



AVIATION



HIGHWAY



MARINE



RAILROAD



PIPELINE

Aviation Investigation Final Report

Location:	Ft Lauderdale, Florida	Accident Number:	ERA17LA121
Date & Time:	March 2, 2017, 10:34 Local	Registration:	N340DW
Aircraft:	Cessna 340	Aircraft Damage:	Substantial
Defining Event:	Landing gear collapse	Injuries:	1 None
Flight Conducted Under:	Part 91: General aviation - Flight test		

Analysis

During approach, the airline transport pilot observed a cockpit indication that the landing gear was down and locked; however, the left main landing gear collapsed during the landing roll. The left propeller struck the runway, and the airplane veered off the left side of the runway and came to rest in the grass. The airplane sustained substantial damage to the left wing. Postaccident examination of the airplane revealed that the left main landing gear downlock link had separated. The airplane experienced a previous landing gear collapse about 3 years before the accident. However, it had been flown about 6 hours uneventfully after extensive repairs from the previous accident and two subsequent annual inspections. It could not be determined if these events are related.

Probable Cause and Findings

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

Failure of the left main landing gear downlock link, which resulted in a landing gear collapse during the landing roll.

Findings

Aircraft	Main landing gear - Failure
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Factual Information

History of Flight

Landing-landing roll	Landing gear collapse (Defining event)
Landing-landing roll	Dragged wing/rotor/float/other
Landing-landing roll	Runway excursion
Landing-landing roll	Collision with terr/obj (non-CFIT)

On March 2, 2017, about 1034 eastern standard time, a privately owned and operated Cessna 340A, N340DW, was substantially damaged when the landing gear collapsed during landing at the Fort Lauderdale Executive Airport (FXE), Fort Lauderdale, Florida. The airline transport pilot was not injured. The local flight departed FXE about 0930. Visual meteorological conditions prevailed, and no flight plan was filed for the post maintenance test flight, which was conducted under the provisions of 14 Code of Federal Regulations Part 91.

According to the pilot, the purpose of the flight was to perform a post maintenance check. He departed FXE to the northwest and performed maneuvers and aircraft systems checks before returning to FXE. On approach for runway 9, he observed a three-green landing gear down indication. During the landing roll, the left main landing gear collapsed, the left propeller struck the runway, and the airplane veered off the left side of the runway and came to rest in the grass.

Examination of the airplane by a Federal Aviation Administration (FAA) inspector revealed that the airplane had been substantially damaged. The left wing aft spar was bent, the left wing tip tank, wing flaps, and leading edge were impact damaged, and the left propeller blade tips were curled back. Further examination of the airplane by an FAA inspector revealed that the left main landing gear downlock link separated. The inspector added that a previous landing gear collapse occurred in the Cayman Islands on April 21, 2014.

According to airplane maintenance records, the airplane had undergone extensive maintenance in December of 2015, including replacement of the left aileron, left inboard and outboard flaps, and removal, inspection, and servicing of all three landing gear. The airplane's most recent annual inspection was completed on January 19, 2017. At the time of the inspection, the airplane had accrued 3,977 total hours of operation. According to the Hobbs meter, the airplane had been operated 4.6 hours between the completion of the December 2015 repairs (and January 2016 annual inspection) and the most recent annual inspection. The airplane had been operated an additional 1.3 hours from the time of the most recent inspection, until the accident.

Pilot Information

Certificate:	Airline transport; Private	Age:	78,Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	Helicopter	Restraint Used:	3-point
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 2 With waivers/limitations	Last FAA Medical Exam:	October 14, 2016
Occupational Pilot:	UNK	Last Flight Review or Equivalent:	June 10, 2016
Flight Time:	2089 hours (Total, all aircraft), 205 hours (Total, this make and model), 1800 hours (Pilot In Command, all aircraft), 24 hours (Last 90 days, all aircraft), 12 hours (Last 30 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	Registration:	N340DW
Model/Series:	340 A	Aircraft Category:	Airplane
Year of Manufacture:	1978	Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	340A-0497
Landing Gear Type:	Retractable - Tricycle	Seats:	6
Date/Type of Last Inspection:	January 19, 2017 Annual	Certified Max Gross Wt.:	5990 lbs
Time Since Last Inspection:	1 Hrs	Engines:	2 Reciprocating
Airframe Total Time:	3978 Hrs at time of accident	Engine Manufacturer:	CONT MOTOR
ELT:	C126 installed, not activated	Engine Model/Series:	TSIO-520-NB
Registered Owner:	SOUTHERN AIRCRAFT CONSULTANCY INC TRUSTE	Rated Power:	310 Horsepower
Operator:	SOUTHERN AIRCRAFT CONSULTANCY INC TRUSTE	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	FXE,14 ft msl	Distance from Accident Site:	0 Nautical Miles
Observation Time:	10:53 Local	Direction from Accident Site:	214°
Lowest Cloud Condition:		Visibility	10 miles
Lowest Ceiling:	Broken / 3200 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	7 knots / None	Turbulence Type Forecast/Actual:	None / None
Wind Direction:	190°	Turbulence Severity Forecast/Actual:	N/A / N/A
Altimeter Setting:	30.09 inches Hg	Temperature/Dew Point:	29°C / 19°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Ft Lauderdale, FL (FXE)	Type of Flight Plan Filed:	None
Destination:	Ft Lauderdale, FL (FXE)	Type of Clearance:	None
Departure Time:	09:30 Local	Type of Airspace:	

Airport Information

Airport:	FORT LAUDERDALE EXECUTIVE FXE	Runway Surface Type:	Asphalt
Airport Elevation:	13 ft msl	Runway Surface Condition:	Dry
Runway Used:	9	IFR Approach:	None
Runway Length/Width:	6002 ft / 100 ft	VFR Approach/Landing:	Full stop;Traffic pattern

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:	26.197221,-80.170829(est)

Administrative Information

Investigator In Charge (IIC):	Brazy, Douglass
Additional Participating Persons:	Carlos Enriquez; FAA/FSDO; Miramar, FL
Original Publish Date:	November 6, 2019
Last Revision Date:	
Investigation Class:	Class
Note:	The NTSB did not travel to the scene of this accident.
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=94819

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](#).