



AVIATION



HIGHWAY



MARINE



RAILROAD



PIPELINE

Aviation Investigation Final Report

Location:	Newport News, Virginia	Accident Number:	ERA19LA169
Date & Time:	May 9, 2019, 10:15 Local	Registration:	N343AX
Aircraft:	Hawker Siddeley HUNTER	Aircraft Damage:	Substantial
Defining Event:	Landing gear collapse	Injuries:	1 None
Flight Conducted Under:	Public aircraft		

Analysis

The pilot was conducting a training flight under the supervision of a flight instructor in a second airplane. Following a touch-and-go landing, the landing gear was retracted; however, the right main landing gear indicated unsafe. After consultation with the flight instructor, the pilot again attempted to lower the landing gear and then observed a normal indication that all three landing gear were down and locked into position. As the pilot turned onto the downwind leg of the traffic pattern, he noticed a hydraulic warning light. The flight instructor also noticed fluid streaming from the right side of the airplane. Shortly thereafter, the pilot noted low hydraulic pressure and it was decided he would conduct a no-flap landing, utilizing the remaining hydraulic pressure to boost the flight controls. Immediately upon touchdown, the right main landing gear collapsed. The pilot was unable to control the airplane and it veered off the right side of the runway before stopping.

The right main landing gear strut was broken in two parts. Examination of the broken right gear components revealed small crack features consistent with a preexisting progressive crack at the base of the aft pivot pin bore. It is likely that the preexisting fatigue crack in the landing gear propagated to the point of failure. The crack also likely became large enough for hydraulic fluid to leak following the touch-and-go landing and failed catastrophically when the airplane touched down during the final landing.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be:

The failure of the right main landing gear due to a fatigue cracking.

Findings

Aircraft	Main gear strut/axle/truck - Failure
Aircraft	Main gear strut/axle/truck - Fatigue/wear/corrosion

Factual Information

History of Flight

Landing-landing roll	Landing gear collapse (Defining event)
Landing-landing roll	Runway excursion

On May 9, 2019, at 1015 eastern daylight time, a Hawker Siddeley Hunter MK-58, N343AX, was substantially damaged when it was involved in an accident at Newport News-Williamsburg International (PHF), Newport News, Virginia. The pilot was not injured. The airplane was operated as a public aircraft for the instructional flight.

An operator’s flight instructor reported that the purpose of the flight was initial training for the recently hired pilot. The flight instructor observed the flight and provided the pilot verbal instructions from another MK-58, which he flew in formation with the accident airplane. The mission briefing, preflight inspection, takeoff, and en route phases of the flight were unremarkable. The flight then returned to PHF to practice touch-and-go landings.

According to the pilot, following a touch-and -go landing, the right main landing gear indicated unsafe after retraction. After consultation with the flight instructor, the pilot again lowered the landing gear and then observed a normal indication that all three landing gear were down and locked into position. As the pilot turned onto the downwind leg of the traffic pattern, he noticed a hydraulic warning light. The flight instructor also noticed fluid streaming from the right side of the airplane. Shortly thereafter, the pilot noted low hydraulic pressure and the decision was made to conduct a no-flap landing, utilizing the remaining hydraulic pressure to boost the flight controls.

Immediately upon touchdown, the right main landing gear collapsed, and the pilot deployed the brake parachute. The pilot was unable to control the airplane and it veered off the right side of the runway and came to a complete stop.

Examination of the airplane by a Federal Aviation Administration inspector revealed that the right main landing gear strut was broken into two parts.

The right main landing gear upper trunnion strut was examined at the National Transportation Safety Board (NTSB) Materials Laboratory. Examination of the fracture surfaces revealed features consistent with a preexisting progressive crack on the main fitting fracture surface at the base of the aft pivot pin bore.

Pilot Information

Certificate:	Airline transport; Commercial; Flight instructor; Private	Age:	53,Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Single
Other Aircraft Rating(s):	None	Restraint Used:	5-point
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	Airplane multi-engine; Airplane single-engine	Toxicology Performed:	No
Medical Certification:	Class 2 Without waivers/limitations	Last FAA Medical Exam:	July 18, 2018
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	May 8, 2019
Flight Time:	(Estimated) 8000 hours (Total, all aircraft), 5 hours (Total, this make and model), 8438 hours (Pilot In Command, all aircraft), 202 hours (Last 90 days, all aircraft), 142 hours (Last 30 days, all aircraft), 3 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Hawker Siddeley	Registration:	N343AX
Model/Series:	HUNTER MK58	Aircraft Category:	Airplane
Year of Manufacture:	1959	Amateur Built:	
Airworthiness Certificate:	Experimental (Special)	Serial Number:	41H-697450
Landing Gear Type:	Retractable - Tricycle	Seats:	1
Date/Type of Last Inspection:	April 26, 2019 AAIP	Certified Max Gross Wt.:	25000 lbs
Time Since Last Inspection:	80 Hrs	Engines:	1 Turbo jet
Airframe Total Time:	2604 Hrs as of last inspection	Engine Manufacturer:	Avon
ELT:	C126 installed, not activated	Engine Model/Series:	203/7
Registered Owner:		Rated Power:	10150 Lbs thrust
Operator:		Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	phf,42 ft msl	Distance from Accident Site:	0 Nautical Miles
Observation Time:	10:54 Local	Direction from Accident Site:	0°
Lowest Cloud Condition:	Few / 30 ft AGL	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	8 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	170°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30.17 inches Hg	Temperature/Dew Point:	25°C / 17°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Newport News, VA (PHF)	Type of Flight Plan Filed:	IFR
Destination:	Newport News, VA (PHF)	Type of Clearance:	IFR
Departure Time:	09:30 Local	Type of Airspace:	Class D

Airport Information

Airport:	Newport News/Williamsburg Intl PHF	Runway Surface Type:	Asphalt
Airport Elevation:	42 ft msl	Runway Surface Condition:	Dry
Runway Used:	25	IFR Approach:	None
Runway Length/Width:	8003 ft / 150 ft	VFR Approach/Landing:	Full stop

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 None	Latitude, Longitude:	37.131942,-76.493057(est)

Administrative Information

Investigator In Charge (IIC):	Alleyne, Eric		
Additional Participating Persons:	Micheal P Marchelletta; FAA/FSDO; Richmond, VA Brandon McEwen; Airborne Tactical Advantage Company; Newport News, VA Sean Lally; Airborne Tactical Advantage Company; Newport News, VA Steve Guillemetto; Lortie Aviation Andre Lortie; Lortie Aviation		
Original Publish Date:	March 30, 2022	Investigation Class:	3
Note:	The NTSB did not travel to the scene of this accident.		
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=99408		

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](#).