# National Transportation Safety Board
# Aviation Accident Final Report

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| **Location:** | Honolulu, HI | **Accident Number:** | WPR17LA138 |
| **Date & Time:** | 06/30/2017, 1330 HST | **Registration:** | N4244T |
| **Aircraft:** | PIPER PA 28-140 | **Aircraft Damage:** | Substantial |
| **Defining Event:** | Loss of engine power (total) | **Injuries:** | 3 Serious |
| **Flight Conducted Under:** | Part 91: General Aviation - Personal | | |

## Analysis

The private pilot reported that he conducted a preflight inspection to prepare for the local personal flight and that a minimum of 20 gallons of fuel was on board. He started the engine and taxied the airplane to an open area for a run-up. Shortly after takeoff, about 300 ft above ground level, the engine lost power. He initiated an emergency landing to a riverbed. The airplane subsequently came to rest under a highway overpass and caught fire.

Postaccident visual and engine examinations revealed no evidence of a mechanical malfunction. Further, impact and fire damage precluded a determination of the cause of the loss of engine power.

## Probable Cause and Findings

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

A total loss of engine power during initial climb for reasons that could not be determined due to impact and fire damage.

### Findings

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| **Not determined** | Not determined - Unknown/Not determined (Cause) |

# Factual Information

## History of Flight

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| **Initial climb** | Loss of engine power (total) (Defining event) |
| **Landing** | Off-field or emergency landing |
| **Post-impact** | Fire/smoke (post-impact) |

On June 30, 2017, about 1330 Hawaii-Aleutian standard time, a Piper PA-28-140 airplane, N4244T, collided with the ground under a highway overpass following a loss of engine power shortly after takeoff from Daniel K Inouye International Airport (HNL), Honolulu, Hawaii. The private pilot, a commercial pilot rated passenger and a passenger were seriously injured. The airplane was substantially damaged. The airplane was privately owned and operated under the provisions of Title 14 *Code of Federal Regulations* Part 91. Visual meteorological conditions prevailed, and no flight plan was filed for the local personal flight that departed HNL at 1320.

The pilot reported that a preflight inspection was accomplished and that a minimum of 20 gallons of fuel was on board. The engine was started, and the airplane was taxied to an open area for a run-up. Shortly after takeoff from runway 4 left, about 300 ft above ground level, the pilot noted that the engine lost power. He subsequently initiated an emergency landing to a riverbed; the airplane came to rest under a highway overpass and caught fire.

The rear seat passenger reported to a Federal Aviation Administration (FAA) Inspector that the right seat pilot took control of the airplane just prior to the collision and he had cut off the mixture (and power) just prior to ground impact.

The owner of the airplane reported that the airplane had been flown every day and no issues with the operation of the airplane were reported. He indicated that the fuel tanks would be filled to the tabs (20 gallons in each tank). The airplane would fly one flight with the fuel selector positioned to one fuel tank, and then on the next flight it would be positioned on the other fuel tank. Prior to the accident flight, the owner had instructed the pilots to switch fuel tanks prior to takeoff since they were used to flying in Cessna airplanes that flew with the fuel selector positioned to BOTH.

## Pilot Information

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| **Certificate:** | Private | **Age:** | 20, Male |
| **Airplane Rating(s):** | Single-engine Land | **Seat Occupied:** | Left |
| **Other Aircraft Rating(s):** | None | **Restraint Used:** | 3-point |
| **Instrument Rating(s):** | None | **Second Pilot Present:** | No |
| **Instructor Rating(s):** | None | **Toxicology Performed:** | No |
| **Medical Certification:** | Class 3 None | **Last FAA Medical Exam:** | 02/03/2017 |
| **Occupational Pilot:** | No | **Last Flight Review or Equivalent:** | 04/29/2017 |
| **Flight Time:** | 68 hours (Total, all aircraft), 5 hours (Total, this make and model), 28 hours (Last 90 days, all aircraft), 8 hours (Last 30 days, all aircraft) | | |

## Pilot-Rated Passenger Information

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| **Certificate:** | Commercial | **Age:** | 28, Male |
| **Airplane Rating(s):** | Single-engine Land | **Seat Occupied:** | Right |
| **Other Aircraft Rating(s):** | | **Restraint Used:** | 3-point |
| **Instrument Rating(s):** | Airplane | **Second Pilot Present:** | No |
| **Instructor Rating(s):** | None | **Toxicology Performed:** | No |
| **Medical Certification:** | Class 1 Without Waivers/Limitations | **Last FAA Medical Exam:** | 10/04/2015 |
| **Occupational Pilot:** | No | **Last Flight Review or Equivalent:** | 04/12/2016 |
| **Flight Time:** | 775 hours (Total, all aircraft), 657 hours (Pilot In Command, all aircraft) | | |

The 20-year-old left seat pilot held a private pilot certificate with a rating in airplane single-engine land. The pilot held a Federal Aviation Administration third-class medical certificate issued February 3, 2017 with no waivers or limitations. The pilot's total flight experience was about 68 hours. He logged 28 hours in the previous 90 days, and 8 hours in the previous 30 days. A total of 5 hours were logged in the make and model airplane involved in the accident.

The 28-year-old right seat pilot held a commercial certificate with ratings in airplane single-engine land and instrument airplane. The pilot held a Federal Aviation Administration first-class medical certificate issued October 4, 2015, with no waivers or limitations. The pilot's total flight experience was about 775 hours.

## Aircraft and Owner/Operator Information

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| **Aircraft Make:** | PIPER | **Registration:** | N4244T |
| **Model/Series:** | PA 28-140 | **Aircraft Category:** | Airplane |
| **Year of Manufacture:** | 1971 | **Amateur Built:** | No |
| **Airworthiness Certificate:** | Normal | **Serial Number:** | 28-7225103 |
| **Landing Gear Type:** | Tricycle | **Seats:** | 4 |
| **Date/Type of Last Inspection:** | | **Certified Max Gross Wt.:** | |
| **Time Since Last Inspection:** | | **Engines:** | 1 Reciprocating |
| **Airframe Total Time:** | | **Engine Manufacturer:** | LYCOMING |
| **ELT:** | | **Engine Model/Series:** | O-320-E30 |
| **Registered Owner:** | MUELLER JAHN P | **Rated Power:** | 140 hp |
| **Operator:** | On file | **Operating Certificate(s) Held:** | None |

The 4-seat, low-wing, fixed-gear airplane, serial number 28-7225103, was manufactured in 1971 and was powered by a 140-horsepower Lycoming O-320 series engine. The owner of the airplane reported that the maintenance logbooks for both the airframe and engine were inside the airplane at the time of the accident and were destroyed in the post-crash fire. No total times nor maintenance inspection documentation was obtained.

## Meteorological Information and Flight Plan

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| **Conditions at Accident Site:** | Visual Conditions | **Condition of Light:** | Day |
| **Observation Facility, Elevation:** | PHNL | **Distance from Accident Site:** | |
| **Observation Time:** | 1253 HST | **Direction from Accident Site:** | |
| **Lowest Cloud Condition:** | Few / 2700 ft agl | **Visibility** | 10 Miles |
| **Lowest Ceiling:** | | **Visibility (RVR):** | |
| **Wind Speed/Gusts:** | 17 knots / 25 knots | **Turbulence Type Forecast/Actual:** | / |
| **Wind Direction:** | 79° | **Turbulence Severity Forecast/Actual:** | / |
| **Altimeter Setting:** | 30.03 inches Hg | **Temperature/Dew Point:** | 29°C / 16°C |
| **Precipitation and Obscuration:** | No Obscuration; No Precipitation | | |
| **Departure Point:** | Honolulu, HI (PHNL) | **Type of Flight Plan Filed:** | Unknown |
| **Destination:** | Honolulu, HI (PHNL) | **Type of Clearance:** | None |
| **Departure Time:** | 1320 HST | **Type of Airspace:** | |

## Airport Information

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| **Airport:** | Honolulu (PHNL) | **Runway Surface Type:** | N/A |
| **Airport Elevation:** | 12 ft | **Runway Surface Condition:** | Unknown |
| **Runway Used:** | N/A | **IFR Approach:** | None |
| **Runway Length/Width:** | | **VFR Approach/Landing:** | Forced Landing |

## Wreckage and Impact Information

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| **Crew Injuries:** | 2 Serious | **Aircraft Damage:** | Substantial |
| **Passenger Injuries:** | 1 Serious | **Aircraft Fire:** | On-Ground |
| **Ground Injuries:** | N/A | **Aircraft Explosion:** | None |
| **Total Injuries:** | 3 Serious | **Latitude, Longitude:** | 21.316667, -157.916667 (est) |

The airplane came to rest under an overpass about 1.5 miles north of the departure end of runway 4 left. The ground was dirt and loose rocks. The first of 3 ground impact points was noted about 55 ft south of the main wreckage. The main wreckage was facing to the south and laying on its belly. The landing gear had separated and was in front of the engine, which remained partially attached at the firewall. The inboard section of the right wing remained partially attached at the fuselage. The outboard wingtip section was separated and within about 13 ft of the wreckage. The left wing, in its entirety, remained attached to the fuselage, however was deformed about mid-section. The empennage remained in place. All flight control surfaces were accounted for. The aft end of the engine and cabin area, aft to the baggage compartment, was consumed by the postimpact fire.

The postaccident engine examination revealed that the engine sustained fire damage primarily to the rear engine compartment. The cockpit controls were destroyed and could not be moved or identified. A visual examination of the engine revealed no evidence of a catastrophic engine failure.

The top and bottom spark plugs were removed and noted that the electrodes displayed normal operating signatures. The magnetos remained in place to their mountings, however were destroyed by heat distress and could not be tested.

The engine valve covers were removed and the crankshaft was turned by hand. Thumb compression was established in each cylinder. Accessory gear and valve train continuity was established. The oil filter/screen was destroyed. The carburetor was destroyed by fire.

The fuel selector valve was burned and melted. The valve position could not be verified.

## Administrative Information

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| **Investigator In Charge (IIC):** | Howard D Plagens | **Report Date:** | 02/26/2019 |
| **Additional Participating Persons:** | Joe Monfort; FAA FSDO; Honolulu, HI | | |
| **Publish Date:** | 02/26/2019 | | |
| **Note:** | The NTSB did not travel to the scene of this accident. | | |
| **Investigation Docket:** | http://dms.ntsb.gov/pubdms/search/dockList.cfm?mKey=95471 | | |

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.