



National Transportation Safety Board Aviation Accident Final Report

Location:	Battle Ground, WA	Accident Number:	SEA02LA117
Date & Time:	07/01/2002, 1915 PDT	Registration:	N37065
Aircraft:	Cessna 172 E	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 None
Flight Conducted Under:	Part 91: General Aviation - Personal		

Analysis

According to the pilot, the aircraft lost oil pressure shortly after takeoff. During the landing attempt at a nearby airport, the aircraft overran the end of the runway and collided with a tree. A post-accident engine run and wreckage examination revealed that the aircraft's engine developed an extensive engine oil leak during the accident flight, and during a post-accident engine run. According to the FAA Inspector, and the operator of the aircraft, the leak originated from the engine accessory area where the oil temperature bulb attaches to the oil screen assembly. The operator reported that the oil temperature bulb appeared to have been improperly installed during an oil change that occurred approximately 15 minutes prior to the accident flight. The pilot of the accident aircraft, a certified mechanic, supervised the oil change that was performed by a non-certified mechanic who was employed by the pilot.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: Improper maintenance procedures by maintenance personnel, which resulted in an engine oil leak while in flight. A factor was the pilot's misjudgment of distance during the precautionary landing which led to a runway overrun.

Findings

Occurrence #1: LOSS OF ENGINE POWER

Phase of Operation: CRUISE

Findings

1. (C) LUBRICATING SYSTEM - LEAK
2. (C) MAINTENANCE, SERVICE OF AIRCRAFT/EQUIPMENT - IMPROPER - OTHER MAINTENANCE PERSONNEL

Occurrence #2: FORCED LANDING

Phase of Operation: DESCENT - EMERGENCY

Occurrence #3: OVERRUN

Phase of Operation: EMERGENCY LANDING

Findings

3. (F) DISTANCE - MISJUDGED - PILOT IN COMMAND

Occurrence #4: ON GROUND/WATER COLLISION WITH OBJECT

Phase of Operation: EMERGENCY LANDING

Findings

4. OBJECT - TREE(S)

Factual Information

On July 1, 2002, approximately 1915 Pacific daylight time, a Cessna 172E, N37065, collided with a tree while on the landing rollout at Cedars North Airport (W58), Battle Ground, Washington. The commercial pilot, the sole occupant of the airplane, was not injured; however, the aircraft received substantial damage to the right wing and its associated lift strut. The airplane is owned by a private party and was being operated as a visual flight rules (VFR) personal/pleasure flight under the provisions of Title 14, CFR Part 91, when the accident occurred. The flight departed from Grove Airport, Camas, Washington, approximately 15 minutes prior to the accident. Visual meteorological conditions prevailed and no flight plan had been filed for the local flight.

According to the pilot, the aircraft lost oil pressure shortly after takeoff from Grove Airport. During his attempt to land at a nearby airport, the aircraft overran the end of the runway and collided with a tree.

A post-accident engine run and wreckage examination by personnel from the Federal Aviation Administration (FAA) Flight Standards District Office (FSDO), Hillsboro, Oregon, revealed that the aircraft's engine developed an extensive engine oil leak during the accident flight, and during the post-accident engine run. According to the FAA inspector, and the operator of the aircraft, the leak originated from the engine accessory area where the oil temperature bulb attaches to the oil screen assembly. The operator reported that the oil temperature bulb appeared to have been improperly installed during an oil change that occurred approximately 15 minutes prior to the accident flight. The pilot of the accident aircraft, a certified mechanic, supervised the oil change that was performed by a non-certified mechanic who was employed by the pilot.

Pilot Information

Certificate:	Commercial	Age:	31, Male
Airplane Rating(s):	Multi-engine Land; Single-engine Land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	Seatbelt, Shoulder harness
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 1 Valid Medical--no waivers/lim.	Last FAA Medical Exam:	01/03/2000
Occupational Pilot:		Last Flight Review or Equivalent:	12/18/2000
Flight Time:	500 hours (Total, all aircraft), 100 hours (Total, this make and model), 35 hours (Last 90 days, all aircraft), 12 hours (Last 30 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	Registration:	N37065
Model/Series:	172 E	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Normal	Serial Number:	17250906
Landing Gear Type:	Tricycle	Seats:	4
Date/Type of Last Inspection:	03/12/2002, Annual	Certified Max Gross Wt.:	2300 lbs
Time Since Last Inspection:	83 Hours	Engines:	1 Reciprocating
Airframe Total Time:	3276 Hours as of last inspection	Engine Manufacturer:	Continental
ELT:	Installed, activated, did not aid in locating accident	Engine Model/Series:	O-300-C
Registered Owner:	Gordon I. Buslack	Rated Power:	145 hp
Operator:	Scott C Devlin	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	KPDX, 30 ft msl	Distance from Accident Site:	11 Nautical Miles
Observation Time:	1855 PDT	Direction from Accident Site:	180°
Lowest Cloud Condition:	Few / 4000 ft agl	Visibility	10 Miles
Lowest Ceiling:	Broken / 7000 ft agl	Visibility (RVR):	
Wind Speed/Gusts:	8 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	310°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30.18 inches Hg	Temperature/Dew Point:	19° C / 12° C
Precipitation and Obscuration:			
Departure Point:	Camas, WA (1W1)	Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	1900 PDT	Type of Airspace:	Class G

Airport Information

Airport:	Cedars North Airpark (W58)	Runway Surface Type:	Grass/turf
Airport Elevation:	275 ft	Runway Surface Condition:	Dry
Runway Used:	08	IFR Approach:	None
Runway Length/Width:	1960 ft / 50 ft	VFR Approach/Landing:	Forced Landing; Straight-in

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	N/A	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 None	Latitude, Longitude:	45.873333, -122.515000

Administrative Information

Investigator In Charge (IIC):	Dennis J Hogenson	Report Date:	04/08/2003
Additional Participating Persons:	Lori A Brand; FAA-FSDO; Hillsboro, OR		
Publish Date:			
Investigation Docket:	NTSB accident and incident dockets serve as permanent archival information for the NTSB's investigations. Dockets released prior to June 1, 2009 are publicly available from the NTSB's Record Management Division at pubinq@ntsb.gov , or at 800-877-6799. Dockets released after this date are available at http://dms.ntsbt.gov/pubdms/ .		

The National Transportation Safety Board (NTSB), established in 1967, is an independent federal agency mandated by Congress through the Independent Safety Board Act of 1974 to investigate transportation accidents, determine the probable causes of the accidents, issue safety recommendations, study transportation safety issues, and evaluate the safety effectiveness of government agencies involved in transportation. The NTSB makes public its actions and decisions through accident reports, safety studies, special investigation reports, safety recommendations, and statistical reviews.

The Independent Safety Board Act, as codified at 49 U.S.C. Section 1154(b), precludes the admission into evidence or use of any part of an NTSB report related to an incident or accident in a civil action for damages resulting from a matter mentioned in the report. A factual report that may be admissible under 49 U.S.C. § 1154(b) is available [here](#).