

Aviation Investigation Final Report

Location:	HOMESTEAD, Flori	da	Accident Number:	MIA92LA172
Date & Time:	September 2, 1992	, 16:00 Local	Registration:	N975DA
Aircraft:	PIPER	PA-34-200	Aircraft Damage:	Substantial
Defining Event:			Injuries:	2 None
Flight Conducted Under:	Part 91: General av	viation - Personal		

Analysis

FLIGHT EXPERIENCED COLLAPSE OF THE LEFT MAIN LANDING GEAR DURING LANDING ROLLOUT. THE PILOT/MECHANIC REPORTED THE STRUT HOUSING HAD CRACKED AND FAILED JUST BELOW THE POINT THE TRUNION WEB ENDS. PIPER AIRCRAFT CORPORATION SERVICE BULLETIN 787A, DATED AUGUST 15, 1985, REQUIRES INSPECTION OF THE LANDING GEAR HOUSING JUST BELOW THE TRUNION WEB FOR CRACKS EACH 100 HOURS. IF A NEW LANDING GEAR STRUT HOUSING IS INSTALLED IN WHICH THE TRUNION WEB EXTENDS THE LENGTH OF THE HOUSING THE INSPECTION IS NOT REQUIRED. NO RECORD OF COMPLIANCE WITH SERVICE BULLETIN 787A WAS FOUND IN THE LOGBOOKS FOR N975DA. ON JUNE 22, 1990, THE NTSB ISSUED SAFETY RECOMMENDATION A-90-92 TO THE FEDERAL AVIATION ADMINISTRATION, RECOMMENDING THAT PIPER SERVICE BULLETIN 787A BE MADE MANDATORY BY ISSUANCE OF AN AIRWORTHINESS DIRECTIVE.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: THE FAILURE OF MAINTENANCE PERSONNEL TO COMPLY WITH A SERVICE BULLETIN, WHICH ALLOWED A CRACKED LANDING GEAR HOUSING TO GO UNDETECTED, RESULTING IN FAILURE OF THE LANDING GEAR.

Findings

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

- 1. (C) LANDING GEAR, MAIN GEAR CRACKED
- 2. (C) MAINTENANCE, SERVICE BULLETIN/LETTER NOT PERFORMED COMPANY MAINTENANCE PERSONNEL 3. (C) LANDING GEAR, MAIN GEAR FAILURE, TOTAL

Factual Information

Pilot Information

Certificate:	Commercial; Flight instructor	Age:	49,Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	Airplane multi-engine; Airplane single-engine; Instrument airplane	Toxicology Performed:	No
Medical Certification:	Class 2 Valid Medical–w/ waivers/lim	Last FAA Medical Exam:	March 19, 1992
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	
Flight Time:	3500 hours (Total, all aircraft), 100 hours (Total, this make and model), 3350 hours (Pilot In Command, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	PIPER	Registration:	N975DA
Model/Series:	PA-34-200 PA-34-200	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	34-7250216
Landing Gear Type:	Retractable - Tricycle	Seats:	6
Date/Type of Last Inspection:	June 9, 1992 100 hour	Certified Max Gross Wt.:	4000 lbs
Time Since Last Inspection:	80 Hrs	Engines:	2 Reciprocating
Airframe Total Time:	4900 Hrs	Engine Manufacturer:	LYCOMING
ELT:	Installed, not activated	Engine Model/Series:	IO-360-C1E6
Registered Owner:	AVIATION ENTERPRISES, INC.	Rated Power:	200 Horsepower
Operator:	JOHN OKLESEN	Operating Certificate(s) Held:	None
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:	MIA ,11 ft msl	Distance from Accident Site:	20 Nautical Miles
Observation Time:	15:50 Local	Direction from Accident Site:	20°
Lowest Cloud Condition:	Scattered / 2500 ft AGL	Visibility	7 miles
Lowest Ceiling:	Broken / 30000 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	16 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	90°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	31°C / 24°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	PUNTA GORDA ,FL (PGD)	Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	15:00 Local	Type of Airspace:	Class G

Airport Information

Airport:	HOMESTEAD GENERAL AVIATIO X51	Runway Surface Type:	Asphalt
Airport Elevation:	9 ft msl	Runway Surface Condition:	Dry
Runway Used:	18	IFR Approach:	
Runway Length/Width:	4000 ft / 100 ft	VFR Approach/Landing:	Traffic pattern

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	1 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 None	Latitude, Longitude:	25.860033,-80.270027(est)

Administrative Information

Investigator In Charge (IIC):	Kennedy, Jeffrey	
Additional Participating Persons:	DAN HUTCHINGS; MIAMI , FL	
Original Publish Date:	September 14, 1993	
Last Revision Date:		
Investigation Class:	<u>Class</u>	
Note:		
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=33128	

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 <u>here</u>.