



National Transportation Safety Board Aviation Accident Final Report

Location:	DOS PALOS, CA	Accident Number:	LAX00LA062
Date & Time:	01/02/2000, 1430 PST	Registration:	N7249T
Aircraft:	Cessna 172A	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 Minor

Flight Conducted Under: Part 91: General Aviation - Instructional

Analysis

While en route to the practice area, the student pilot performed several practice turns. She noted a loss of altitude, added throttle to regain altitude, but did not receive corresponding power indication. She checked the fuel selector to make sure it was in the on position, and then checked the engine gauges. No discrepancies were noted. Carburetor heat was applied with no response and the rpm's continued to drop. She crosschecked the engine instruments, and reapplied carburetor heat with no change. With the rpm's continuing to drop, she made an emergency landing in a plowed dirt field. The engine was inspected, and it was noted that the retaining nut that attaches the serrated throttle lever to the serrated throttle shaft of the carburetor was loose, and the cotter pin was missing. The serrated portion of the throttle lever was unable to properly engage with the serrated stop of the throttle shaft. The carburetor had been replaced during the annual inspection on June 6, 1999, to comply with Airworthiness Directives. No further discrepancies were noted.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: A partial loss of engine power due to the failure of maintenance personnel to properly install and safety the throttle arm to the carburetor throttle shaft.

Findings

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

Findings

1. FUEL SYSTEM,CARBURETOR
 2. (C) THROTTLE/POWER LEVER,LINKAGE - LOOSE PART/BOLT/NUT/CLAMP/ETC
 3. (C) MAINTENANCE,INSTALLATION - IMPROPER - OTHER MAINTENANCE PERSONNEL
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Occurrence #2: FORCED LANDING
Phase of Operation: EMERGENCY DESCENT/LANDING

Occurrence #3: NOSE OVER
Phase of Operation: LANDING - ROLL

Findings

4. TERRAIN CONDITION - ROUGH/UNEVEN
5. LANDING GEAR,NOSE GEAR - SHEARED

Factual Information

On January 2, 2000, at 1430 hours Pacific standard time, a Cessna 172A, N7249T, experienced a partial loss of engine power and came to rest inverted after making an emergency landing in an open dirt field near Dos Palos, California. The airplane, owned and operated by the student pilot under 14 CFR Part 91, sustained substantial damage. The pilot received minor injuries. Visual meteorological conditions existed for the instructional flight that had departed the Merced, California, airport at 1400. No flight plan was filed.

In an interview with a Federal Aviation Administration (FAA) inspector, the student pilot reported that she had refueled the airplane several weeks prior to the accident flight. The airplane was refueled with approximately 30 gallons, and she had not flown it since it had been refueled.

The pilot stated that during the preflight she verified that she had "in excess of 15 gallons" of fuel in each wing by utilizing a graduated fuel gage. She then checked for fuel contamination by taking a sample from the port of each wing with no discrepancies noted. She reported that there were no problems encountered during the run-up or the departure from Merced.

While en route to the practice area, she performed several practice turns. About 30 minutes into the flight, she noted a loss of altitude and added throttle to regain altitude, but did not receive a corresponding power indication. She noted the fuel selector was in the both position and attempted to troubleshoot the problem by switching to the left and then right fuel tank positions, and applying carburetor heat. She stated that there was no change and the rpm's continued to drop. The engine instruments were crosschecked and she reapplied carburetor heat with no change. The pilot reported that the engine was not running rough or sputtering, it was just not producing enough power to sustain flight. During the landing rollout, the nose gear dug into the plowed dirt field, collapsed, and the airplane nosed over and came to rest inverted.

The student pilot indicated that she had purchased the airplane in June 1999, without the logbooks. The Airframe and Powerplant (A & P) mechanic who performed the annual inspection of the airplane sent a letter to the former owner requesting the logbooks. The former owner responded by indicating that the logbooks had been accidentally burned with the trash. In the last entry for the annual performed on June 6, 1999, the A & P mechanic indicates that the carburetor was replaced to comply with Airworthiness Directives 72-06-05, 93-19-04 and 98-01-06.

An engine inspection was conducted at Plain Parts in Pleasant Grove, California, on February 9, 2000. It was noted that the retaining nut that holds in place the serrated throttle lever to the serrated stop of the throttle shaft of the carburetor did not have a cotter pin. The retaining nut was found loose on the shaft, allowing the serrated portion of the throttle lever to not engage properly with the serrated stop of the throttle shaft.

Pilot Information

Certificate:	Student	Age:	47, Female
Airplane Rating(s):	None	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	Seatbelt
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 3 Valid Medical--w/ waivers/lim.	Last FAA Medical Exam:	02/26/1998
Occupational Pilot:		Last Flight Review or Equivalent:	
Flight Time:	64 hours (Total, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	Registration:	N7249T
Model/Series:	172A 172A	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Normal	Serial Number:	46849
Landing Gear Type:	Tricycle	Seats:	4
Date/Type of Last Inspection:	06/09/1999, Annual	Certified Max Gross Wt.:	2350 lbs
Time Since Last Inspection:	10 Hours	Engines:	1 Reciprocating
Airframe Total Time:	3177 Hours	Engine Manufacturer:	Continental
ELT:	Installed, not activated	Engine Model/Series:	O-300
Registered Owner:	LANA L. BALATTI	Rated Power:	145 hp
Operator:	LANA L. BALATTI	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	MCE, 156 ft msl	Distance from Accident Site:	21 Nautical Miles
Observation Time:	1453 PST	Direction from Accident Site:	360°
Lowest Cloud Condition:	Clear / 0 ft agl	Visibility	10 Miles
Lowest Ceiling:	None / 0 ft agl	Visibility (RVR):	0 ft
Wind Speed/Gusts:	11 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	320°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	55° C / 30° C
Precipitation and Obscuration:			
Departure Point:	MERCED, CA (MCE)	Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	1400 PST	Type of Airspace:	Class G

Wreckage and Impact Information

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

Administrative Information

Investigator In Charge (IIC):	TEALEYE C CORNEJO	Report Date:	12/14/2001
Additional Participating Persons:	NORM WILKINS; FRESNO, CA		
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 pubinquiry@ntsb.gov , or at 800-877-6799. Dockets released after this date are available at http://dms.nts.gov/pubdms/ .		

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