



National Transportation Safety Board Aviation Accident Data Summary

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|--------------------------------|--------------------------------------|-------------------------|------------|
| Location: | CROSSVILLE, TN | Accident Number: | ATL93LA049 |
| Date & Time: | 01/02/1993, 1700 CST | Registration: | N7712Y |
| Aircraft: | PIPER PA-30 | Injuries: | 1 None |
| Flight Conducted Under: | Part 91: General Aviation - Personal | | |

Analysis

ABOUT 30 MINUTES INTO THE LOCAL FLIGHT, THE PRIVATE PILOT REPORTED THAT TOTAL ELECTRICAL POWER WAS LOST. HE COULD NOT LOWER THE FLAPS, AND WHEN HE LOWERED THE GEAR HANDLE, NO GREENS LIGHTS ILLUMINATED. HE ELECTED TO RAISE THE GEAR HANDLE AND LAND. THE AIRCRAFT WAS STRUCTURALLY DAMAGED DURING THE LANDING. WHEN THE AIRCRAFT WAS REMOVED FROM THE RUNWAY, AN FBO EMPLOYEE LOWERED THE GEAR HANDLE, AND THE GEAR EXTENDED AND LOCKED. HE THEN TURNED ON THE MASTER SWITCH, AND OBSERVED 3 GREEN GEAR DOWN LIGHTS ILLUMINATED. THE PILOT REPORTED THAT HE DID NOT ATTEMPT TO USE THE MANUAL ALTERNATE GEAR EXTENSION METHOD. THE PILOT ALSO REPORTED THAT THE LOSS OF ELECTRICAL POWER COULD HAVE RESULTED FROM HIS FAILURE TO TURN ON THE GENERATORS DURING THE FLIGHT.

Probable Cause

The National Transportation Safety Board determines the probable cause(s) of this accident to be: THE PILOT'S FAILURE TO FOLLOW CHECKLIST PROCEDURES IN THAT HE DID NOT UTILIZE THE ALTERNATE GEAR EXTENSION METHOD WHEN ELECTRICAL POWER WAS LOST. A FACTOR WAS HIS FAILURE TO FOLLOW THE CHECKLIST WHEN HE FAILED TO TURN ON THE GENERATORS PRIOR TO FLIGHT, WHICH RESULTED IN ELECTRICAL FAILURE.

Findings

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

Findings

1. (F) ELECTRICAL SYSTEM - LOSS, TOTAL
 2. (F) CHECKLIST - NOT FOLLOWED - PILOT IN COMMAND
 3. (F) GENERATOR - NOT USED - PILOT IN COMMAND
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Occurrence #2: GEAR NOT EXTENDED
Phase of Operation: LANDING

Findings

4. (C) CHECKLIST - NOT FOLLOWED - PILOT IN COMMAND
5. (C) GEAR EXTENSION - IMPROPER USE OF - PILOT IN COMMAND

Pilot Information

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|----------------------------------|--|------------------------------|----------|
| Certificate: | Private | Age: | 65 |
| Airplane Rating(s): | Multi-engine Land; Single-engine Land | Instrument Rating(s): | Airplane |
| Other Aircraft Rating(s): | None | Instructor Rating(s): | None |
| Flight Time: | 3000 hours (Total, all aircraft), 20 hours (Total, this make and model), 2900 hours (Pilot In Command, all aircraft) | | |

Aircraft and Owner/Operator Information

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|---------------------------------------|--------------------------------------|-----------------------------|-----------------|
| Aircraft Make: | PIPER | Registration: | N7712Y |
| Model/Series: | PA-30 PA-30 | Engines: | 2 Reciprocating |
| Operator: | UPCHURCH, CORNELL P. | Engine Manufacturer: | LYCOMING |
| Operating Certificate(s) Held: | None | Engine Model/Series: | IO-320-B1A |
| Flight Conducted Under: | Part 91: General Aviation - Personal | | |

Meteorological Information and Flight Plan

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|---|----------------------|-------------------------------------|------------------------------|
| Conditions at Accident Site: | Visual Conditions | Condition of Light: | Dusk |
| Observation Facility, Elevation: | CSV, 1881 ft msl | Weather Information Source: | Weather Observation Facility |
| Lowest Ceiling: | Broken / 3500 ft agl | Wind Speed/Gusts, Direction: | 6 knots / , 150° |
| Temperature: | 12° C | Visibility | 12 Miles |
| Precipitation and Obscuration: | | | |
| Departure Point: | (CSV) | Destination: | (CSV) |

Airport Information

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|-----------------------------|---------------------------|----------------------------------|---------|
| Airport: | CROSSVILLE MEMORIAL (CSV) | Runway Surface Type: | Asphalt |
| Runway Used: | 8 | Runway Surface Condition: | Dry |
| Runway Length/Width: | 5418 ft / 100 ft | | |

Wreckage and Impact Information

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

Administrative Information

Investigator In Charge (IIC): RALPH E HICKS

Adopted Date: 10/25/1993

Investigation Docket: NTSB accident and incident dockets serve as permanent archival information for the NTSB's investigations. Dockets released prior to June 1, 2009 are publicly available from the NTSB's Record Management Division at pubinq@ntsb.gov, or at 800-877-6799. Dockets released after this date are available at <http://dms.nts.gov/pubdms/>.

The National Transportation Safety Board (NTSB), established in 1967, is an independent federal agency mandated by Congress through the Independent Safety Board Act of 1974 to investigate transportation accidents, determine the probable causes of the accidents, issue safety recommendations, study transportation safety issues, and evaluate the safety effectiveness of government agencies involved in transportation. The NTSB makes public its actions and decisions through accident reports, safety studies, special investigation reports, safety recommendations, and statistical reviews.

The Independent Safety Board Act, as codified at 49 U.S.C. Section 1154(b), precludes the admission into evidence or use of any part of an NTSB report related to an incident or accident in a civil action for damages resulting from a matter mentioned in the report.