



Aviation Investigation Final Report

Location:	ALEXANDRIA, Minnesota	Accident Number:	CHI83LA172
Date & Time:	April 16, 1983, 11:30 Local	Registration:	N8034D
Aircraft:	PIPER PA-22	Aircraft Damage:	Substantial
Defining Event:		Injuries:	3 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

THE PILOT DECIDED TO MAKE A PRECAUTIONARY LANDING AFTER HE HEARD A NOISE OR BANG WHICH HE THOUGHT WAS THE MUFFLER. THE PILOT MADE A DECISION TO LAND ON A RUNWAY WHICH HAD AN UNFAVORABLE WIND. CONTROL WAS LOST WHEN A GUST OF WIND RAISED THE LEFT WING. THE RIGHT WING TIP STRUCK THE GROUND AND AT ABOUT 10 MPH THE RT MAIN GEAR COLLAPSED. EXAMINATION OF THE ENGINE DISCLOSED AN EXHAUST STUD CAME LOOSE WHICH ALLOWED EXHAUST GAS TO BLOW BY THE GASKET.

Probable Cause and Findings

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

Findings

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

Findings
1. (F) EXHAUST SYSTEM,GASKET - LOOSE

Occurrence #2: LOSS OF CONTROL - ON GROUND/WATER
Phase of Operation: LANDING - ROLL

Findings

2. (F) PRECAUTIONARY LANDING - SELECTED - PILOT IN COMMAND
3. (F) WEATHER CONDITION - CROSSWIND
4. (F) WEATHER CONDITION - GUSTS
5. (C) DIRECTIONAL CONTROL - NOT MAINTAINED - PILOT IN COMMAND
6. (F) GROUND LOOP/SWERVE - INADVERTENT - PILOT IN COMMAND

Occurrence #3: MAIN GEAR COLLAPSED

Phase of Operation: LANDING - ROLL

Findings

7. (F) LANDING GEAR,MAIN GEAR STRUT - OVERLOAD

Factual Information

Pilot Information

Certificate:	Commercial	Age:	55, Male
Airplane Rating(s):	Single-engine land; Single-engine sea	Seat Occupied:	Left
Other Aircraft Rating(s):		Restraint Used:	
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):		Toxicology Performed:	No
Medical Certification:	Class 2 Valid Medical--w/ waivers/lim	Last FAA Medical Exam:	February 17, 1982
Occupational Pilot:	UNK	Last Flight Review or Equivalent:	
Flight Time:	2072 hours (Total, all aircraft), 205 hours (Total, this make and model), 1781 hours (Pilot In Command, all aircraft), 30 hours (Last 90 days, all aircraft), 6 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	PIPER	Registration:	N8034D
Model/Series:	PA-22 PA-22	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	22-559
Landing Gear Type:	Tricycle	Seats:	4
Date/Type of Last Inspection:	May 21, 1982 Annual	Certified Max Gross Wt.:	2000 lbs
Time Since Last Inspection:	0 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	2248 Hrs	Engine Manufacturer:	LYCOMING
ELT:	Installed, not activated	Engine Model/Series:	O-320
Registered Owner:	FRANCIS G. MCDANIELS	Rated Power:	150 Horsepower
Operator:		Operating Certificate(s) Held:	
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:	AXN ,1425 ft msl	Distance from Accident Site:	
Observation Time:	10:55 Local	Direction from Accident Site:	
Lowest Cloud Condition:	Scattered / 2000 ft AGL	Visibility	15 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	12 knots / 15 knots	Turbulence Type Forecast/Actual:	/
Wind Direction:	360°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	3°C / -1°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	PELICAN RAPIDS , MN (47Y)	Type of Flight Plan Filed:	VFR
Destination:	MINNEAPOLIS , MN (ANE)	Type of Clearance:	None
Departure Time:	10:00 Local	Type of Airspace:	Class G

Airport Information

Airport:	ALEXANDRIA AXN	Runway Surface Type:	Asphalt
Airport Elevation:	1425 ft msl	Runway Surface Condition:	Dry
Runway Used:	4	IFR Approach:	None
Runway Length/Width:	5700 ft / 150 ft	VFR Approach/Landing:	Full stop;Precautionary landing

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:	

Administrative Information

Investigator In Charge (IIC): Seidlien, George

Additional Participating Persons:

Original Publish Date:

Last Revision Date:

Investigation Class: [Class](#)

Note:

Investigation Docket: <https://data.nts.gov/Docket?ProjectID=12136>

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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](#).