



National Transportation Safety Board Aviation Accident Final Report

Location:	Fort Yukon, AK	Accident Number:	ANC02LA089
Date & Time:	08/01/2002, 1630 AKD	Registration:	N50718
Aircraft:	Helio H-295	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 None
Flight Conducted Under:	Part 91: General Aviation - Business		

Analysis

The pilot reported that he was landing on a remote gravel strip when the right main landing gear tire/wheel separated from the airplane. He said the right main landing gear leg then dug into the ground, and the fuselage buckled at the landing gear attachment point. The pilot said he examined the right main landing gear axle, and found what he believes was a pre-existing crack where the axle failed.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The failure of the axle shaft, which resulted in the separation of the right main tire/wheel from the airplane on landing.

Findings

Occurrence #1: AIRFRAME/COMPONENT/SYSTEM FAILURE/MALFUNCTION
Phase of Operation: LANDING - FLARE/TOUCHDOWN

Findings

1. (C) LANDING GEAR, AXLE - FAILURE, TOTAL
2. LANDING GEAR, WHEEL - SEPARATION

Factual Information

On August 1, 2002, about 1630 Alaska daylight time, a wheel-equipped Helio H-295 airplane, N50718, sustained substantial damage when the right main landing gear axle failed during landing at a remote unimproved airstrip, about 124 miles northwest of Fort Yukon, Alaska. The airplane was being operated by Circle Air of Central, Alaska, as a visual flight rules (VFR) business flight under Title 14, CFR Part 91, at the time of the accident. The solo commercial pilot was not injured. Visual meteorological conditions prevailed, and company VFR flight following procedures were in effect. The flight originated at a remote airstrip along Your Creek, about 40 miles north of the accident site.

During a telephone conversation with the National Transportation Safety Board (NTSB) investigator-in-charge (IIC) on August 2, the pilot said as the airplane touched down, the right main wheel/tire separated from the landing gear. The right main landing gear leg then dug into the ground, and bent rearward. He said the fuselage structure and skin were damaged at the right main landing gear attachment point. He further stated that when he retrieved the wheel/tire, he noted that the axle was broken.

The pilot said prior to the accident there were no known mechanical anomalies with the airplane, but when he examined the broken axle he said he believed the failure was due to an "old crack."

Pilot Information

Certificate:	Commercial	Age:	58, Male
Airplane Rating(s):	Single-engine Land; Single-engine Sea	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	Seatbelt, Shoulder harness
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 2 Valid Medical--w/ waivers/lim.	Last FAA Medical Exam:	08/23/2001
Occupational Pilot:		Last Flight Review or Equivalent:	06/14/2002
Flight Time:	7488 hours (Total, all aircraft), 291 hours (Total, this make and model), 7442 hours (Pilot In Command, all aircraft), 57 hours (Last 90 days, all aircraft), 28 hours (Last 30 days, all aircraft), 3 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Helio	Registration:	N50718
Model/Series:	H-295	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Normal; Utility	Serial Number:	1268
Landing Gear Type:	Tailwheel	Seats:	6
Date/Type of Last Inspection:	05/29/2002, Annual	Certified Max Gross Wt.:	3800 lbs
Time Since Last Inspection:	20 Hours	Engines:	1 Reciprocating
Airframe Total Time:	4332 Hours as of last inspection	Engine Manufacturer:	Lycoming
ELT:	Installed, not activated	Engine Model/Series:	GO-480
Registered Owner:	Dawn E. Foster	Rated Power:	295 hp
Operator:	Dawn E. Foster	Operating Certificate(s) Held:	On-demand Air Taxi (135)
Operator Does Business As:	Circle Air	Operator Designator Code:	C6VC

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:		Distance from Accident Site:	
Observation Time:		Direction from Accident Site:	
Lowest Cloud Condition:	Clear	Visibility	10 Miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	Light and Variable /	Turbulence Type Forecast/Actual:	/
Wind Direction:	Variable	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:		Temperature/Dew Point:	16° C
Precipitation and Obscuration:			
Departure Point:	Fort Yukon, AK	Type of Flight Plan Filed:	Company VFR
Destination:	Fort Yukon, AK	Type of Clearance:	None
Departure Time:	1115 ADT	Type of Airspace:	Class G

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	N/A	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 None	Latitude, Longitude:	67.954444, -148.233333

Administrative Information

Investigator In Charge (IIC): Lawrence R Lewis **Report Date:** 04/29/2003

Additional Participating Persons: Kenneth C Thomas; FAA Fairbanks FSDO-01; Fairbanks, AK

Publish Date:

Investigation Docket: 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 pubinq@ntsb.gov, or at 800-877-6799. Dockets released after this date are available at <http://dms.nts.gov/pubdms/>.

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. A factual report that may be admissible under 49 U.S.C. § 1154(b) is available [here](#).