

Aviation Investigation Final Report

Location: Muscle Shoals, Alabama **Accident Number:** NYC08CA073

Date & Time: December 12, 2007, 19:29 Local Registration: N112ED

Aircraft: Piper PA-31T Aircraft Damage: Substantial

Defining Event: 2 None

Flight Conducted Under: Part 91: General aviation - Personal

Analysis

While conducting an instrument approach, the pilot of a Piper PA-31T crossed the initial approach fix and descended to 2,300 feet, per the instrument approach procedure. Upon reaching the final approach fix, he then selected 1,200 feet in the altitude preselect and almost simultaneously visually acquired the runway and visual approach slope indicator. The pilot then "became distracted," and" forgot to extend the [landing] gear." He then fully extended the wing flaps, but the power setting remained above the "trigger point" for the landing gear warning horn. The airplane touched down with the landing gear retracted and was substantially damaged.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's failure to lower the landing gear.

Findings

Factual Information

History of Flight

Pilot Information

| Certificate: | Commercial | Age: | 58,Male |
|---------------------------|---|-----------------------------------|-------------------|
| Airplane Rating(s): | Single-engine land; Multi-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 With waivers/limitations | Last FAA Medical Exam: | September 1, 2007 |
| Occupational Pilot: | Yes | Last Flight Review or Equivalent: | November 1, 2007 |
| Flight Time: | 10127 hours (Total, all aircraft), 1500 hours (Total, this make and model), 8768 hours (Pilot In Command, all aircraft), 79 hours (Last 90 days, all aircraft), 37 hours (Last 30 days, all aircraft) | | |

Aircraft and Owner/Operator Information

| Aircraft Make: | Piper | Registration: | N112ED |
|-------------------------------|---|-----------------------------------|------------------------|
| Model/Series: | PA-31T | Aircraft Category: | Airplane |
| Year of Manufacture: | | Amateur Built: | |
| Airworthiness Certificate: | Normal | Serial Number: | 31T-8020060 |
| Landing Gear Type: | Retractable - Tricycle | Seats: | 7 |
| Date/Type of Last Inspection: | December 1, 2007 Continuous airworthiness | Certified Max Gross Wt.: | 9000 lbs |
| Time Since Last Inspection: | | Engines: | 2 Turbo prop |
| Airframe Total Time: | 2823.4 Hrs as of last inspection | Engine Manufacturer: | Pratt & Whitney Canada |
| ELT: | Installed, not activated | Engine Model/Series: | PT6A-28 |
| Registered Owner: | E. H. Darby DBA | Rated Power: | 620 Horsepower |
| Operator: | DARBY AVIATION | Operating Certificate(s) Held: | |
| Operator Does Business As: | Alpha Jet International | Operator Designator Code: | YDBA |

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Meteorological Information and Flight Plan

| Conditions at Accident Site: | Visual (VMC) | Condition of Light: | Dusk |
|----------------------------------|--------------------------------|--------------------------------------|------------|
| Observation Facility, Elevation: | MSL,550 ft msl | Distance from Accident Site: | |
| Observation Time: | 19:20 Local | Direction from Accident Site: | |
| Lowest Cloud Condition: | Thin Overcast / 1700 ft AGL | Visibility | 10 miles |
| Lowest Ceiling: | None | Visibility (RVR): | |
| Wind Speed/Gusts: | 6 knots / 0 knots | Turbulence Type Forecast/Actual: | / |
| Wind Direction: | 340° | Turbulence Severity Forecast/Actual: | / |
| Altimeter Setting: | 30.21 inches Hg | Temperature/Dew Point: | 10°C / 6°C |
| Precipitation and Obscuration: | No Obscuration; No Precipita | ation | |
| Departure Point: | Fort Worth, TX (FTW) | Type of Flight Plan Filed: | IFR |
| Destination: | Muscle Shoals, AL (MSL) | Type of Clearance: | IFR |
| Departure Time: | 17:34 Local | Type of Airspace: | |

Airport Information

| Airport: | Muscle Shoals MLS | Runway Surface Type: | Asphalt |
|----------------------|-------------------|---------------------------|---------------------------|
| Airport Elevation: | 550 ft msl | Runway Surface Condition: | Dry |
| Runway Used: | 11 | IFR Approach: | Global positioning system |
| Runway Length/Width: | 6693 ft / 150 ft | VFR Approach/Landing: | Straight-in |

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: | 34.745277,-87.610275 |

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Administrative Information

| Investigator In Charge (IIC): | Gunther, Todd |
|-----------------------------------|---|
| Additional Participating Persons: | Warren Green; FAA/FSDO; Birmingham, AL |
| Original Publish Date: | February 28, 2008 |
| Last Revision Date: | |
| Investigation Class: | <u>Class</u> |
| Note: | This accident report documents the factual circumstances of this accident as described to the NTSB. |
| Investigation Docket: | https://data.ntsb.gov/Docket?ProjectID=67336 |

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.

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