

Aviation Investigation Final Report

| Location: | CANTWELL, Alaska | a | Accident Number: | ANC96LA037 |
|-------------------------|---|-------|------------------|-------------|
| Date & Time: | March 23, 1996, 10:00 Local | | Registration: | N2431M |
| Aircraft: | Piper | PA-12 | Aircraft Damage: | Substantial |
| Defining Event: | | | Injuries: | 1 None |
| Flight Conducted Under: | Part 91: General aviation - Instructional | | | |

Analysis

The student pilot, on his first solo cross country flight, had just over flown an airport runway that was not suitable to use for landing when the engine began to lose power. He made a slight turn and was forced to land in deep snow. Subsequent examination of the airplane and engine revealed no mechanical reason for the loss of engine power. Fuel quantity could not be determined.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The undetermined loss of engine power and lack of suitable terrain to make a forced landing.

Findings

Occurrence #1: LOSS OF ENGINE POWER Phase of Operation: MANEUVERING

Findings
1. (C) REASON FOR OCCURRENCE UNDETERMINED

Occurrence #2: FORCED LANDING Phase of Operation: EMERGENCY LANDING

Occurrence #3: ON GROUND/WATER ENCOUNTER WITH TERRAIN/WATER Phase of Operation: EMERGENCY LANDING

Findings 2. TERRAIN CONDITION - SNOW COVERED

3. (F) TERRAIN CONDITION - NONE SUITABLE

Factual Information

On March 23, 1996, at 1000 Alaska standard time, a wheel equipped Piper PA-12 airplane, N2431M, registered to and operated by the student pilot, experienced a power loss and subsequent forced landing near Cantwell, Alaska. The student pilot, on his first solo cross country flight, was operating under 14 CFR Part 91. No flight plan was filed and visual meteorological conditions prevailed. The flight departed Merrill Field, Anchorage, Alaska, and the destination was Cantwell. The airplane received substantial damage and the student pilot, the sole occupant, was not injured.

During a telephone conversation with the student pilot on March 23, 1996, he stated that he had overflown the Summit airport to view the conditions of the runway prior to landing. The runway was unsuitable for landing and as he passed the runway the engine began to lose power. He was unable to turn toward the runway and elected to land near a road. The pilot landed the airplane in deep snow and the airplane struck a snow bank.

Examination of the airplane and engine was accomplished by Ernie's Aircraft Service of Anchorage, Alaska. The examination determined the following:

 The engine turned freely and was lubricated.
 The magnetos were timed correctly and the "P" leads were not grounded.
 The fuel flowed to the carburetor.
 The carburetor air box was clear of obstructions.
 The airplane was not equipped with a header tank.
 The fuel quantity could not be determined because the wings had been removed and the fuel drained.

Ernie's Aircraft could not find any mechanical problems with the engine.

During the interview with the pilot on March 23, 1996, he stated that he had fueled the airplane the previous day with 19 gallons of fuel. He then flew the airplane approximately 1 hour. He did not refuel the airplane prior to this flight. He stated that the airplane carries 5 hours of fuel on board. He had flown approximately 2.0 hours during this flight.

During the pilot interview he stated that he had applied carburetor heat before reducing the engine power. There are no weather reporting facilities at the accident site and the temperature and dewpoint spread are undeterminable.

During the initial interview with the student pilot, he stated that the engine windmilled for a short time until he slowed his airspeed. At that point, the propeller stopped windmilling. During a subsequent conversation with the student pilot, he stated that his instructor told him if the propeller stopped windmilling it was a mechanical failure.

Pilot Information

| Certificate: | Student | Age: | 46,Male |
|---------------------------|---|-----------------------------------|---------------|
| Airplane Rating(s): | Single-engine land | Seat Occupied: | Front |
| Other Aircraft Rating(s): | None | Restraint Used: | |
| Instrument Rating(s): | None | Second Pilot Present: | No |
| Instructor Rating(s): | None | Toxicology Performed: | No |
| Medical Certification: | Class 3 Valid Medicalw/ waivers/lim | Last FAA Medical Exam: | June 28, 1995 |
| Occupational Pilot: | No | Last Flight Review or Equivalent: | |
| Flight Time: | 22 hours (Total, all aircraft), 22 hours (Total, this make and model), 4 hours (Pilot In Command, all aircraft), 4 hours (Last 90 days, all aircraft), 4 hours (Last 30 days, all aircraft) | | |

Aircraft and Owner/Operator Information

| Aircraft Make: | Piper | Registration: | N2431M |
|----------------------------------|--------------------------|-----------------------------------|-----------------|
| Model/Series: | PA-12 PA-12 | Aircraft Category: | Airplane |
| Year of Manufacture: | | Amateur Built: | |
| Airworthiness Certificate: | Normal | Serial Number: | 12-1675 |
| Landing Gear Type: | Tailwheel | Seats: | 3 |
| Date/Type of Last Inspection: | August 30, 1995 Annual | Certified Max Gross Wt.: | 1750 lbs |
| Time Since Last Inspection: | 22 Hrs | Engines: | 1 Reciprocating |
| Airframe Total Time: | 2535 Hrs | Engine Manufacturer: | Lycoming |
| ELT: | Installed, not activated | Engine Model/Series: | 0-290-D2 |
| Registered Owner: | DAVID D. FRICKEY | Rated Power: | 135 Horsepower |
| Operator: | | Operating Certificate(s) Held: | None |
| 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: | | Distance from Accident Site: | |
| Observation Time: | | Direction from Accident Site: | |
| Lowest Cloud Condition: | Clear | Visibility | 50 miles |
| Lowest Ceiling: | None | Visibility (RVR): | |
| Wind Speed/Gusts: | / | Turbulence Type Forecast/Actual: | / |
| Wind Direction: | 330° | Turbulence Severity Forecast/Actual: | / |
| Altimeter Setting: | | Temperature/Dew Point: | -6°C |
| Precipitation and Obscuration: | No Obscuration; No Precipitation | | |
| Departure Point: | ANCHORAGE , AK (MRI) | Type of Flight Plan Filed: | None |
| Destination: | (UMM) | Type of Clearance: | None |
| Departure Time: | 08:00 Local | Type of Airspace: | Class G |

Airport Information

| Airport: | | Runway Surface Type: | |
|----------------------|---|---------------------------|----------------|
| Airport Elevation: | | Runway Surface Condition: | |
| Runway Used: | 0 | IFR Approach: | None |
| Runway Length/Width: | | VFR Approach/Landing: | Forced landing |

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: | 63.009532,-149.399551(est) |

Administrative Information

| Investigator In Charge (IIC): | Kobelnyk, George | | |
|--------------------------------------|---|--|--|
| Additional Participating Persons: | DEAN DIAMA; ANCHORAGE , AK | | |
| Original Publish Date: | July 25, 1996 | | |
| Last Revision Date: | | | |
| Investigation Class: | <u>Class</u> | | |
| Note: | | | |
| Investigation Docket: | https://data.ntsb.gov/Docket?ProjectID=2811 | | |

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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 <u>here</u>.