



Aviation Investigation Final Report

Location:	GAINESVILLE, Florida	Accident Number:	MIA89LA148
Date & Time:	May 16, 1989, 08:54 Local	Registration:	N43797
Aircraft:	PIPER PA-32R-300	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 Minor
Flight Conducted Under:	Part 91: General aviation		

Analysis

THE FLT WAS CRUISING IN VFR CONDS WHEN RADIO CONTACT WAS LOST WITH CENTER. THE PLT DESCENDED & RETURNED TO GNV. HE STATED THAT HE WAS UNABLE TO FULLY EXTEND & LOCK THE GEAR USING NORMAL & EMERG MEANS DUE TO A LOSS OF ELECT POWER. AN APRCH WAS FLOWN FOR THE RWY WITH THE MAIN GEAR DOWN & THE NOSE GEAR IN AN UNDETERMINED POSITION. THE PLT STATED THAT ON SHORT FINAL APRCH, HE SAW THAT HE WAS GOING TO BE SHORT OF THE RWY & ATTEMPTED TO ADD POWER BUT THE ENGINE DID NOT RESPOND. A HARD LANDING WAS MADE ON THE OVERRUN SECTION OF THE RWY WHICH DROVE THE MAIN GEAR INTO THE SPAR CAUSING A PARTIAL COLLAPSE OF THE GEAR & MAJOR DAMAGE TO THE ACFT. THE ALTERNATOR WAS LATER EXAMINED BY MAINT PERSNL WHO REPORTED THE BRUSHES WERE COMPLETELY BURNED OUT. TWO WITNESSES, BOTH OF WHOM ARE CFIS, STATED THAT WHILE ON SHORT FINAL, THEY HEARD TWO POWER APPLICATIONS BEFORE IMPACT BUT THE ACFT HAD DEVELOPED A NOSE HI ATTITUDE & HI SINK RATE WHICH WAS NOT ARRESTED PRIOR TO IMPACT WITH THE GRND. FAA PERSONL LATER TEST RAN THE ENG WHICH CHECKED OUT OK.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: PILOT'S INABILITY TO PROPERLY FLARE DUE TO A HIGH SINK RATE AS A RESULT OF INSUFFICIENT AIRSPEED WHICH RESULTED IN A HARD LANDING SHORT OF AND OFF OF THE RUNWAY.

Findings

Occurrence #1: AIRFRAME/COMPONENT/SYSTEM FAILURE/MALFUNCTION
Phase of Operation: CRUISE - NORMAL

Findings

1. (F) ELECTRICAL SYSTEM,ALTERNATOR - FAILURE,TOTAL

Occurrence #2: GEAR NOT EXTENDED
Phase of Operation: APPROACH - VFR PATTERN - FINAL APPROACH

Findings

2. (C) GEAR EXTENSION - INADEQUATE - PILOT IN COMMAND
3. (C) GEAR DOWN AND LOCKED - NOT OBTAINED - PILOT IN COMMAND
4. (C) EMERGENCY PROCEDURE - NOT UNDERSTOOD - PILOT IN COMMAND
5. (C) GEAR EXTENSION - NOT UNDERSTOOD - PILOT IN COMMAND

Occurrence #3: HARD LANDING
Phase of Operation: LANDING - FLARE/TOUCHDOWN

Findings

6. (C) AIRSPEED - INADEQUATE - PILOT IN COMMAND
7. (C) AIRCRAFT CONTROL - POOR - PILOT IN COMMAND
8. (C) STALL/MUSH - PERFORMED - PILOT IN COMMAND

Factual Information

Pilot Information

Certificate:	Private	Age:	45, Male
Airplane Rating(s):	Single-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 3 Valid Medical-w/ waivers/lim	Last FAA Medical Exam:	June 8, 1987
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:	1307 hours (Total, all aircraft), 704 hours (Total, this make and model), 1257 hours (Pilot In Command, all aircraft), 51 hours (Last 90 days, all aircraft), 21 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	PIPER	Registration:	N43797
Model/Series:	PA-32R-300 PA-32R-300	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	32R-7780526
Landing Gear Type:	Retractable - Tricycle	Seats:	6
Date/Type of Last Inspection:	June 3, 1988 Annual	Certified Max Gross Wt.:	3400 lbs
Time Since Last Inspection:	152 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	3655 Hrs	Engine Manufacturer:	LYCOMING
ELT:	Installed, not activated	Engine Model/Series:	IO-540K
Registered Owner:	ORTHOPAEDICS ASSOC. INC	Rated Power:	300 Horsepower
Operator:	ORTHOPAEDICS ASSOCIATES, INC.	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:	GNV ,152 ft msl	Distance from Accident Site:	
Observation Time:	08:55 Local	Direction from Accident Site:	
Lowest Cloud Condition:	Clear	Visibility	6 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	7 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	40°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29 inches Hg	Temperature/Dew Point:	23°C / 17°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	GAINESVILLE , FL (GNV)	Type of Flight Plan Filed:	IFR
Destination:	PENSACOLA , FL (PNS)	Type of Clearance:	IFR
Departure Time:	07:15 Local	Type of Airspace:	Class E

Airport Information

Airport:	GAINESVILLE REG. GNV	Runway Surface Type:	Asphalt
Airport Elevation:	152 ft msl	Runway Surface Condition:	Dry
Runway Used:	24	IFR Approach:	None
Runway Length/Width:	4147 ft / 100 ft	VFR Approach/Landing:	Full stop;Traffic pattern

Wreckage and Impact Information

Crew Injuries:	1 Minor	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Minor	Latitude, Longitude:	

Administrative Information

Investigator In Charge (IIC):	Bird, Ronald
Additional Participating Persons:	FRED WILLIAMS; JACKSONVILLE , FL
Original Publish Date:	August 22, 1990
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=32433

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