



Aviation Investigation Final Report

| Location: | North English, Iowa | Accident Number: | CEN11CA497 |
|-------------------------|----------------------------|----------------------|-------------|
| Date & Time: | July 21, 2011, 17:30 Local | Registration: | N5439 |
| Aircraft: | Grumman Schweizer G-164A | Aircraft Damage: | Substantial |
| Defining Event: | Hard landing | Injuries: | 1 None |
| Flight Conducted Under: | Part 137: Agricultural | | |

Analysis

The pilot stated that he was attempting a landing into the sun with agricultural chemical on the windshield. He said that a sudden air burst pushed the airplane down, which resulted in a hard landing. The airplane then bounced and impacted the runway causing substantial damage to the fuselage. Weather reports for the area did not indicate the presence of weather that would have resulted in an air burst.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's improper flare which resulted in a hard landing.

| Findings | |
|----------------------|---|
| Aircraft | Landing flare - Not attained/maintained |
| Personnel issues | Visual function - Pilot |
| Environmental issues | Glare - Effect on operation |
| | |

Factual Information

History of Flight

Landing

Hard landing (Defining event)

Pilot Information

| Certificate: | Commercial | Age: | 68,Male |
|---------------------------|--|-----------------------------------|-------------------|
| Airplane Rating(s): | Single-engine land | Seat Occupied: | Single |
| 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: | February 11, 2011 |
| Occupational Pilot: | Yes | Last Flight Review or Equivalent: | March 20, 2011 |
| Flight Time: | 30000 hours (Total, all aircraft), 2508 hours (Total, this make and model), 29750 hours (Pilot In Command, all aircraft), 150 hours (Last 90 days, all aircraft), 20 hours (Last 30 days, all aircraft), 4 hours (Last 24 hours, all aircraft) | | |

Aircraft and Owner/Operator Information

| Aircraft Make: | Grumman Schweizer | Registration: | N5439 |
|----------------------------------|---|-----------------------------------|-------------------|
| Model/Series: | G-164A | Aircraft Category: | Airplane |
| Year of Manufacture: | | Amateur Built: | |
| Airworthiness Certificate: | Restricted (Special) | Serial Number: | 1158 |
| Landing Gear Type: | Tailwheel | Seats: | 1 |
| Date/Type of Last Inspection: | July 16, 2011 Continuous airworthiness | Certified Max Gross Wt.: | 4500 lbs |
| Time Since Last Inspection: | | Engines: | 1 Turbo prop |
| Airframe Total Time: | 8554.2 Hrs | Engine Manufacturer: | Garret AiResearch |
| ELT: | Not installed | Engine Model/Series: | TPE-331 |
| Registered Owner: | Kirk Aviation Inc | Rated Power: | 665 Horsepower |
| Operator: | Kirk Aviation Inc | Operating Certificate(s) Held: | |
| Operator Does Business As: | | Operator Designator Code: | LUXG |

Meteorological Information and Flight Plan

| Conditions at Accident Site: | Visual (VMC) | Condition of Light: | Day |
|----------------------------------|----------------------------------|---|-------------------|
| Observation Facility, Elevation: | AWG,754 ft msl | Distance from Accident Site: | 26 Nautical Miles |
| Observation Time: | 17:15 Local | Direction from Accident Site: | 135° |
| Lowest Cloud Condition: | Clear | Visibility | 10 miles |
| Lowest Ceiling: | None | Visibility (RVR): | |
| Wind Speed/Gusts: | 3 knots / None | Turbulence Type Forecast/Actual: | / |
| Wind Direction: | 140° | Turbulence Severity Forecast/Actual: | / |
| Altimeter Setting: | 29.81 inches Hg | Temperature/Dew Point: | 36°C / 23°C |
| Precipitation and Obscuration: | No Obscuration; No Precipitation | | |
| Departure Point: | North English, IA (7IA1) | Type of Flight Plan Filed: | None |
| Destination: | North English, IA | Type of Clearance: | None |
| Departure Time: | 16:20 Local | Type of Airspace: | |

Airport Information

| Airport: | White Pigeon Airport 7IA1 | Runway Surface Type: | Grass/turf |
|----------------------|---------------------------|---------------------------|------------|
| Airport Elevation: | 875 ft msl | Runway Surface Condition: | Dry |
| Runway Used: | 27 | IFR Approach: | Unknown |
| Runway Length/Width: | 2400 ft / 70 ft | VFR Approach/Landing: | Unknown |

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: | 41.493331,-92.148056(est) |

Administrative Information

| Investigator In Charge (IIC): | Gallo, Mitchell |
|--------------------------------------|---|
| Additional Participating Persons: | Joe Quiring; Federal Aviation Administration; Des Moines, IA |
| Original Publish Date: | October 20, 2011 |
| 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=81192 |

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