



# Aviation Investigation Final Report

<b>Location:</b>	VERO BEACH, Florida	<b>Accident Number:</b>	ATL00LA084
<b>Date &amp; Time:</b>	August 18, 2000, 19:11 Local	<b>Registration:</b>	N4380S
<b>Aircraft:</b>	Piper PA-46-310P	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>		<b>Injuries:</b>	2 None
<b>Flight Conducted Under:</b>	Part 91: General aviation - Instructional		

## Analysis

During a local instructional flight, a simulated engine out landing was attempted. The flight instructor stated that on short final, an unsafe gear indication occurred. The instructor then stated that an attempt was made to abort the landing and the engine failed to develop takeoff power. The airplane landed and the right main landing gear collapsed. According to the FAA Inspector on-scene, after the gear collapsed the airplane slid down the runway and struck a runway marker light substantially damaging the right wing leading edge, flap, and aileron. Examination of the engine, landing gear, and the hydraulic system, found no discrepancies.

## Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's inability to control the aircraft after landing due to a loss of engine power and landing gear failure for undetermined reasons. A factor in the severity of the accident was the impact with the airport marker lights.

### Findings

Occurrence #1: LOSS OF ENGINE POWER  
Phase of Operation: GO-AROUND (VFR)

#### Findings

- 1. (F) POWERPLANT - UNDETERMINED

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Occurrence #2: FORCED LANDING  
Phase of Operation: EMERGENCY DESCENT/LANDING  
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Occurrence #3: MAIN GEAR COLLAPSED  
Phase of Operation: LANDING - FLARE/TOUCHDOWN

Findings  
2. (C) LANDING GEAR,MAIN GEAR - UNDETERMINED  
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Occurrence #4: ON GROUND/WATER ENCOUNTER WITH TERRAIN/WATER  
Phase of Operation: LANDING - ROLL

Findings  
3. (F) OBJECT - AIRPORT SIGN/MARKER  
4. (F) AIRCRAFT CONTROL - NOT POSSIBLE - PILOT IN COMMAND

## Factual Information

On August 18, 2000, at 1911 eastern daylight time, a Piper PA-46-310P, N4380S, collided with a runway light when the right main landing gear collapsed during landing at the Vero Beach Municipal Airport, in Vero Beach, Florida. The airplane was operated by the airline transport pilot under the provisions of Title 14, CFR Part 91, and visual flight rules. Visual meteorological conditions prevailed and no flight plan was filed for the local flight. Neither the pilot or pilot rated passenger were injured, and the airplane sustained substantial damage. The flight had originated from the Vero Beach Municipal airport at 1700.

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According to the FAA Inspector on-scene, after the gear collapsed the airplane slid down the runway and struck a runway marker light substantially damaging the right wing leading edge, flap, and aileron. Examination of the engine, landing gear, and the hydraulic system, found no discrepancies.

### Pilot Information

<b>Certificate:</b>	Airline transport; Commercial; Flight engineer; Flight instructor	<b>Age:</b>	55, Male
<b>Airplane Rating(s):</b>	Single-engine land; Multi-engine land	<b>Seat Occupied:</b>	Right
<b>Other Aircraft Rating(s):</b>	Helicopter	<b>Restraint Used:</b>	
<b>Instrument Rating(s):</b>	Airplane; Helicopter	<b>Second Pilot Present:</b>	Yes
<b>Instructor Rating(s):</b>	Airplane multi-engine; Airplane single-engine; Helicopter; Instrument airplane; Instrument helicopter	<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>	Class 2 Valid Medical-w/ waivers/lim	<b>Last FAA Medical Exam:</b>	November 15, 1999
<b>Occupational Pilot:</b>	Yes	<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>	3000 hours (Total, all aircraft), 300 hours (Total, this make and model), 2100 hours (Pilot In Command, all aircraft), 60 hours (Last 90 days, all aircraft), 30 hours (Last 30 days, all aircraft), 6 hours (Last 24 hours, all aircraft)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	Piper	<b>Registration:</b>	N4380S
<b>Model/Series:</b>	PA-46-310P PA-46-310P	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>		<b>Amateur Built:</b>	
<b>Airworthiness Certificate:</b>	Normal	<b>Serial Number:</b>	46-8508020
<b>Landing Gear Type:</b>	Retractable - Tricycle	<b>Seats:</b>	6
<b>Date/Type of Last Inspection:</b>	August 8, 2000 Continuous airworthiness	<b>Certified Max Gross Wt.:</b>	4118 lbs
<b>Time Since Last Inspection:</b>	37 Hrs	<b>Engines:</b>	1 Reciprocating
<b>Airframe Total Time:</b>	2190 Hrs	<b>Engine Manufacturer:</b>	TELEDYNE CONT
<b>ELT:</b>	Installed, not activated	<b>Engine Model/Series:</b>	TSIO 520 BEIF
<b>Registered Owner:</b>	SUN AERO, INC.	<b>Rated Power:</b>	310 Horsepower
<b>Operator:</b>		<b>Operating Certificate(s) Held:</b>	None
<b>Operator Does Business As:</b>		<b>Operator Designator Code:</b>	

## Meteorological Information and Flight Plan

<b>Conditions at Accident Site:</b>	Visual (VMC)	<b>Condition of Light:</b>	Day
<b>Observation Facility, Elevation:</b>	VRB ,25 ft msl	<b>Distance from Accident Site:</b>	
<b>Observation Time:</b>	18:52 Local	<b>Direction from Accident Site:</b>	
<b>Lowest Cloud Condition:</b>	Scattered / 25000 ft AGL	<b>Visibility</b>	15 miles
<b>Lowest Ceiling:</b>	None	<b>Visibility (RVR):</b>	
<b>Wind Speed/Gusts:</b>	11 knots /	<b>Turbulence Type Forecast/Actual:</b>	/
<b>Wind Direction:</b>	110°	<b>Turbulence Severity Forecast/Actual:</b>	/
<b>Altimeter Setting:</b>	30 inches Hg	<b>Temperature/Dew Point:</b>	29°C / 22°C
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>	(VRB )	<b>Type of Flight Plan Filed:</b>	None
<b>Destination:</b>		<b>Type of Clearance:</b>	VFR
<b>Departure Time:</b>	17:00 Local	<b>Type of Airspace:</b>	Class D

## Airport Information

<b>Airport:</b>	VERO BEACH MUNICIPAL VRB	<b>Runway Surface Type:</b>	Asphalt
<b>Airport Elevation:</b>	25 ft msl	<b>Runway Surface Condition:</b>	Dry
<b>Runway Used:</b>	11R	<b>IFR Approach:</b>	None
<b>Runway Length/Width:</b>	7296 ft / 100 ft	<b>VFR Approach/Landing:</b>	Full stop

## Wreckage and Impact Information

<b>Crew Injuries:</b>	2 None	<b>Aircraft Damage:</b>	Substantial
<b>Passenger Injuries:</b>		<b>Aircraft Fire:</b>	None
<b>Ground Injuries:</b>	N/A	<b>Aircraft Explosion:</b>	None
<b>Total Injuries:</b>	2 None	<b>Latitude, Longitude:</b>	27.589736,-80.379089(est)

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Wilson, Butch
<b>Additional Participating Persons:</b>	JIM GUEST; ORLANDO , FL
<b>Original Publish Date:</b>	March 2, 2001
<b>Last Revision Date:</b>	
<b>Investigation Class:</b>	<a href="#">Class</a>
<b>Note:</b>	The NTSB traveled to the scene of this accident.
<b>Investigation Docket:</b>	<a href="https://data.ntsb.gov/Docket?ProjectID=50073">https://data.ntsb.gov/Docket?ProjectID=50073</a>

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](#).