



# Aviation Investigation Final Report

<b>Location:</b>	Hood River, Oregon	<b>Accident Number:</b>	GAA17CA331
<b>Date &amp; Time:</b>	June 11, 2017, 16:30 Local	<b>Registration:</b>	N8578L
<b>Aircraft:</b>	Piper PA25	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>	Fuel exhaustion	<b>Injuries:</b>	1 Minor
<b>Flight Conducted Under:</b>	Part 91: General aviation - Glider tow		

## Analysis

The glider tow pilot reported that, during preflight, the fuel indicator read "2/3 full" and he had a "brief discussion" with the previous pilot who had just completed numerous glider tow flights without refueling. He added that a fuel dipstick was not available, and a visual check of the fuel quantity was not completed during preflight. He further added that on the 10th glider tow flight, which was about 2 hours of flight time, he noted a "low fuel indication in flight just prior to glider release." Subsequently, the glider released and during the return to the airport, about 2 nautical miles from the runway and about 1,900 above ground, the engine lost power.

The pilot reported that due to the quartering headwind aloft he did not believe he could make the runway, so he attempted to land on an open pasture, but struck trees and impacted terrain about "50 yards short of [the] pasture."

The fuselage, elevator, and both wings sustained substantial damage.

The pilot reported that there were no preaccident mechanical malfunctions or failures with the airplane 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 failure to visually check the fuel level prior to takeoff and subsequent mismanagement of the available fuel supply during numerous glider tow flights.

## Findings

<b>Personnel issues</b>	Preflight inspection - Pilot
<b>Personnel issues</b>	Fuel planning - Pilot
<b>Aircraft</b>	Fuel - Inadequate inspection
<b>Aircraft</b>	Fuel - Fluid level
<b>Environmental issues</b>	Tree(s) - Contributed to outcome

## Factual Information

### History of Flight

<b>Prior to flight</b>	Aircraft inspection event
<b>Enroute-descent</b>	Fuel exhaustion (Defining event)
<b>Enroute-descent</b>	Other weather encounter
<b>Enroute-descent</b>	Collision with terr/obj (non-CFIT)

### Pilot Information

<b>Certificate:</b>	Commercial	<b>Age:</b>	55,Male
<b>Airplane Rating(s):</b>	Single-engine land	<b>Seat Occupied:</b>	Single
<b>Other Aircraft Rating(s):</b>	None	<b>Restraint Used:</b>	Unknown
<b>Instrument Rating(s):</b>	Airplane	<b>Second Pilot Present:</b>	No
<b>Instructor Rating(s):</b>	None	<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>	Class 2 With waivers/limitations	<b>Last FAA Medical Exam:</b>	September 15, 2016
<b>Occupational Pilot:</b>	Yes	<b>Last Flight Review or Equivalent:</b>	June 30, 2016
<b>Flight Time:</b>	(Estimated) 317.6 hours (Total, all aircraft), 7.6 hours (Total, this make and model), 255.8 hours (Pilot In Command, all aircraft), 18.7 hours (Last 90 days, all aircraft), 9.6 hours (Last 30 days, all aircraft), 2 hours (Last 24 hours, all aircraft)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	Piper	<b>Registration:</b>	N8578L
<b>Model/Series:</b>	PA25 260	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>	1969	<b>Amateur Built:</b>	
<b>Airworthiness Certificate:</b>	Normal	<b>Serial Number:</b>	25-5004
<b>Landing Gear Type:</b>	Tailwheel	<b>Seats:</b>	1
<b>Date/Type of Last Inspection:</b>	June 9, 2017 Annual	<b>Certified Max Gross Wt.:</b>	2900 lbs
<b>Time Since Last Inspection:</b>		<b>Engines:</b>	1 Reciprocating
<b>Airframe Total Time:</b>	13229.82 Hrs as of last inspection	<b>Engine Manufacturer:</b>	LYCOMING
<b>ELT:</b>	Not installed	<b>Engine Model/Series:</b>	O-540-G1A5
<b>Registered Owner:</b>		<b>Rated Power:</b>	260 Horsepower
<b>Operator:</b>		<b>Operating Certificate(s) Held:</b>	None

## Meteorological Information and Flight Plan

<b>Conditions at Accident Site:</b>	Visual (VMC)	<b>Condition of Light:</b>	Day
<b>Observation Facility, Elevation:</b>	K4S2,638 ft msl	<b>Distance from Accident Site:</b>	1 Nautical Miles
<b>Observation Time:</b>	23:35 Local	<b>Direction from Accident Site:</b>	140°
<b>Lowest Cloud Condition:</b>	Scattered / 11000 ft AGL	<b>Visibility</b>	10 miles
<b>Lowest Ceiling:</b>		<b>Visibility (RVR):</b>	
<b>Wind Speed/Gusts:</b>	7 knots / 15 knots	<b>Turbulence Type Forecast/Actual:</b>	/ None
<b>Wind Direction:</b>	280°	<b>Turbulence Severity Forecast/Actual:</b>	/ N/A
<b>Altimeter Setting:</b>	29.9 inches Hg	<b>Temperature/Dew Point:</b>	20°C / 8°C
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>	Hood River, OR (4S2 )	<b>Type of Flight Plan Filed:</b>	None
<b>Destination:</b>	Hood River, OR (4S2 )	<b>Type of Clearance:</b>	None
<b>Departure Time:</b>	16:30 Local	<b>Type of Airspace:</b>	Class G

## Airport Information

<b>Airport:</b>	KEN JERNSTEDT AIRFIELD 4S2	<b>Runway Surface Type:</b>	
<b>Airport Elevation:</b>	638 ft msl	<b>Runway Surface Condition:</b>	Dry
<b>Runway Used:</b>		<b>IFR Approach:</b>	None
<b>Runway Length/Width:</b>		<b>VFR Approach/Landing:</b>	Forced landing

## Wreckage and Impact Information

<b>Crew Injuries:</b>	1 Minor	<b>Aircraft Damage:</b>	Substantial
<b>Passenger Injuries:</b>		<b>Aircraft Fire:</b>	None
<b>Ground Injuries:</b>	N/A	<b>Aircraft Explosion:</b>	None
<b>Total Injuries:</b>	1 Minor	<b>Latitude, Longitude:</b>	45.665,-121.52111(est)

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Gerhardt, Adam
<b>Additional Participating Persons:</b>	Bruce Stephanson; FAA/ FSDO; Portland, OR
<b>Original Publish Date:</b>	September 10, 2018
<b>Note:</b>	This accident report documents the factual circumstances of this accident as described to the NTSB.
<b>Investigation Docket:</b>	<a href="https://data.nts.gov/Docket?ProjectID=95350">https://data.nts.gov/Docket?ProjectID=95350</a>

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