



Aviation Investigation Final Report

Location:	Miami, Florida	Accident Number:	ATL04CA192
Date & Time:	September 10, 2004, 17:30 Local	Registration:	N268DA
Aircraft:	Piper PA-44-180	Aircraft Damage:	Substantial
Defining Event:		Injuries:	3 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

According to the pilot, when he lowered the landing gear during his approach he verified that he had three green lights and the nose gear was visible in the mirror, and the red gear unsafe warning light was off. When he turned onto final approach and lined up with the runway he again checked and found that he had three green lights and verified the nose gear was visible in the mirror. He said he touched down on runway 9R and began the rollout. After about five seconds, he applied brakes to make the first turn off. Immediately after applying the brakes he said the landing gear collapsed. The airplane slid down the runway veered to the right and came to a stop just off the side of the runway, damaging the right outboard wing, the under carriage and propeller. Examination of the airplane found the flaps extended about 10 degrees and the gear handle not fully down in its detent. The airplane was moved to a maintenance facility on the airport and the gear was actuated seven times. Each time the landing gear functioned normally, there was no damage noted to the gear locks or the squat switch.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's failure to follow the after landing check list, which resulted in his inadvertent gear retraction during landing roll.

Findings

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

Findings

1. (C) GEAR RETRACTION - INADVERTENT - PILOT IN COMMAND
2. (C) CHECKLIST - NOT FOLLOWED - PILOT IN COMMAND

Factual Information

On September 10, 2004 at 1730 eastern daylight time, a Piper PA-44-180, N268DA, registered to Jack and Robert Arrow LLC., and operated by the commercial pilot, collapsed the nose and right main landing gear during roll out at the Kendall-Tamiami Airport in Miami, Florida. The personal flight was operated under the provisions of Title 14 CFR Part 91 and visual flight rules. Visual meteorological conditions prevailed and no flight plan was filed. The pilot and two passengers were not injured and the airplane sustained substantial damage. The flight originated at Opa Locka, Florida, on September 10, 2004, at 1715.

According to the pilot, when he lowered the landing gear during his approach he verified that he had three green lights and the nose gear was visible in the mirror, and the red gear unsafe warning light was off. When he turned onto final approach and lined up with the runway he again checked and found that he had three green lights and verified the nose gear was visible in the mirror. He said he touched down on runway 9R and began the rollout. After about five seconds, he applied brakes to make the first turn off. Immediately after applying the brakes, he said the landing gear collapsed. The airplane slid down the runway veered to the right and came to a stop just off the side of the runway, damaging the right outboard wing, the under carriage and propeller.

Examination of the airplane found the flaps extended about 10 degrees and the gear handle not fully down in its detent. The airplane was moved to a maintenance facility on the airport and the gear was actuated seven times. The gear order of operation was first left main down and locked, second right main down and locked, then the nose gear down to 3/4 travel at which time the right main will unlock and brake over center and both nose and main will then lock. Each time the landing gear functioned normally, there was no damage noted to the gear locks or the squat switch.

Pilot Information

Certificate:	Commercial	Age:	27,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):	None	Toxicology Performed:	No
Medical Certification:	Class 2 Valid Medical--no waivers/lim.	Last FAA Medical Exam:	January 7, 2004
Occupational Pilot:	UNK	Last Flight Review or Equivalent:	July 23, 2004
Flight Time:	1862 hours (Total, all aircraft), 60 hours (Total, this make and model), 1716 hours (Pilot In Command, all aircraft), 122 hours (Last 90 days, all aircraft), 65 hours (Last 30 days, all aircraft), 4 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Piper	Registration:	N268DA
Model/Series:	PA-44-180	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	4496135
Landing Gear Type:	Retractable - Tricycle	Seats:	4
Date/Type of Last Inspection:	100 hour	Certified Max Gross Wt.:	3816 lbs
Time Since Last Inspection:	46 Hrs	Engines:	2 Reciprocating
Airframe Total Time:	1249 Hrs as of last inspection	Engine Manufacturer:	Lycoming
ELT:	Installed, not activated	Engine Model/Series:	O360-A1H6
Registered Owner:	Jack and Robert Arrow LLC	Rated Power:	180 Horsepower
Operator:	Robert S. Morrell	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	TMB,10 ft msl	Distance from Accident Site:	0 Nautical Miles
Observation Time:	17:53 Local	Direction from Accident Site:	0°
Lowest Cloud Condition:	Few / 3000 ft AGL	Visibility	10 miles
Lowest Ceiling:		Visibility (RVR):	
Wind Speed/Gusts:	11 knots / None	Turbulence Type Forecast/Actual:	/
Wind Direction:	50°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29.95 inches Hg	Temperature/Dew Point:	27°C / 22°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Opa Locka, FL (OPF)	Type of Flight Plan Filed:	None
Destination:	Miami, FL (TMB)	Type of Clearance:	VFR
Departure Time:	17:15 Local	Type of Airspace:	Class E

Airport Information

Airport:	Kendall Tamiami TMB	Runway Surface Type:	Asphalt
Airport Elevation:	10 ft msl	Runway Surface Condition:	Dry
Runway Used:	9R	IFR Approach:	None
Runway Length/Width:	4999 ft / 150 ft	VFR Approach/Landing:	Traffic pattern

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	2 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	3 None	Latitude, Longitude:	25.649723,-80.416664

Administrative Information

Investigator In Charge (IIC):	Wilson, Ralph
Additional Participating Persons:	Rick Behrle; MIA FSDO; Miami, FL
Original Publish Date:	December 3, 2004
Last Revision Date:	
Investigation Class:	Class
Note:	This accident report documents the factual circumstances of this accident as described to the NTSB.
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=60242

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](#).