



National Transportation Safety Board Aviation Accident Final Report

| | | | |
|--------------------------------|---|-------------------------|-------------|
| Location: | Oshkosh, WI | Accident Number: | CEN09CA407 |
| Date & Time: | 07/01/2009, 1545 CDT | Registration: | N261RA |
| Aircraft: | Remos G-3/6000 | Aircraft Damage: | Substantial |
| Defining Event: | Fuel exhaustion | Injuries: | 2 None |
| Flight Conducted Under: | Part 91: General Aviation - Instructional | | |

Analysis

The instructor pilot reported that she preflighted the fuel quantity of the high-wing Special Light Sport Aircraft (S-LSA) by looking at the fuel quantity tube that was located between the pilots' seats. She reported that it indicated 1/2 tank, or about 11 gallons of fuel. The pilot departed on a demonstration flight. After approximately 30 minutes of flight, the pilot was returning to the airport when the engine stopped. The engine was restarted, but stopped again about one minute later. The engine stopped and was restarted about five times. The pilot executed a forced landing to a field, and the airplane nosed over during the landing roll. Inspection of the fuel system revealed that it was empty; the engine ran when fuel was provided. The inspection of the fuel quantity tube revealed that it was "discolored," and that there was a crease in the tube at the half-way point. The pilot reported that the crease in the tube made it appear that there was 1/2 tank of fuel. The airplane was also equipped with a fuel quantity gauge on the instrument panel which operated normally.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: A total loss of total engine power due to fuel exhaustion as a result of the instructor pilot's inadequate preflight inspection. Contributing to the accident was the creased fuel quantity tube.

Findings

| | |
|-------------------------|--|
| Aircraft | Fuel - Fluid level (Cause) Fuel indication system - Damaged/degraded (Factor) |
| Personnel issues | Preflight inspection - Pilot (Cause) |

Factual Information

History of Flight

| | |
|----------------------|----------------------------------|
| Enroute | Fuel exhaustion (Defining event) |
| Emergency descent | Loss of engine power (total) |
| Landing-landing roll | Nose over/nose down |

Flight Instructor Information

| | | | |
|---------------------------|---|-----------------------------------|----------------------------|
| Certificate: | Flight Instructor; Commercial | Age: | 28 |
| Airplane Rating(s): | Multi-engine Land; Single-engine Land | Seat Occupied: | Right |
| Other Aircraft Rating(s): | None | Restraint Used: | Seatbelt, Shoulder harness |
| Instrument Rating(s): | Airplane | Second Pilot Present: | No |
| Instructor Rating(s): | Airplane Single-engine | Toxicology Performed: | |
| Medical Certification: | Class 1 With Waivers/Limitations | Last Medical Exam: | 10/24/2008 |
| Occupational Pilot: | | Last Flight Review or Equivalent: | |
| Flight Time: | 425 hours (Total, all aircraft), 28 hours (Total, this make and model), 270 hours (Pilot In Command, all aircraft), 56 hours (Last 90 days, all aircraft), 28 hours (Last 30 days, all aircraft), 2 hours (Last 24 hours, all aircraft) | | |

Aircraft and Owner/Operator Information

| | | | |
|-------------------------------|-----------------------------------|------------------------------------|-----------------|
| Aircraft Manufacturer: | Remos | Registration: | N261RA |
| Model/Series: | G-3/6000 | Aircraft Category: | Airplane |
| Year of Manufacture: | | Amateur Built: | No |
| Airworthiness Certificate: | Experimental Light Sport | Serial Number: | 219 |
| Landing Gear Type: | | Seats: | |
| Date/Type of Last Inspection: | | Certified Max Gross Wt.: | |
| Time Since Last Inspection: | | Engines: | 1 Reciprocating |
| Airframe Total Time: | | Engine Manufacturer: | Rotax |
| ELT: | Not installed | Engine Model/Series: | 912-UL-S |
| Registered Owner: | William J Gottshalk | Rated Power: | 100 hp |
| Operator: | Experimental Aircraft Association | Air Carrier Operating Certificate: | None |

Meteorological Information and Flight Plan

| | | | |
|----------------------------------|-------------------|------------------------------|-------------------|
| Observation Facility, Elevation: | | Observation Time: | |
| Distance from Accident Site: | | Condition of Light: | Day |
| Direction from Accident Site: | | Conditions at Accident Site: | Visual Conditions |
| Lowest Cloud Condition: | | Temperature/Dew Point: | |
| Lowest Ceiling: | | Visibility | |
| Wind Speed/Gusts, Direction: | | Visibility (RVR): | |
| Altimeter Setting: | | Visibility (RVV): | |
| Precipitation and Obscuration: | | | |
| Departure Point: | Oshkosh, WI (OSH) | Type of Flight Plan Filed: | None |
| Destination: | Oshkosh, WI (OSH) | Type of Clearance: | None |
| Departure Time: | 1522 | Type of Airspace: | |

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 | | |

Administrative Information

| | | | |
|-----------------------------------|---|---------------|------------|
| Investigator In Charge (IIC): | James P Silliman | Adopted Date: | 09/10/2009 |
| Additional Participating Persons: | Patrick Doyle; FAA-Milwaukee FSDO; Milwaukee, WI | | |
| Publish Date: | 09/10/2009 | | |
| Note: | This accident report documents the factual circumstances of this accident as described to the NTSB. | | |
| Investigation Docket: | http://dms.nts.gov/pubdms/search/dockList.cfm?mKey=74194 | | |

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.