



Aviation Investigation Final Report

Location:	W.PALM BEACH, Florida	Incident Number:	MIA87IA246
Date & Time:	September 16, 1987, 03:32 Local	Registration:	N9784Q
Aircraft:	PIPER PA-60	Aircraft Damage:	Minor
Defining Event:		Injuries:	1 None
Flight Conducted Under:	Part 135: Air taxi & commuter - Non-scheduled		

Analysis

THE PLT STATED THAT ON LANDING AFTER ROLLING ABOUT 1000 FT. THE SCISSORS ON THE RIGHT MAIN LANDING GEAR STRUT DISCONNECTED CAUSING THE WHEEL ASSEMBLY TO ROTATE & SKID. HE THEN APPLIED HEAVY LEFT BRAKE TO KEEP THE ACFT STRAIGHT ON THE RUNWAY, BUT THE MAIN GEAR COLLAPSED & THE ACFT SLID TO A STOP. POST CRASH EXAMINATION OF THE LANDING GEAR REVEALED THAT THE RIGHT MAIN LANDING GEAR LINK FAILED CAUSING THE WHEEL TO ROTATE 90 DEGREES, SUBSEQUENTLY COLLAPSING THE MAIN GEAR.

Probable Cause and Findings

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

Findings

Occurrence #1: AIRFRAME/COMPONENT/SYSTEM FAILURE/MALFUNCTION

Phase of Operation: LANDING - ROLL

Findings

1. (C) LANDING GEAR,MAIN GEAR STRUT SCISSORS - FAILURE,TOTAL

Occurrence #2: MAIN GEAR COLLAPSED
Phase of Operation: LANDING - ROLL

Factual Information

Pilot Information

Certificate:	Commercial; Flight instructor	Age:	31, 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 single-engine	Toxicology Performed:	No
Medical Certification:	Class 2 Valid Medical--no waivers/lim.	Last FAA Medical Exam:	December 8, 1986
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	
Flight Time:	2251 hours (Total, all aircraft), 306 hours (Total, this make and model), 2137 hours (Pilot In Command, all aircraft), 185 hours (Last 90 days, all aircraft), 4 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	PIPER	Registration:	N9784Q
Model/Series:	PA-60 PA-60	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	60416143
Landing Gear Type:	Retractable - Tricycle	Seats:	6
Date/Type of Last Inspection:	September 8, 1987 AAIP	Certified Max Gross Wt.:	5500 lbs
Time Since Last Inspection:	44 Hrs	Engines:	2 Reciprocating
Airframe Total Time:	5670 Hrs	Engine Manufacturer:	LYCOMING
ELT:	Installed, not activated	Engine Model/Series:	IO-540-KIFS
Registered Owner:	TOP FLIGHT SERVICE INC	Rated Power:	290 Horsepower
Operator:	TOP FLIGHT SERVICE, INC.	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:	Night/dark
Observation Facility, Elevation:	PBI ,19 ft msl	Distance from Accident Site:	
Observation Time:	04:39 Local	Direction from Accident Site:	
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	/	Turbulence Type Forecast/Actual:	/
Wind Direction:	0°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29 inches Hg	Temperature/Dew Point:	24°C / 23°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	MIAMI , FL (MIA)	Type of Flight Plan Filed:	IFR
Destination:		Type of Clearance:	IFR
Departure Time:	03:05 Local	Type of Airspace:	Class E

Airport Information

Airport:	PALM BEACH INT'L PBI	Runway Surface Type:	Asphalt
Airport Elevation:	19 ft msl	Runway Surface Condition:	Dry
Runway Used:	9L	IFR Approach:	None
Runway Length/Width:	7991 ft / 150 ft	VFR Approach/Landing:	Straight-in

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Minor
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 None	Latitude, Longitude:	26.659662,-80.090858(est)

Administrative Information

Investigator In Charge (IIC): Hill, Bruce

Additional Participating Persons:

Original Publish Date: July 10, 1989

Last Revision Date:

Investigation Class: [Class](#)

Note:

Investigation Docket: <https://data.nts.gov/Docket?ProjectID=31803>

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](#).