

# **Aviation Investigation Final Report**

Location:	Arlington, Washington	Accident Number:	SEA06CA051
Date & Time:	February 11, 2006, 16:00 Local	<b>Registration:</b>	N93788
Aircraft:	Ercoupe 415-C	Aircraft Damage:	Substantial
Defining Event:		Injuries:	2 None
Flight Conducted Under:	Part 91: General aviation - Personal		

# Analysis

According to the pilot, earlier in the afternoon, he flew the airplane from one airport to another, and he and his passenger had lunch at the destination airport. The pilot reported that he experienced "some difficulty restarting the plane" for the return trip. After "several tries," he was able to restart the engine. The pilot stated that he did not recall checking the engine oil pressure after restarting the engine. After takeoff on runway 34, the pilot "noticed that the oil pressure indicated 0." He reduced power and maneuvered the airplane for an emergency landing on runway 11. During the turn to final, the airplane "lost altitude," and the pilot attempted to stop the descent by adding power, but the left wing struck the ground. According to the pilot, about 6 months before the accident, "there were several incidents where the oil pressure failed to come up after a stop for lunch. After mechanics replace[d] the oil pressure relief valve, this had not been a problem." The reason for the loss of oil pressure on the accident flight was not determined.

#### **Probable Cause and Findings**

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's excessive descent rate and his delay in taking action to reduce the descent rate which resulted in an in-flight collision with the runway during an emergency landing. Contributing factors were the total loss of engine oil pressure and the pilot's failure to check the oil pressure gage after engine start which would have resulted in detection of the oil pressure problem prior to takeoff.

#### **Findings**

Occurrence #1: AIRFRAME/COMPONENT/SYSTEM FAILURE/MALFUNCTION Phase of Operation: TAKEOFF - INITIAL CLIMB

Findings

1. (F) FLUID,OIL - NO PRESSURE

2. (F) ENGINE INSTRUMENT - NOT USED - PILOT IN COMMAND

3. PRECAUTIONARY LANDING - INITIATED - PILOT IN COMMAND

Occurrence #2: IN FLIGHT COLLISION WITH TERRAIN/WATER Phase of Operation: EMERGENCY LANDING AFTER TAKEOFF

Findings

4. (C) DESCENT - EXCESSIVE - PILOT IN COMMAND

- 5. (C) REMEDIAL ACTION DELAYED PILOT IN COMMAND
- 6. TERRAIN CONDITION RUNWAY

#### **Factual Information**

On February 11, 2006, about 1600 Pacific standard time, an Ercoupe 415-C airplane, N93788, sustained substantial damage when it collided with the ground during an emergency landing after takeoff from the Arlington Municipal Airport, Arlington, Washington. The private pilot and the passenger were not injured. The airplane was registered to and operated by the pilot. Visual meteorological conditions prevailed for the 14 CFR Part 91 personal flight and no flight plan was filed. The flight was originating when the accident occurred and the intended destination was Everett, Washington.

According to the pilot, earlier in the afternoon, he flew the airplane from Everett to Arlington, and he and his passenger had lunch at the Arlington Airport. The pilot reported that he experienced "some difficulty restarting the plane" for the return trip to Everett. After "several tries," he was able to restart the engine. The pilot stated that he did not recall checking the engine oil pressure after restarting the engine. After takeoff on runway 34, the pilot "noticed that the oil pressure indicated 0." He reduced power and maneuvered the airplane for an emergency landing on runway 11. During the turn to final, the airplane "lost altitude," and the pilot attempted to stop the descent by adding power, but the left wing struck the ground. The left wing sustained structural damage, the nose landing gear separated, and the propeller was damaged.

According to the pilot, about 6 months before the accident, "there were several incidents where the oil pressure failed to come up after a stop for lunch. After mechanics replace[d] the oil pressure relief valve, this had not been a problem." The reason for the loss of oil pressure on the accident flight was not determined.

Phot information			
Certificate:	Private	Age:	57,Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	None	Second Pilot Present:	
Instructor Rating(s):		Toxicology Performed:	No
Medical Certification:	Class 3	Last FAA Medical Exam:	January 1, 2006
Occupational Pilot:		Last Flight Review or Equivalent:	
Flight Time:	850 hours (Total, all aircraft), 750 hours (Total, this make and model), 5 hours (Last 90 days, all aircraft), 1 hours (Last 30 days, all aircraft)		

#### **Pilot Information**

### Aircraft and Owner/Operator Information

Aircraft Make:	Ercoupe	Registration:	N93788
Model/Series:	415-C	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	1111
Landing Gear Type:	Tricycle	Seats:	
Date/Type of Last Inspection:		Certified Max Gross Wt.:	
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:		Engine Manufacturer:	Continental
ELT:		Engine Model/Series:	C85
Registered Owner:	On file	Rated Power:	
Operator:	On file	Operating Certificate(s) Held:	None

### Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
<b>Observation Facility, Elevation:</b>		Distance from Accident Site:	
Observation Time:		Direction from Accident Site:	
Lowest Cloud Condition:		Visibility	
Lowest Ceiling:		Visibility (RVR):	
Wind Speed/Gusts:	/	Turbulence Type Forecast/Actual:	/
Wind Direction:		Turbulence Severity Forecast/Actual:	/
Altimeter Setting:		Temperature/Dew Point:	
Precipitation and Obscuration:			
Departure Point:	Arlington, WA (AWO )	Type of Flight Plan Filed:	None
Destination:	Everett, WA (PAE )	Type of Clearance:	None
Departure Time:		Type of Airspace:	

### **Airport Information**

Airport:	Arlington Municipal Airport AWO	Runway Surface Type:	
Airport Elevation:		Runway Surface Condition:	
Runway Used:	11	IFR Approach:	None
Runway Length/Width:		VFR Approach/Landing:	

# Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	1 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	
Total Injuries:	2 None	Latitude, Longitude:	48.160556,-122.158889

#### **Administrative Information**

Investigator In Charge (IIC):	Struhsaker, Georgia
Additional Participating Persons:	
Original Publish Date:	May 30, 2006
Last Revision Date:	
Investigation Class:	<u>Class</u>
Note:	This accident report documents the factual circumstances of this accident as described to the NTSB.
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=63197

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.