



Aviation Investigation Final Report

Location:	EUREKA, Alaska	Accident Number:	ANC89LA118
Date & Time:	July 7, 1989, 23:00 Local	Registration:	N7029K
Aircraft:	PIPER PA-20	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 Serious, 1 Minor
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

THE PILOT WAS USING AUTOMOTIVE FUEL IN HIS AIRPLANE & HAD MADE NUMEROUS TAKEOFFS & LANDINGS IN RAPID SUCCESSION. THE TEMPERATURE WAS 50 DEGREES, THE SKY WAS CLEAR & THE AIRSTRIP ELEVATION WAS ABOUT 4000 FT. JUST AFTER LIFT-OFF, THE ENGINE COUGHED ONCE, THEN STOPPED COMPLETELY AS IF SOMEONE HAD TURNED IT OFF. SUBSEQUENTLY THE AIRPLANE WAS DAMAGED DURING A LANDING ON UNEVEN TUNDRA. NO MECHANICAL IRREGULARITIES WERE FOUND WITH THE ENGINE OR AIRPLANE. THE CARBURETOR COMPOSITE FLOAT WAS WEIGHTED & FOUND TO BE WITHIN SPECIFIED LIMITS, BUT WHEN SECTIONED, IT GAVE OFF A SLIGHT HYDROCARBONODOR. VAPOR PRESSURE OF THE AUTO FUEL WAS RPRTD TO BE 15 PSI AS COMPARED TO 5 PSI FOR 100 OCTANE AVIATION FUEL (AUTO FUEL MORE SUSCEPTIBLE TO VAPOR LOCK).

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: LOSS OF ENGINE POWER FOR AN UNKNOWN REASON. A FACTOR RELATED TO THE ACCIDENT WAS: ROUGH TERRAIN IN THE EMERGENCY LANDING AREA.

Findings

Occurrence #1: LOSS OF ENGINE POWER(TOTAL) - NONMECHANICAL
Phase of Operation: TAKEOFF - INITIAL CLIMB

Findings

1. (C) REASON FOR OCCURRENCE UNDETERMINED
2. FLUID,FUEL GRADE - OTHER
3. WEATHER CONDITION - HIGH DENSITY ALTITUDE

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

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

Findings

4. (F) TERRAIN CONDITION - ROUGH/UNEVEN

Factual Information

Pilot Information

Certificate:	Private	Age:	24, Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Left
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 Medical--no waivers/lim.	Last FAA Medical Exam:	December 1, 1988
Occupational Pilot:	UNK	Last Flight Review or Equivalent:	
Flight Time:	189 hours (Total, all aircraft), 27 hours (Total, this make and model), 179 hours (Pilot In Command, all aircraft), 112 hours (Last 90 days, all aircraft), 27 hours (Last 30 days, all aircraft), 5 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	PIPER	Registration:	N7029K
Model/Series:	PA-20 PA-20	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	20-138
Landing Gear Type:	Tailwheel	Seats:	2
Date/Type of Last Inspection:	June 18, 1989 Annual	Certified Max Gross Wt.:	1800 lbs
Time Since Last Inspection:	34 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	1851 Hrs	Engine Manufacturer:	LYCOMING
ELT:	Installed, activated, aided in locating accident	Engine Model/Series:	O-290-D-135
Registered Owner:	DAVE HANNAM	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	90 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	/	Turbulence Type Forecast/Actual:	/
Wind Direction:	0°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:		Temperature/Dew Point:	10°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:		Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	22:50 Local	Type of Airspace:	Class G

Airport Information

Airport:	DIRT STRIP	Runway Surface Type:	Dirt
Airport Elevation:	0 ft msl	Runway Surface Condition:	Dry
Runway Used:	0	IFR Approach:	None
Runway Length/Width:	1500 ft / 15 ft	VFR Approach/Landing:	Forced landing

Wreckage and Impact Information

Crew Injuries:	1 Serious	Aircraft Damage:	Substantial
Passenger Injuries:	1 Minor	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Serious, 1 Minor	Latitude, Longitude:	

Administrative Information

Investigator In Charge (IIC): Kobelnyk, George

Additional Participating Persons:

Original Publish Date: June 28, 1991

Last Revision Date:

Investigation Class: [Class](#)

Note:

Investigation Docket: <https://data.ntsb.gov/Docket?ProjectID=5221>

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](#).