b>Engine Manufacturer:</b>	CONTINENTAL
<b>ELT:</b>	Installed, activated, did not aid in locating accident	<b>Engine Model/Series:</b>	IO-520-F
<b>Registered Owner:</b>	FLIGHT ALASKA INC.	<b>Rated Power:</b>	300 Horsepower
<b>Operator:</b>		<b>Operating Certificate(s) Held:</b>	Commuter air carrier (135), On-demand air taxi (135)
<b>Operator Does Business As:</b>		<b>Operator Designator Code:</b>	YAAA

## Meteorological Information and Flight Plan

<b>Conditions at Accident Site:</b>	Visual (VMC)	<b>Condition of Light:</b>	Day
<b>Observation Facility, Elevation:</b>		<b>Distance from Accident Site:</b>	
<b>Observation Time:</b>		<b>Direction from Accident Site:</b>	
<b>Lowest Cloud Condition:</b>	Clear	<b>Visibility</b>	10 miles
<b>Lowest Ceiling:</b>	None	<b>Visibility (RVR):</b>	
<b>Wind Speed/Gusts:</b>	8 knots / None	<b>Turbulence Type Forecast/Actual:</b>	/
<b>Wind Direction:</b>	290°	<b>Turbulence Severity Forecast/Actual:</b>	/
<b>Altimeter Setting:</b>	29.87 inches Hg	<b>Temperature/Dew Point:</b>	18°C
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>	NEWTOK, AK (PAEW)	<b>Type of Flight Plan Filed:</b>	VFR
<b>Destination:</b>	CHEVAK, AK (VAK )	<b>Type of Clearance:</b>	None
<b>Departure Time:</b>	14:24 Local	<b>Type of Airspace:</b>	Class G

## Airport Information

<b>Airport:</b>	CHEVAK VAK	<b>Runway Surface Type:</b>	Gravel
<b>Airport Elevation:</b>	72 ft msl	<b>Runway Surface Condition:</b>	Dry
<b>Runway Used:</b>	32	<b>IFR Approach:</b>	None
<b>Runway Length/Width:</b>	2610 ft / 40 ft	<b>VFR Approach/Landing:</b>	Full stop

## Wreckage and Impact Information

<b>Crew Injuries:</b>	1 None	<b>Aircraft Damage:</b>	Substantial
<b>Passenger Injuries:</b>	1 None	<b>Aircraft Fire:</b>	None
<b>Ground Injuries:</b>	N/A	<b>Aircraft Explosion:</b>	None
<b>Total Injuries:</b>	2 None	<b>Latitude, Longitude:</b>	61.533611,-165.583618

## Administrative Information

<b>Investigator In Charge (IIC):</b>	ERICKSON, SCOTT
<b>Additional Participating Persons:</b>	TOM NOBLE; FAA-AL-ANC FSDO 03; ANCHORAGE, AK
<b>Original Publish Date:</b>	April 1, 2003
<b>Last Revision Date:</b>	
<b>Investigation Class:</b>	<a href="#">Class</a>
<b>Note:</b>	
<b>Investigation Docket:</b>	<a href="https://data.nts.gov/Docket?ProjectID=55103">https://data.nts.gov/Docket?ProjectID=55103</a>

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](#).