

Aviation Investigation Final Report

Location: Wagoner, Oklahoma Accident Number: CEN14CA275

Date & Time: May 28, 2014, 20:27 Local Registration: UNREG

Aircraft: UNKNOWN BUCCANEER SX Aircraft Damage: Substantial

Defining Event: Loss of control in flight **Injuries:** 1 Serious

Flight Conducted Under: Unknown

Analysis

On May 28, 2014, at 2027 central standard time, an unregistered experimental amateur-built Buccaneer SX, impacted terrain after a loss of engine power and aerodynamic stall during takeoff phase of a touch-and-go landing at Hefner-Easley Airport, Wagoner (H68), Oklahoma, when the engine lost engine power due to fuel exhaustion/starvation. The airplane received substantial damage to the fuselage. The uncertificated pilot sustained serious injuries. The airplane was had been owned and operated by the pilot for approximately two years. The local flight originated from H68 about 1945.

According to a Federal Aviation Administration inspector, the airplane, powered by a Rotax (serial number 6025420) engine, was about 100 feet above the ground after takeoff when the engine quit due to fuel depletion. The pilot estimated that there was about 8 gallons of fuel on board and stated that the fuel gauge was inoperative. The Hobbs meter indicated 1,972 hours, and the pilot thought that the meter was inoperative. The pilot stated the he did not know his total flight time in the accident airplane.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's failure to maintain aircraft control following a loss of engine power during takeoff. Contributing was the pilot's inadequate fuel management that led to fuel starvation/exhaustion and the loss of engine power.

Findings

Aircraft Fuel - Fluid management

Aircraft (general) - Not attained/maintained

Personnel issues Aircraft control - Pilot

Personnel issues Qualification/certification - Pilot

Aircraft Fuel indication system - Inoperative

Personnel issues Pilot logs - Pilot

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Factual Information

History of Flight

| Takeoff | Fuel starvation |
|----------------------|--|
| Takeoff | Fuel exhaustion |
| Takeoff | Loss of lift |
| Takeoff | Loss of control in flight (Defining event) |
| Uncontrolled descent | Collision with terr/obj (non-CFIT) |

Pilot Information

| Certificate: | None | Age: | 54 |
|---------------------------|--|-----------------------------------|---------|
| Airplane Rating(s): | None | Seat Occupied: | Unknown |
| Other Aircraft Rating(s): | None | Restraint Used: | Unknown |
| Instrument Rating(s): | None | Second Pilot Present: | No |
| Instructor Rating(s): | None | Toxicology Performed: | No |
| Medical Certification: | None | Last FAA Medical Exam: | |
| Occupational Pilot: | No | Last Flight Review or Equivalent: | |
| Flight Time: | (Estimated) 11 hours (Total, all aircraft) | | |

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Aircraft and Owner/Operator Information

| Aircraft Make: | UNKNOWN | Registration: | UNREG |
|-------------------------------|--------------|-----------------------------------|-----------------|
| Model/Series: | BUCCANEER SX | Aircraft Category: | Airplane |
| Year of Manufacture: | 1990 | Amateur Built: | Yes |
| Airworthiness Certificate: | None | Serial Number: | NO DATA PLATE |
| Landing Gear Type: | | Seats: | |
| Date/Type of Last Inspection: | Unknown | Certified Max Gross Wt.: | |
| Time Since Last Inspection: | | Engines: | 1 Reciprocating |
| Airframe Total Time: | | Engine Manufacturer: | Rotax |
| ELT: | | Engine Model/Series: | 582 |
| Registered Owner: | UNREGISTERED | Rated Power: | |
| Operator: | Pilot | Operating Certificate(s) Held: | None |
| | | | |

Meteorological Information and Flight Plan

| Conditions at Accident Site: | Visual (VMC) | Condition of Light: | Not reported |
|----------------------------------|-----------------|--------------------------------------|-------------------|
| Observation Facility, Elevation: | MKO,612 ft msl | Distance from Accident Site: | 19 Nautical Miles |
| Observation Time: | 19:53 Local | Direction from Accident Site: | 180° |
| Lowest Cloud Condition: | Clear | Visibility | 10 miles |
| Lowest Ceiling: | None | Visibility (RVR): | |
| Wind Speed/Gusts: | 6 knots / | Turbulence Type Forecast/Actual: | / None |
| Wind Direction: | 40° | Turbulence Severity Forecast/Actual: | / |
| Altimeter Setting: | 29.92 inches Hg | Temperature/Dew Point: | 26°C / 18°C |
| Precipitation and Obscuration: | | | |
| Departure Point: | Wagoner, OK | Type of Flight Plan Filed: | None |
| Destination: | Wagoner, OK | Type of Clearance: | None |
| Departure Time: | | Type of Airspace: | |

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Airport Information

| Airport: | Hefner-Easley Airport H68 | Runway Surface Type: |
|----------------------|---------------------------|---------------------------|
| Airport Elevation: | 599 ft msl | Runway Surface Condition: |
| Runway Used: | 18 | IFR Approach: None |
| Runway Length/Width: | 3401 ft / 60 ft | VFR Approach/Landing: |

Wreckage and Impact Information

| Crew Injuries: | 1 Serious | Aircraft Damage: | Substantial |
|------------------------|-----------|-------------------------|---------------------------|
| Passenger Injuries: | | Aircraft Fire: | None |
| Ground Injuries: | N/A | Aircraft Explosion: | None |
| Total Injuries: | 1 Serious | Latitude, Longitude: | 35.950607,-95.380905(est) |

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Administrative Information

| Investigator In Charge (IIC): | Gallo, Mitchell |
|--------------------------------------|---|
| Additional Participating Persons: | John Thomas; Federal Aviation Administration; Will Rogers FSDO; Oklahoma City, OK |
| Original Publish Date: | August 14, 2014 |
| 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=89363 |

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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