



Aviation Investigation Final Report

Location:	MATTOON, Illinois	Accident Number:	CHI88LA137
Date & Time:	June 16, 1988, 15:30 Local	Registration:	N8226P
Aircraft:	PIPER PA-24-250	Aircraft Damage:	Substantial
Defining Event:		Injuries:	2 None
Flight Conducted Under:	Part 91: General aviation - Other work use		

Analysis

UPON RETURN FROM A LOCAL AERIAL PHOTOGRAPHY FLIGHT, THE PILOT FAILED TO ENSURE THAT THE AIRCRAFT LANDING GEAR WAS EXTENDED, DOWN AND LOCKED. WHEN THE AIRCRAFT TOUCHED DOWN, THE GEAR WAS ONLY EXTENDED APPROXIMATELY 10%; IT COLLAPSED FULLY WHEN IT CONTACTED THE GROUND AND THE AIRCRAFT SLID TO A STOP ON ITS BELLY. THE PAX STATED THAT HE THOUGHT THE GEAR WAS STILL IN THE UP POSITION ON SHORT FINAL AND THE PILOT LOWERED THE GEAR HANDLE ONLY WHEN THE PAX QUERIED HIM. POST-ACCIDENT GEAR ACTUATION REVEALED THAT THE GEAR FUNCTIONED NORMALLY. HOWEVER, THE GEAR WARNING HORN WAS ERRATIC.

Probable Cause and Findings

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

Findings

Occurrence #1: GEAR NOT EXTENDED
Phase of Operation: LANDING - FLARE/TOUCHDOWN

Findings

1. (C) GEAR EXTENSION - DELAYED - PILOT IN COMMAND
2. (C) GEAR DOWN AND LOCKED - NOT IDENTIFIED - PILOT IN COMMAND

3. (C) WHEELS UP LANDING - INADVERTENT - PILOT IN COMMAND
4. (F) LANDING GEAR, GEAR WARNING SYSTEM - ERRATIC

Factual Information

Pilot Information

Certificate:	Commercial	Age:	56, Male
Airplane Rating(s):	Single-engine land; Single-engine sea; 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--w/ waivers/lim	Last FAA Medical Exam:	July 30, 1987
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:	2300 hours (Total, all aircraft), 100 hours (Total, this make and model), 3 hours (Last 30 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	PIPER	Registration:	N8226P
Model/Series:	PA-24-250 PA-24-250	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	24-3479
Landing Gear Type:	Retractable - Tricycle	Seats:	4
Date/Type of Last Inspection:	July 1, 1987 Annual	Certified Max Gross Wt.:	2900 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	3833 Hrs	Engine Manufacturer:	LYCOMING
ELT:	Installed, not activated	Engine Model/Series:	O-540-A1A5
Registered Owner:	NIMS ASSOCIATES, INC.	Rated Power:	250 Horsepower
Operator:		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:	DEC ,679 ft msl	Distance from Accident Site:	35 Nautical Miles
Observation Time:	16:36 Local	Direction from Accident Site:	308°
Lowest Cloud Condition:	Scattered / 4500 ft AGL	Visibility	20 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	10 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	340°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	28°C / 12°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:		Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	15:00 Local	Type of Airspace:	Class G

Airport Information

Airport:	MATTOON MTO	Runway Surface Type:	Asphalt
Airport Elevation:	721 ft msl	Runway Surface Condition:	Dry
Runway Used:	6	IFR Approach:	None
Runway Length/Width:	5799 ft / 100 ft	VFR Approach/Landing:	Full stop

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:	39.4706,-88.360435(est)

Administrative Information

Investigator In Charge (IIC):	Reeves, Jodi
Additional Participating Persons:	R THORPE; SPRINGFIELD , IL
Original Publish Date:	September 29, 1989
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=14095

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](#).