



Aviation Investigation Final Report

| | | | |
|--------------------------------|--------------------------------------|-------------------------|-------------|
| Location: | Southfields, New York | Accident Number: | ERA17LA338 |
| Date & Time: | September 15, 2017, 13:11 Local | Registration: | N1356W |
| Aircraft: | PARKS RICHARD A STARDUSTER SA 100 | Aircraft Damage: | Substantial |
| Defining Event: | Fire/smoke (non-impact) | Injuries: | 1 None |
| Flight Conducted Under: | Part 91: General aviation - Personal | | |

Analysis

The private pilot was conducting a cross-country, personal flight. He reported that, while approaching the destination airport at a cruise altitude of 2,500 ft mean sea level, he noticed smoke coming from the engine cowling. Concerned that there was a fire, he decided to immediately land the airplane in an open field. During touchdown, the airplane impacted 5-ft-tall grass and immediately cartwheeled.

Postaccident examination of the wreckage revealed that there was a loose oil line fitting at the oil cooler and that oil was dripping on the exhaust system, which likely resulted in the smoke the pilot saw before initiating the precautionary landing.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: A loose oil line that allowed oil to drip on the exhaust system, which resulted in smoke during cruise flight and a subsequent precautionary landing.

Findings

| | |
|-----------------------------|---------------------------------|
| Aircraft | (general) - Not specified |
| Environmental issues | (general) - Effect on operation |

Factual Information

History of Flight

| | |
|-------------------|--|
| Enroute-cruise | Fire/smoke (non-impact) (Defining event) |
| Emergency descent | Off-field or emergency landing |
| Landing | Loss of control on ground |

On September 15, 2017, about 1311 eastern daylight time, an experimental amateur-built Starduster SA100, N1356W, was substantially damaged during a precautionary landing near Southfields, New York. The private pilot was not injured. Visual meteorological conditions prevailed and no flight plan was filed for the personal flight that departed Chester Airport (SNC), Chester, Connecticut, and was destined for Warwick Municipal Airport (N72), Warwick, New York. The airplane was operated under the provisions of 14 *Code of Federal Regulations* Part 91.

According to the pilot, he was flying on a short cross-country flight to N72, when during cruise flight at 2,500 ft mean sea level, he noticed smoke coming from the engine cowling. He was 7 miles from his destination, but decided to land immediately due to a possible fire. He saw an open field that he could land the airplane in; however, during touchdown he noticed the grass was about 5 ft tall. The airplane immediately cartwheeled upon touchdown and came to rest at a 45° nose-down attitude. Once he removed the airplane from the field and back to his residence, he noticed a loose oil line fitting at the oil cooler and oil dripping on the exhaust system. He stated there were no mechanical issues with the airplane other than the oil leak.

Examination of the wreckage by a Federal Aviation Administration inspector revealed that the airplane had sustained damage to the landing gear, right upper wing, rudder and vertical stabilizer. He also noticed an oil line that was loose, and observed a large amount of oil in the engine compartment and that oil had been leaking on the exhaust.

Review of the maintenance records revealed that the airplane's most recent conditional inspection was completed on February 14, 2017 and it had accumulated 586 total hours of service at that time.

Pilot Information

| | | | |
|----------------------------------|---|--|--------------|
| Certificate: | Private | Age: | 57,Male |
| Airplane Rating(s): | Single-engine land | Seat Occupied: | Single |
| Other Aircraft Rating(s): | None | Restraint Used: | 4-point |
| Instrument Rating(s): | None | Second Pilot Present: | No |
| Instructor Rating(s): | None | Toxicology Performed: | No |
| Medical Certification: | Sport pilot | Last FAA Medical Exam: | |
| Occupational Pilot: | No | Last Flight Review or Equivalent: | May 26, 2016 |
| Flight Time: | (Estimated) 870 hours (Total, all aircraft), 21 hours (Total, this make and model), 810 hours (Pilot In Command, all aircraft), 8 hours (Last 90 days, all aircraft), 8 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft) | | |

Aircraft and Owner/Operator Information

| | | | |
|--------------------------------------|-----------------------------|---------------------------------------|-----------------|
| Aircraft Make: | PARKS RICHARD A | Registration: | N1356W |
| Model/Series: | STARDUSTER SA 100 NO SERIES | Aircraft Category: | Airplane |
| Year of Manufacture: | 1982 | Amateur Built: | Yes |
| Airworthiness Certificate: | Experimental (Special) | Serial Number: | RAP-02 |
| Landing Gear Type: | Tailwheel | Seats: | 1 |
| Date/Type of Last Inspection: | February 14, 2017 Condition | Certified Max Gross Wt.: | 1290 lbs |
| Time Since Last Inspection: | 20 Hrs | Engines: | 1 Reciprocating |
| Airframe Total Time: | 610 Hrs at time of accident | Engine Manufacturer: | LYCOMING |
| ELT: | Not installed | Engine Model/Series: | O-290 SERIES |
| Registered Owner: | | Rated Power: | 125 Horsepower |
| Operator: | On file | Operating Certificate(s) Held: | None |

Meteorological Information and Flight Plan

| | | | |
|---|-------------------------|---|-------------------|
| Conditions at Accident Site: | Visual (VMC) | Condition of Light: | Day |
| Observation Facility, Elevation: | KSWF, 491 ft msl | Distance from Accident Site: | 13 Nautical Miles |
| Observation Time: | 16:45 Local | Direction from Accident Site: | 9° |
| Lowest Cloud Condition: | Scattered / 1500 ft AGL | Visibility | 10 miles |
| Lowest Ceiling: | None | Visibility (RVR): | |
| Wind Speed/Gusts: | / | Turbulence Type Forecast/Actual: | / |
| Wind Direction: | | Turbulence Severity Forecast/Actual: | / |
| Altimeter Setting: | 30.07 inches Hg | Temperature/Dew Point: | 23°C / 20°C |
| Precipitation and Obscuration: | | | |
| Departure Point: | CHESTER, CT (SNC) | Type of Flight Plan Filed: | None |
| Destination: | WARWICK, NY (N72) | Type of Clearance: | None |
| Departure Time: | 12:00 Local | Type of Airspace: | Class E |

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: | 41.284442, -74.144721 (est) |

Administrative Information

| | |
|--|---|
| Investigator In Charge (IIC): | Boggs, Daniel |
| Additional Participating Persons: | Jennie Coffey; FAA/FSDO; Saddle Brook, NJ |
| Original Publish Date: | April 20, 2020 |
| Note: | The NTSB did not travel to the scene of this accident. |
| Investigation Docket: | https://data.nts.gov/Docket?ProjectID=96103 |

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. A factual report that may be admissible under 49 U.S.C. § 1154(b) is available [here](#).