



National Transportation Safety Board Aviation Accident Data Summary

Location:	Green Valley, AZ	Accident Number:	SEA08LA001
Date & Time:	10/02/2007, 1030 MST	Registration:	N6291D
Aircraft:	Cessna 172N	Injuries:	2 None
Flight Conducted Under:	Part 91: General Aviation - Instructional		

Analysis

During cruise flight, the engine suddenly started to run rough and backfire periodically. The pilot attempted to troubleshoot the rough-running engine without success and decided to initiate a precautionary landing to a nearby road. During the landing roll, the airplane struck two road signs and a barbwire fence, substantially damaging the left and right wings. Examination of the engine revealed that the number three cylinder exhaust rocker arm was disconnected from the cylinder due to the rocker arm hold down nut backing off.

Probable Cause

The National Transportation Safety Board determines the probable cause(s) of this accident to be:
The loss of engine power due to the separation of the number three cylinder exhaust rocker arm.

Findings

Occurrence #1: LOSS OF ENGINE POWER(PARTIAL) - MECH FAILURE/MALF
Phase of Operation: CRUISE - NORMAL

Findings

1. (C) ENGINE ASSEMBLY,ROCKER ARM/TAPPET - SEPARATION

Occurrence #2: FORCED LANDING
Phase of Operation: EMERGENCY DESCENT/LANDING

Occurrence #3: ON GROUND/WATER COLLISION WITH OBJECT
Phase of Operation: EMERGENCY LANDING

Findings

2. (F) OBJECT - SIGN
3. (F) OBJECT - FENCE

Pilot Information

Certificate:	Private	Age:	50
Airplane Rating(s):	Single-engine Land	Instrument Rating(s):	None
Other Aircraft Rating(s):	None	Instructor Rating(s):	None
Flight Time:	300 hours (Total, all aircraft), 250 hours (Total, this make and model), 250 hours (Pilot In Command, all aircraft), 5 hours (Last 90 days, all aircraft), 5 hours (Last 30 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	Registration:	N6291D
Model/Series:	172N	Engines:	1 Reciprocating
Operator:	Georg Domogala	Engine Manufacturer:	Lycoming
Operating Certificate(s) Held:	None	Engine Model/Series:	O-320-H2AD
Flight Conducted Under:	Part 91: General Aviation - Instructional		

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:		Weather Information Source:	Pilot
Lowest Ceiling:	None	Wind Speed/Gusts, Direction:	Light and Variable / , Variable
Temperature:	25° C	Visibility	10 Miles
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	MARANA, AZ (AVQ)	Destination:	

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	1 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Latitude, Longitude:	31.853333, -111.000556		

Administrative Information

Investigator In Charge (IIC):	Dennis J Hogenson	Adopted Date:	03/31/2008
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 pubin@ntsb.gov , or at 800-877-6799. Dockets released after this date are available at http://dms.nts.gov/pubdms/ .		

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