



# National Transportation Safety Board Aviation Accident Final Report

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|                                |                                      |                         |             |
|--------------------------------|--------------------------------------|-------------------------|-------------|
| <b>Location:</b>               | Prescott, AZ                         | <b>Accident Number:</b> | GAA18CA312  |
| <b>Date &amp; Time:</b>        | 05/29/2018, 2115 MST                 | <b>Registration:</b>    | N148ME      |
| <b>Aircraft:</b>               | PIPER PA 46                          | <b>Aircraft Damage:</b> | Substantial |
| <b>Defining Event:</b>         | Fuel exhaustion                      | <b>Injuries:</b>        | 3 None      |
| <b>Flight Conducted Under:</b> | Part 91: General Aviation - Personal |                         |             |

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## Analysis

According to the pilot, about 15 minutes before reaching the destination airport during descent, the engine lost power. The pilot switched fuel tanks, and the engine power was momentarily restored, but the engine stopped producing power even though he thought it "was still running all the way to impact." The pilot conducted a forced landed on a highway at night, and the right wing struck an object and separated from the airplane. The airplane came to rest inverted.

According to the Federal Aviation Administration (FAA) aviation safety inspector (ASI) that performed the postaccident airplane examination, the fuel lines to the fuel manifold were dry, and the fuel manifold valves were dry. He reported that the fuel strainer, the diaphragm, and the fuel filter in the fuel manifold were unremarkable. Fuel was found in the gascolator.

The FAA ASI reported that, during his interview with the pilot, "the pilot changed his story from fuel exhaustion, to fuel contamination." The inspector reported that there were no signs of fuel contamination during the examination of the fuel system.

According to the fixed-base operator (FBO) at the departure airport, the pilot requested 20 gallons of fuel. He then canceled his fuel request and walked out of the FBO.

## Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be:

The pilot's improper fuel planning, which resulted in fuel exhaustion and the subsequent total loss of engine power.

## Findings

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|                  |                               |
|------------------|-------------------------------|
| Aircraft         | Fuel - Fluid level (Cause)    |
| Personnel issues | Fuel planning - Pilot (Cause) |

## Factual Information

### History of Flight

|                        |  |
|------------------------|--|
| <b>Enroute-descent</b> | Fuel exhaustion (Defining event)<br>Loss of engine power (total)<br>Attempted remediation/recovery |
| <b>Landing</b>         | Collision with terr/obj (non-CFIT)<br>Part(s) separation from AC<br>Roll over                      |

### Pilot Information

|                                  |   |  |            |
|----------------------------------|---|--|------------|
| <b>Certificate:</b>              | Airline Transport; Private  | <b>Age:</b>                              | 34, Male   |
| <b>Airplane Rating(s):</b>       | Multi-engine Land; Single-engine Land   | <b>Seat Occupied:</b>                    | Left       |
| <b>Other Aircraft Rating(s):</b> | None  | <b>Restraint Used:</b>                   | 3-point    |
| <b>Instrument Rating(s):</b>     | Airplane  | <b>Second Pilot Present:</b>             | No         |
| <b>Instructor Rating(s):</b>     | None  | <b>Toxicology Performed:</b>             | No         |
| <b>Medical Certification:</b>    | Class 1 None  | <b>Last FAA Medical Exam:</b>            | 01/05/2018 |
| <b>Occupational Pilot:</b>       | Yes   | <b>Last Flight Review or Equivalent:</b> | 03/27/2018 |
| <b>Flight Time:</b>              | (Estimated) 3100 hours (Total, all aircraft), 3 hours (Total, this make and model), 2000 hours (Pilot In Command, all aircraft), 60 hours (Last 90 days, all aircraft), 22 hours (Last 30 days, all aircraft) |  |            |

### Aircraft and Owner/Operator Information

|                                      |                                |                                       |                 |
|--------------------------------------|--------------------------------|---------------------------------------|-----------------|
| <b>Aircraft Make:</b>                | PIPER                          | <b>Registration:</b>                  | N148ME          |
| <b>Model/Series:</b>                 | PA 46                          | <b>Aircraft Category:</b>             | Airplane        |
| <b>Year of Manufacture:</b>          | 1986                           | <b>Amateur Built:</b>                 | No              |
| <b>Airworthiness Certificate:</b>    | Normal                         | <b>Serial Number:</b>                 | 46-8608009      |
| <b>Landing Gear Type:</b>            | Retractable - Tricycle         | <b>Seats:</b>                         | 6               |
| <b>Date/Type of Last Inspection:</b> | Annual                         | <b>Certified Max Gross Wt.:</b>       | 4118 lbs        |
| <b>Time Since Last Inspection:</b>   |                                | <b>Engines:</b>                       | 1 Reciprocating |
| <b>Airframe Total Time:</b>          |                                | <b>Engine Manufacturer:</b>           | Continental     |
| <b>ELT:</b>                          | Installed, not activated       | <b>Engine Model/Series:</b>           | TSIO-520        |
| <b>Registered Owner:</b>             | 1ST AVENUE MALIBU SERVICES LLC | <b>Rated Power:</b>                   | 0 hp            |
| <b>Operator:</b>                     | 1ST AVENUE MALIBU SERVICES LLC | <b>Operating Certificate(s) Held:</b> | None            |

## Meteorological Information and Flight Plan

|                                  |                                  |                                      |                      |
|----------------------------------|----------------------------------|--------------------------------------|----------------------|
| Conditions at Accident Site:     | Visual Conditions                | Condition of Light:                  | Night                |
| Observation Facility, Elevation: | KPRC, 5052 ft msl                | Distance from Accident Site:         | 20 Nautical Miles    |
| Observation Time:                | 0453 UTC                         | Direction from Accident Site:        | 341°                 |
| Lowest Cloud Condition:          | Clear                            | Visibility                           | 10 Miles             |
| Lowest Ceiling:                  | None                             | Visibility (RVR):                    |                      |
| Wind Speed/Gusts:                | 7 knots /                        | Turbulence Type Forecast/Actual:     | / None               |
| Wind Direction:                  | 210°                             | Turbulence Severity Forecast/Actual: | / N/A                |
| Altimeter Setting:               | 29.95 inches Hg                  | Temperature/Dew Point:               | 22° C / -2° C        |
| Precipitation and Obscuration:   | No Obscuration; No Precipitation |                                      |                      |
| Departure Point:                 | SANTA ANA, CA (SNA)              | Type of Flight Plan Filed:           | IFR                  |
| Destination:                     | PRESCOTT, AZ (PRC)               | Type of Clearance:                   | IFR; VFR; VFR on top |
| Departure Time:                  | 1940 PDT                         | Type of Airspace:                    | Class D              |

## Airport Information

|                      |                           |                           |                   |
|----------------------|---------------------------|---------------------------|-------------------|
| Airport:             | Ernest A Love Field (PRC) | Runway Surface Type:      | Asphalt; Concrete |
| Airport Elevation:   | 5045 ft                   | Runway Surface Condition: | Dry               |
| Runway Used:         | N/A                       | IFR Approach:             | None              |
| Runway Length/Width: |                           | VFR Approach/Landing:     | Forced Landing    |

## Wreckage and Impact Information

|                     |        |                      |                              |
|---------------------|--------|----------------------|------------------------------|
| Crew Injuries:      | 1 None | Aircraft Damage:     | Substantial                  |
| Passenger Injuries: | 2 None | Aircraft Fire:       | None                         |
| Ground Injuries:    | N/A    | Aircraft Explosion:  | None                         |
| Total Injuries:     | 3 None | Latitude, Longitude: | 34.340556, -112.294167 (est) |

## Administrative Information

|                                   |   |               |            |
|-----------------------------------|---|---------------|------------|
| Investigator In Charge (IIC):     | Michael A Hicks   | Adopted Date: | 03/18/2019 |
| Additional Participating Persons: | Michael G Moyer; FAA; Prescott, AZ  |               |            |
| Publish Date:                     | 03/18/2019  |               |            |
| Note:                             | This accident report documents the factual circumstances of this accident as described to the NTSB.                             |               |            |
| Investigation Docket:             | <a href="http://dms.nts.gov/pubdms/search/dockList.cfm?mKey=97366">http://dms.nts.gov/pubdms/search/dockList.cfm?mKey=97366</a> |               |            |

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