Aviation Investigation Final Report

Location:	SAN LUIS OBISPO, California	**Accident Number:**	LAX99LA159
Date & Time:	April 20, 1999, 18:34 Local	**Registration:**	N7317X
Aircraft:	Cessna R182	**Aircraft Damage:**	Substantial
Defining Event:		**Injuries:**	1 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The pilot reported that he was about 6 miles northwest of the airport, returning to the airport for landing, the engine abruptly and completely ceased delivering power. The aircraft descended through a stratus cloud layer and broke out beneath a 900-foot ceiling. The pilot determined that the aircraft would not glide to the airport and made an emergency landing in an open field beside a highway. The right wing struck a sign during the landing. FAA inspectors reported that the engine fuel sump contained a clear fluid resembling water, and that the right-hand fuel tank sump drain had a threaded plug installed which precluded routine sampling of the tank for water.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The inadequate preflight inspection of the aircraft by the pilot-in-command which resulted in a loss of engine power due to water contamination in the fuel system. A factor in the accident was an improper maintenance alteration which disabled a fuel sump drain.

Findings

Occurrence #1: LOSS OF ENGINE POWER(TOTAL) - NONMECHANICAL
Phase of Operation: DESCENT - NORMAL

Findings
1. (C) FUEL SYSTEM - CONTAMINATION,WATER

2. FUEL SYSTEM,DRAIN - DISABLED
3. (F) MAINTENANCE - IMPROPER - UNKNOWN
4. (C) AIRCRAFT PREFLIGHT - 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
5. OBJECT - SIGN

Factual Information

On April 20, 1999, at 1834 hours Pacific daylight time, a Cessna R182, N7317X, was substantially damaged when the right wing collided with a sign during an off-airport emergency landing following loss of engine power near San Luis Obispo, California. The commercial pilot was not injured. Visual meteorological conditions prevailed and no flight plan was filed. The personal flight, operated by the owner under 14 CFR Part 91, departed from San Luis Obispo at 1800.

The pilot reported that he was returning for landing when the engine stopped abruptly about 6 miles northwest of the airport. The aircraft descended through a stratus cloud layer and broke out beneath a 900-foot ceiling. The pilot determined that the aircraft would not glide to the airport and made an emergency landing in an open field alongside a highway.

In his report to the Safety Board, the pilot reported there were no mechanical malfunctions with the aircraft, and that water was found in the carburetor at the emergency landing site. He reported that he drained both fuel tank sumps (left and right), as well as the firewall gascolator as part of his preflight inspection.

Inspectors from the San Jose Flight Standards District Office reported that the engine fuel sump contained a clear fluid resembling water, and that the right-hand fuel tank sump drain had a threaded plug installed which precluded routine sampling of the tank for water.

Pilot Information

Certificate:	Commercial; Flight instructor	**Age:**	77,Male
Airplane Rating(s):	Single-engine land; Single-engine sea; Multi-engine land	**Seat Occupied:**	Left
Other Aircraft Rating(s):	None	**Restraint Used:**	
Instrument Rating(s):	Airplane	**Second Pilot Present:**	No
Instructor Rating(s):	Airplane multi-engine; Airplane single-engine	**Toxicology Performed:**	No
Medical Certification:	Class 2 Valid Medical--w/ waivers/lim	**Last FAA Medical Exam:**	September 13, 1998
Occupational Pilot:	UNK	**Last Flight Review or Equivalent:**	
Flight Time:	2429 hours (Total, all aircraft), 508 hours (Total, this make and model), 2360 hours (Pilot In Command, all aircraft), 2 hours (Last 90 days, all aircraft), 1 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	**Registration:**	N7317X
Model/Series:	R182 R182	**Aircraft Category:**	Airplane
Year of Manufacture:		**Amateur Built:**	
Airworthiness Certificate:	Normal	**Serial Number:**	R18200073
Landing Gear Type:	Retractable - Tricycle	**Seats:**	4
Date/Type of Last Inspection:	February 3, 1998 Annual	**Certified Max Gross Wt.:**	3112 lbs
Time Since Last Inspection:	12 Hrs	**Engines:**	1 Reciprocating
Airframe Total Time:	1607 Hrs	**Engine Manufacturer:**	Lycoming
ELT:	Installed, activated, did not aid in locating accident	**Engine Model/Series:**	O-540-J3C5D
Registered Owner:	LYNN D. MAHIN	**Rated Power:**	235 Horsepower
Operator:		**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:**	Dusk
Observation Facility, Elevation:	SBP ,209 ft msl	**Distance from Accident Site:**	6 Nautical Miles
Observation Time:	18:56 Local	**Direction from Accident Site:**	135°
Lowest Cloud Condition:	Scattered / 1300 ft AGL	**Visibility**	15 miles
Lowest Ceiling:	Broken / 20000 ft AGL	**Visibility (RVR):**	
Wind Speed/Gusts:	19 knots / 27 knots	**Turbulence Type Forecast/Actual:**	/
Wind Direction:	310°	**Turbulence Severity Forecast/Actual:**	/
Altimeter Setting:	29 inches Hg	**Temperature/Dew Point:**	13°C / 9°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	, CA (SBP)	**Type of Flight Plan Filed:**	None
Destination:		**Type of Clearance:**	None
Departure Time:	18:00 Local	**Type of Airspace:**	Class G

Airport Information

Airport:		**Runway Surface Type:**	
Airport Elevation:		**Runway Surface Condition:**	
Runway Used:	0	**IFR Approach:**	
Runway Length/Width:		**VFR Approach/Landing:**	Forced landing

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:**	35.290298,-120.809814(est)

Administrative Information

Investigator In Charge (IIC):	Parker, Richard
Additional Participating Persons:	WILBERT J ROBINSON, JR.; SAN JOSE , CA
Original Publish Date:	June 23, 2000
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=46143