



Aviation Investigation Final Report

Location:	SPOKANE, Washington	Accident Number:	SEA93LA007
Date & Time:	October 11, 1992, 15:30 Local	Registration:	N24563
Aircraft:	PIPER PA-38-112	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 None
Flight Conducted Under:	Part 91: General aviation - Instructional		

Analysis

DURING A SOLO CROSS COUNTRY FLIGHT, THE PILOT REPORTED THAT JUST BEFORE HIS LAST DEPARTURE FOR THE RETURN LEG HOME, HE INCORRECTLY CALCULATED THE REMAINING FUEL ON BOARD AND DID NOT REFUEL THE AIRPLANE. WHEN APPROXIMATELY TEN MILES FROM THE DESTINATION AIRPORT, THE LEFT FUEL TANK EXHAUSTED OF FUEL. THE PILOT SWITCHED TO THE RIGHT FUEL TANK THAT EXHAUSTED OF FUEL APPROXIMATELY TWO MILES FROM THE AIRPORT. THE PILOT ATTEMPTED AN APPROACH TO RUNWAY 21L, THEN SWITCHED TO 21R TO TRY AND LAND ON THE OVERRUN. AN AIRPORT BOUNDARY FENCE IS PRESENT AT THE END OF THE OVERRUN. IN ORDER TO AVOID STRIKING THE FENCE, THE PILOT HAD TO PULL THE AIRPLANE UP AND OVER THE FENCE. THE AIRPLANE STALLED AND DROPPED TO THE GROUND, STRIKING THE RUNWAY APPROACH LIGHTS.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: INADEQUATE PREFLIGHT PLANNING/PREPARATION. FACTORS TO THE ACCIDENT WERE: FUEL EXHAUSTION AND INADEQUATE FUEL CONSUMPTION CALCULATIONS.

Findings

Occurrence #1: LOSS OF ENGINE POWER(TOTAL) - NONMECHANICAL
Phase of Operation: APPROACH - VFR PATTERN - FINAL APPROACH

Findings

1. (F) FLUID,FUEL - EXHAUSTION
2. (F) FUEL CONSUMPTION CALCULATIONS - INACCURATE - PILOT IN COMMAND
3. (C) PREFLIGHT PLANNING/PREPARATION - INADEQUATE - PILOT IN COMMAND

Occurrence #2: FORCED LANDING

Phase of Operation: DESCENT - EMERGENCY

Occurrence #3: ON GROUND/WATER COLLISION WITH OBJECT

Phase of Operation: LANDING - ROLL

Findings

4. OBJECT - APPROACH LIGHT/NAVAID

Factual Information

Pilot Information

Certificate:	Student	Age:	48, 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-w/ waivers/lim	Last FAA Medical Exam:	September 22, 1992
Occupational Pilot:	UNK	Last Flight Review or Equivalent:	
Flight Time:	35 hours (Total, all aircraft), 21 hours (Total, this make and model), 7 hours (Pilot In Command, all aircraft), 21 hours (Last 90 days, all aircraft), 15 hours (Last 30 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	PIPER	Registration:	N24563
Model/Series:	PA-38-112 PA-38-112	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	38-79A1132
Landing Gear Type:	Tricycle	Seats:	2
Date/Type of Last Inspection:	January 2, 2000 Annual	Certified Max Gross Wt.:	1600 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:		Engine Manufacturer:	LYCOMING
ELT:	Installed, not activated	Engine Model/Series:	O-235-L2C
Registered Owner:	VAUGHN, GERALD W.	Rated Power:	112 Horsepower
Operator:	LORANGER AVIATION	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:	Unknown	Visibility	30 miles
Lowest Ceiling:	Broken / 25000 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	4 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	200°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	23°C / 6°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	LEWISTON , ID (LWS)	Type of Flight Plan Filed:	VFR
Destination:		Type of Clearance:	None
Departure Time:	14:30 Local	Type of Airspace:	Class E

Airport Information

Airport:	FELTS FLD SFF	Runway Surface Type:	Concrete
Airport Elevation:	1953 ft msl	Runway Surface Condition:	Dry
Runway Used:	21	IFR Approach:	None
Runway Length/Width:	4500 ft / 150 ft	VFR Approach/Landing:	Forced landing;Straight-in

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:	47.649703,-117.310012(est)

Administrative Information

Investigator In Charge (IIC):	Eckrote, Debra
Additional Participating Persons:	TEX GASTON; SPOKANE , WA
Original Publish Date:	August 31, 1993
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=42951

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