



# **Aviation Investigation Final Report**

Location: ROCK FALLS, Illinois Accident Number: CHI95LA134

Date & Time: April 19, 1995, 19:15 Local Registration: N9418D

Aircraft: PIPER PA-22-160 Aircraft Damage: Substantial

**Defining Event:** 1 Minor, 1 None

Flight Conducted Under: Part 91: General aviation - Personal

## **Analysis**

THE PILOT STATED THAT HE BELIEVED THERE WAS 1/2 HOUR OF FUEL REMAINING IN THE AIRPLANE'S RIGHT FUEL TANK AND NO FUEL IN THE LEFT FUEL TANK. HE MADE NO VISUAL CHECK OF THE FUEL TANKS PRIOR TO TAXI AND DEPARTURE. AT APPROXIMATELY 300 FEET ABOVE THE GROUND ON THE INITIAL CLIMB AFTER TAKEOFF, THE ENGINE LOST ALL POWER. THE PILOT MADE A 180 DEGREE TURN BACK TO THE AIRPORT TO MAKE A FORCED LANDING. THE AIRPLANE LANDED ON THE GRASS SHORT OF THE RUNWAY, NOSED OVER, AND CAME TO REST IN AN INVERTED POSITION. POSTACCIDENT EXAMINATION REVEALED NO FUEL IN THE RIGHT FUEL TANK AND APPROXIMATELY TWO TO THREE GALLONS OF FUEL IN THE LEFT FUEL TANK. NO MECHANICAL ANOMALIES WERE REVEALED.

### **Probable Cause and Findings**

The National Transportation Safety Board determines the probable cause(s) of this accident to be: the failure of the pilot to refuel prior to fuel exhaustion. A factor in the accident was the pilot's poor preflight planning/preparation.

### **Findings**

Occurrence #1: LOSS OF ENGINE POWER(TOTAL) - NONMECHANICAL

Phase of Operation: TAKEOFF - INITIAL CLIMB

Findings

1. (C) REFUELING - NOT PERFORMED - PILOT IN COMMAND

#### 2. (C) FLUID, FUEL - EXHAUSTION

### 3. (F) PREFLIGHT PLANNING/PREPARATION - POOR - PILOT IN COMMAND

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Occurrence #2: FORCED LANDING

Phase of Operation: EMERGENCY LANDING AFTER TAKEOFF

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Occurrence #3: IN FLIGHT COLLISION WITH TERRAIN/WATER

Phase of Operation: EMERGENCY DESCENT/LANDING

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Occurrence #4: NOSE OVER

Phase of Operation: LANDING - ROLL

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### **Factual Information**

On April 19, 1995, at 1915 central daylight time, a Piper PA-22- 160, N9418D, registered to Stephen C. Schlager of Carterville, Illinois, sustained substantial damage following a loss of engine power and subsequent forced landing at Whiteside County Airport, Rock Falls, Illinois. The private pilot received minor injuries, the passenger reported no injuries. The local 14 CFR Part 91 pleasure flight operated without a flight plan in visual meteorological conditions.

In a detailed statement, the pilot reported that he had planned to take a friend for a quick ride around the traffic pattern. The pilot stated that he did not visually check the fuel tanks prior to this flight but he stated, "I was real confident that I had 1/2 hour fuel left in that right tank." He also stated that he believed there was no fuel in the left tank.

After taxiing to the end of the runway, they departed runway 36. At approximately 300 feet above the ground, the engine lost all power. The pilot stated he decided to make a 180 degree turn back to the airport to make a forced landing. The airplane landed on the grass short of the runway, nosed over, and came to rest in an inverted position.

Postaccident examination revealed no mechanical anomalies. No fuel was found in the right fuel tank and approximately two to three gallons of fuel was found in the left fuel tank.

During an interview with the FAA, the passenger stated that when the engine lost power, he had suggested to the pilot that he switch the selected fuel tank to the left. The pilot had replied that there was no fuel in the left tank.

#### **Pilot Information**

| Certificate:              | Private   | Age:                              | 37,U              |
|---------------------------|---|-----------------------------------|-------------------|
| Airplane Rating(s):       | Single-engine land  | Seat Occupied:                    | Left              |
| Other Aircraft Rating(s): | Glider  | Restraint Used:                   |                   |
| Instrument Rating(s):     | None  | Second Pilot Present:             | No                |
| Instructor Rating(s):     | None  | Toxicology Performed:             | No                |
| Medical Certification:    | Class 3 Valid Medicalw/<br>waivers/lim  | Last FAA Medical Exam:            | November 21, 1993 |
| Occupational Pilot:       | UNK   | Last Flight Review or Equivalent: |                   |
| Flight Time:              | 462 hours (Total, all aircraft), 332 hours (Total, this make and model), 406 hours (Pilot In Command, all aircraft), 14 hours (Last 90 days, all aircraft), 9 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft) |                                   |                   |

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## **Aircraft and Owner/Operator Information**

| Aircraft Make:                   | PIPER                    | Registration:                     | N9418D          |
|----------------------------------|--------------------------|-----------------------------------|-----------------|
| Model/Series:                    | PA-22-160 PA-22-160      | Aircraft Category:                | Airplane        |
| Year of Manufacture:             |                          | Amateur Built:                    |                 |
| Airworthiness Certificate:       | Normal                   | Serial Number:                    | 22-6392         |
| Landing Gear Type:               | Tailwheel                | Seats:                            | 4               |
| Date/Type of Last<br>Inspection: | June 24, 1994 Annual     | Certified Max Gross Wt.:          | 2000 lbs        |
| Time Since Last Inspection:      | 44 Hrs                   | Engines:                          | 1 Reciprocating |
| Airframe Total Time:             | 3443 Hrs                 | Engine Manufacturer:              | LYCOMING        |
| ELT:                             | Installed, not activated | Engine Model/Series:              | O-320-B2A       |
| Registered Owner:                | STEPHEN C. SCHLAGER      | Rated Power:                      | 160 Horsepower  |
| Operator:                        |                          | Operating Certificate(s)<br>Held: |                 |
| Operator Does Business As:       |                          | Operator Designator Code:         |                 |

## Meteorological Information and Flight Plan

| Conditions at Accident Site:     | Visual (VMC)                 | Condition of Light:                  | Day        |
|----------------------------------|------------------------------|--------------------------------------|------------|
| Observation Facility, Elevation: | SQI ,647 ft msl              | Distance from Accident Site:         |            |
| Observation Time:                | 20:15 Local                  | Direction from Accident Site:        |            |
| <b>Lowest Cloud Condition:</b>   | Clear                        | Visibility                           | 10 miles   |
| Lowest Ceiling:                  | None                         | Visibility (RVR):                    |            |
| Wind Speed/Gusts:                | 4 knots /                    | Turbulence Type<br>Forecast/Actual:  | /          |
| Wind Direction:                  | 80°                          | Turbulence Severity Forecast/Actual: | /          |
| Altimeter Setting:               | 29 inches Hg                 | Temperature/Dew Point:               | 11°C / 2°C |
| Precipitation and Obscuration:   | No Obscuration; No Precipita | ation                                |            |
| Departure Point:                 | (SQI)                        | Type of Flight Plan Filed:           | None       |
| Destination:                     |                              | Type of Clearance:                   | None       |
| Departure Time:                  | 18:40 Local                  | Type of Airspace:                    | Class E    |

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## **Airport Information**

| Airport:             | WHITESIDE COUNTY AIRPORT SQI | Runway Surface Type:             | Asphalt        |
|----------------------|------------------------------|----------------------------------|----------------|
| Airport Elevation:   | 647 ft msl                   | <b>Runway Surface Condition:</b> | Dry            |
| Runway Used:         | 36                           | IFR Approach:                    |                |
| Runway Length/Width: | 3900 ft / 100 ft             | VFR Approach/Landing:            | Forced landing |

## Wreckage and Impact Information

| Crew Injuries:         | 1 Minor         | Aircraft Damage:        | Substantial               |
|------------------------|-----------------|-------------------------|---------------------------|
| Passenger<br>Injuries: | 1 None          | Aircraft Fire:          | None                      |
| Ground Injuries:       | N/A             | Aircraft Explosion:     | None                      |
| Total Injuries:        | 1 Minor, 1 None | Latitude,<br>Longitude: | 41.789497,-89.689659(est) |

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#### **Administrative Information**

| Investigator In Charge (IIC):        | Corsones, Christine                         |  |
|--------------------------------------|---|--|
| Additional Participating<br>Persons: | THOMAS SOERENS; WEST CHICAGO , IL           |  |
| Original Publish Date:               | June 29, 1995                               |  |
| Last Revision Date:                  |   |  |
| Investigation Class:                 | <u>Class</u>                                |  |
| Note:                                |   |  |
| Investigation Docket:                | https://data.ntsb.gov/Docket?ProjectID=9875 |  |

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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