



Aviation Investigation Final Report

Location:	WILLIMANTIC, Connecticut	Accident Number:	BF093LA067
Date & Time:	May 2, 1993, 17:45 Local	Registration:	N81529
Aircraft:	PIPER PA-28RT-201	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

WHILE IN CRUISE DURING A CROSS COUNTRY FLIGHT, THE AIRPLANE LOST TOTAL ELECTRICAL POWER. THE FLIGHT WAS CONTINUED TO ITS PLANNED DESTINATION. WHILE IN THE PATTERN, THE LANDING GEAR WAS EXTENDED AT 95 KNOTS INDICATED AIRSPEED. DURING THE LANDING, THE LEFT MAIN GEAR COLLAPSED AND THE AIRPLANE SKIDDED INTO A CONSTRUCTION SITE. THE AIRPLANE IMPACTED CONSTRUCTION MATERIAL AND THE RIGHT MAIN GEAR WAS TORN AWAY FROM THE RIGHT WING STRUCTURE. POST ACCIDENT EXAMINATION OF THE AIRPLANE'S ELECTRICAL SYSTEM REVEALED THAT A BATTERY WIRE LEADING TO THE ALTERNATOR HAD FAILED NEAR THE ALTERNATOR. THE LANDING GEAR WAS TESTED WITH NO ANOMALIES NOTED. THE PILOT OPERATING HANDBOOK STATED THAT THE EMERGENCY GEAR LEVER MUST BE HELD IN THE DOWNWARD POSITION FOR EMERGENCY EXTENSION. THE PILOT OPERATING HANDBOOK ALSO STATED THAT AN AIRSPEED OF 87 KNOTS SHOULD BE ATTAINED BEFORE TRYING TO EXTEND THE GEAR DURING AN EMERGENCY EXTENSION.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: FAILURE OF THE PILOT TO FOLLOW EMERGENCY PROCEDURES TO ENSURE THAT THE GEAR WAS LOCKED. A FACTOR RELATED TO THE ACCIDENT WAS THE TOTAL ELECTRICAL FAILURE AND THE CONSTRUCTION SITE LOCATED BESIDE THE RUNWAY.

Findings

Occurrence #1: AIRFRAME/COMPONENT/SYSTEM FAILURE/MALFUNCTION

Phase of Operation: CRUISE - NORMAL

Findings

1. ELECTRICAL SYSTEM,ELECTRIC WIRING - SEPARATION
2. (F) ELECTRICAL SYSTEM - FAILURE,TOTAL

Occurrence #2: MAIN GEAR COLLAPSED

Phase of Operation: LANDING - FLARE/TOUCHDOWN

Findings

3. (C) EMERGENCY PROCEDURE - NOT FOLLOWED - PILOT IN COMMAND
4. (C) GEAR DOWN AND LOCKED - NOT ATTAINED - PILOT IN COMMAND

Occurrence #3: LOSS OF CONTROL - ON GROUND/WATER

Phase of Operation: LANDING

Findings

5. DIRECTIONAL CONTROL - NOT POSSIBLE
6. GROUND LOOP/SWERVE - UNCONTROLLED - PILOT IN COMMAND

Occurrence #4: ON GROUND/WATER COLLISION WITH OBJECT

Phase of Operation: LANDING - ROLL

Factual Information

Pilot Information

Certificate:	Private	Age:	42, 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 2 Valid Medical--no waivers/lim.	Last FAA Medical Exam:	April 26, 1993
Occupational Pilot:	UNK	Last Flight Review or Equivalent:	
Flight Time:	237 hours (Total, all aircraft), 22 hours (Total, this make and model), 22 hours (Last 90 days, all aircraft), 11 hours (Last 30 days, all aircraft), 8 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	PIPER	Registration:	N81529
Model/Series:	PA-28RT-201 PA-28RT-20	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	28R-8018036
Landing Gear Type:	Retractable - Tricycle	Seats:	4
Date/Type of Last Inspection:	April 5, 1993 Annual	Certified Max Gross Wt.:	2750 lbs
Time Since Last Inspection:	26 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	3485 Hrs	Engine Manufacturer:	LYCOMING
ELT:	Installed, not activated	Engine Model/Series:	IO-360-C1C6
Registered Owner:	WINDHAM AVIATION INC	Rated Power:	200 Horsepower
Operator:	WINDHAM AVIATION 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:		Distance from Accident Site:	
Observation Time:		Direction from Accident Site:	
Lowest Cloud Condition:	Clear	Visibility	15 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	/	Turbulence Type Forecast/Actual:	/
Wind Direction:	0°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:		Temperature/Dew Point:	21°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	NANTUCKET , MA (ACK)	Type of Flight Plan Filed:	None
Destination:	(IJD)	Type of Clearance:	None
Departure Time:	16:30 Local	Type of Airspace:	Class G

Airport Information

Airport:	WINDHAM AIRPORT IJD	Runway Surface Type:	Asphalt
Airport Elevation:	247 ft msl	Runway Surface Condition:	Dry
Runway Used:	18	IFR Approach:	
Runway Length/Width:	2797 ft / 150 ft	VFR Approach/Landing:	Traffic pattern

Wreckage and Impact Information

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

Administrative Information

Investigator In Charge (IIC):	Napolitan, Margaret
Additional Participating Persons:	BURTE LABBE; WINDSOR LOCKS , CT
Original Publish Date:	November 15, 1993
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=11929

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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](#).