



Aviation Investigation Final Report

Location:	NEW STUYAHOK, Alaska	Accident Number:	ANC96LA115
Date & Time:	August 2, 1996, 11:00 Local	Registration:	N800NC
Aircraft:	de Havilland DHC-4	Aircraft Damage:	Substantial
Defining Event:		Injuries:	2 None
Flight Conducted Under:	Part 135: Air taxi & commuter - Non-scheduled		

Analysis

The airplane's nosegear collapsed during a landing roll on a gravel airstrip. Subsequent examination of the nosegear locking mechanism disclosed a failed hydraulic drag strut locking actuator.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The collapse of the nosegear precipitated by the failure of the hydraulic nosegear drag strut locking actuator.

Findings

Occurrence #1: NOSE GEAR COLLAPSED
Phase of Operation: LANDING - ROLL

Findings

1. LANDING GEAR,NOSE GEAR - UNLOCKED
2. LANDING GEAR,NOSE GEAR - COLLAPSED
3. (C) HYDRAULIC SYSTEM,ACTUATOR - FAILURE

Factual Information

On August 2, 1996, about 1100 Alaska daylight time, a deHavilland DHC-4 airplane, N800NC, registered to and operated by Greatland Air Cargo, sustained substantial damage while landing at the New Stuyahok airstrip, New Stuyahok, Alaska. The commercial certificated captain and first officer were not injured. The 14 CFR Part 135 cargo flight operated in visual meteorological conditions.

During a telephone interview with the NTSB investigator-in-charge on August 5, the captain related that during the landing roll at New Stuyahok, the nose gear suddenly collapsed. The captain said the landing was normal and uneventful until the nosegear collapsed. He also said that the green, gear down and locked light, was appropriately illuminated, and that he was uncertain why the nosegear collapsed.

The airplane was returned to its maintenance base and repaired. According to the pilot, the nose gear hydraulic drag strut actuator malfunctioned, and failed to remain in the down locked position. He said the part was changed, and the nosegear operated properly. He also indicated that the drag strut actuator service life is "on condition." The failed part, part number 5460-3, had approximately 1400 service hours at the time of failure. The pilot, who is also a certificated aviation mechanic, believes that additional inspections of the drag strut and associated hoses are warranted.

Pilot Information

Certificate:	Commercial	Age:	49, Male
Airplane Rating(s):	Single-engine land; Single-engine sea; Multi-engine land; Multi-engine sea	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	Yes
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 2 Valid Medical--w/ waivers/lim	Last FAA Medical Exam:	February 14, 1996
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	
Flight Time:	15670 hours (Total, all aircraft), 850 hours (Total, this make and model), 15670 hours (Pilot In Command, all aircraft), 334 hours (Last 90 days, all aircraft), 108 hours (Last 30 days, all aircraft), 3 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	de Havilland	Registration:	N800NC
Model/Series:	DHC-4 DHC-4	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	98
Landing Gear Type:	Retractable - Tricycle	Seats:	3
Date/Type of Last Inspection:	August 1, 1996 AAIP	Certified Max Gross Wt.:	28500 lbs
Time Since Last Inspection:	3 Hrs	Engines:	2 Reciprocating
Airframe Total Time:	14638 Hrs	Engine Manufacturer:	P&W
ELT:	Installed, not activated	Engine Model/Series:	R2000-7M2
Registered Owner:	GREATLAND AIR CARGO	Rated Power:	1450 Horsepower
Operator:		Operating Certificate(s) Held:	On-demand air taxi (135)
Operator Does Business As:		Operator Designator Code:	

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:		Distance from Accident Site:	
Observation Time:		Direction from Accident Site:	
Lowest Cloud Condition:	Unknown	Visibility	20 miles
Lowest Ceiling:	Broken / 1000 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	10 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	190°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:		Temperature/Dew Point:	16°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	ANCHORAGE , AK (ANC)	Type of Flight Plan Filed:	Company VFR
Destination:	(KNW)	Type of Clearance:	None
Departure Time:	00:00 Local	Type of Airspace:	Class G

Airport Information

Airport:	NEW STUYAHOK KNW	Runway Surface Type:	Gravel
Airport Elevation:	279 ft msl	Runway Surface Condition:	Dry
Runway Used:	0	IFR Approach:	None
Runway Length/Width:	1800 ft / 70 ft	VFR Approach/Landing:	Full stop;Traffic pattern

Wreckage and Impact Information

Crew Injuries:	2 None	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 None	Latitude, Longitude:	59.489261,-157.29074(est)

Administrative Information

Investigator In Charge (IIC):	Labelle, James
Additional Participating Persons:	P.K. WILLIS; ANCHORAGE , AK
Original Publish Date:	February 18, 1997
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=2872

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