



AVIATION



HIGHWAY



MARINE



RAILROAD



PIPELINE

Aviation Investigation Final Report

Location:	Wishram, Washington	Accident Number:	WPR23LA222
Date & Time:	June 7, 2023, 14:45 Local	Registration:	N7155F
Aircraft:	Cessna 150F	Aircraft Damage:	Substantial
Defining Event:	Fuel exhaustion	Injuries:	1 None
Flight Conducted Under:	Part 91: General aviation - Aerial observation		

Analysis

According to the pilot, the intent for the flight was to conduct several aerial surveys of large fields. The flight departed with 37 gallons of fuel onboard intended for the 4-hour flight. A diversion was made due to scattered rain showers to wait for weather conditions to improve to the requirements for aerial photography. The engine lost total power about 9 miles from the intended destination. He realized he would be unable to land at his intended destination due to the airplane's altitude and distance from it, so he performed an off airport forced landing in a field. The airplane touched down and rolled over inverted in a ravine sustaining substantial damage to the fuselage, vertical stabilizer, left wing and right aileron.

The pilot reported that there were no preaccident mechanical malfunctions or failures that would have precluded normal operation.

Probable Cause and Findings

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

The pilot's improper fuel management, which resulted in fuel exhaustion and a total loss of engine power.

Findings

Personnel issues	Fuel planning - Pilot
Personnel issues	Decision making/judgment - Pilot

Factual Information

History of Flight

Enroute-cruise	Fuel exhaustion (Defining event)
Landing-landing roll	Off-field or emergency landing
Landing-landing roll	Nose over/nose down

Pilot Information

Certificate:	Commercial; Flight instructor	Age:	48,Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	4-point
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	Airplane single-engine; Instrument airplane	Toxicology Performed:	
Medical Certification:	Class 1 With waivers/limitations	Last FAA Medical Exam:	March 6, 2023
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	April 25, 2022
Flight Time:	987 hours (Total, all aircraft), 339 hours (Total, this make and model), 906 hours (Pilot In Command, all aircraft), 153 hours (Last 90 days, all aircraft), 101 hours (Last 30 days, all aircraft), 7 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	Registration:	N7155F
Model/Series:	150F	Aircraft Category:	Airplane
Year of Manufacture:	1966	Amateur Built:	
Airworthiness Certificate:	None	Serial Number:	15063755
Landing Gear Type:	Tricycle	Seats:	2
Date/Type of Last Inspection:	April 18, 2023 Annual	Certified Max Gross Wt.:	1760 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	4935 Hrs at time of accident	Engine Manufacturer:	Lycoming
ELT:	C126 installed, activated, aided in locating accident	Engine Model/Series:	O-320 E2D
Registered Owner:	JR Imaging Logistics Inc.	Rated Power:	150 Horsepower
Operator:	JR Imaging Logistics Inc.	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	KDLS, 210 ft msl	Distance from Accident Site:	7 Nautical Miles
Observation Time:	14:53 Local	Direction from Accident Site:	245°
Lowest Cloud Condition:	Few / 5000 ft AGL	Visibility	10 miles
Lowest Ceiling:		Visibility (RVR):	
Wind Speed/Gusts:	7 knots /	Turbulence Type Forecast/Actual:	Convective / Convective
Wind Direction:	320°	Turbulence Severity Forecast/Actual:	Light / Light
Altimeter Setting:	29.77 inches Hg	Temperature/Dew Point:	28°C / 9°C
Precipitation and Obscuration:	Light - Showers - Rain		
Departure Point:	Richland, WA (RLD)	Type of Flight Plan Filed:	None
Destination:	Dalles, OR (DLS)	Type of Clearance:	VFR; VFR flight following
Departure Time:	10:45 Local	Type of Airspace:	Class E

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:		Aircraft Explosion:	None
Total Injuries:	1 None	Latitude, Longitude:	45.66607,-121.02039

Administrative Information

Investigator In Charge (IIC):	Blum, Contessa
Additional Participating Persons:	Terry Brewer; GEG FSDO; Spokane, WA
Original Publish Date:	October 20, 2023
Last Revision Date:	
Investigation Class:	Class 4
Note:	The NTSB did not travel to the scene of this accident.
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=192345

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](#).