Aviation Investigation Final Report

Location:	Santa Rosa, New Mexico	**Accident Number:**	DEN05CA020
Date & Time:	November 5, 2004, 14:30 Local	**Registration:**	N2695W
Aircraft:	Mooney M20E	**Aircraft Damage:**	Substantial
Defining Event:		**Injuries:**	1 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

While preparing to depart, the pilot stated that the airplane's "battery seemed weak" and noted that the ammeter was not charging or discharging. The pilot had the battery charged for 1/2 hour and elected to fly to another airport to have a mechanic examine the airplane. While en route, he noticed "the engine was running rough." The pilot checked both magnetos and noted the left magneto selection resulted in a rough engine. The fuel pressure was also low; however, the pilot felt he would be okay until arriving at his destination. The pilot stated that both magnetos began to run rough. He was unable to maintain altitude and landed on a highway. While maneuvering the airplane to avoid oncoming traffic, the airplane struck a road sign causing substantial damage. Examination of the engine revealed that the P-lead had broken off of the right magneto. The P-lead had been rubbing against a bracket aft of the P-lead, prior to its failure. FAA inspector who examined the airplane stated that an annual inspection should have discovered this situation.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: Inadequate maintenance inspection which failed to detect the separation of the right P-lead, resulting in a loss of engine power.

Findings

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

Findings
1. (F) IGNITION SYSTEM,MAGNETO GROUNDING LEAD (P-LEAD) - SEPARATION
2. (F) MAINTENANCE,ANNUAL INSPECTION - INADEQUATE - OTHER MAINTENANCE PERSONNEL
3. (F) IGNITION SYSTEM,MAGNETO - FAILURE

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

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

Findings
4. (F) OBJECT - SIGN

Factual Information

On November 5, 2004, at approximately 1430 mountain standard time, a Mooney, N2695W, piloted by a commercial pilot, was substantially damaged when it impacted a road sign during a forced landing on Highway 54, north of Santa Rosa, New Mexico. Visual meteorological conditions prevailed at the time of the accident. The personal flight was being conducted under the provisions of Title 14 CFR Part 91 without a flight plan. The pilot was not injured. The cross-country flight originated at Miami, Oklahoma, and was en route to Tucumcari, New Mexico.

According to the accident report submitted by the pilot, he had purchased the accident airplane in August of 2003. The pilot requested an inspection to be conducted by Broken Arrow Aviation in Miami, Oklahoma, to ensure there was "no corrosion." The annual inspection was performed on October 3, 2004. The pilot left Miami on the date of the accident. During his flight, the pilot attempted to land at Amarillo, Texas; however, he was unable to establish radio contact with them and elected to continue on to Tucumcari, New Mexico. When the pilot arrived in Tucumcari, he was unable to extend his landing gear and had to "crank the gear down."

The airplane was refueled and while preparing to depart, the pilot stated that the airplane's "battery seemed weak" and noted that the ammeter was not charging or discharging. The pilot had the battery charged for 1/2 hour and elected to fly to Double Eagle Airport, Albuquerque, New Mexico, where he had arranged to have a mechanic examine the airplane.

The pilot departed Tucumcari and upon passing Santa Rosa, he noticed "the engine was running rough." The pilot checked both magnetos and noted the left magneto selection resulted in a rough engine. The fuel pressure was also low; however, the pilot felt he would be okay until arriving in Albuquerque. The pilot stated that both magnetos began to run rough and he attempted to return to Santa Rosa. He was unable to maintain altitude and landed on Highway 54. While maneuvering the airplane to avoid oncoming traffic, the airplane struck a road sign. The outboard 24 inches of the leading edge of the right wing was crushed aft. The four outer ribs of the right wing were fractured and bent.

According to the FAA inspector who traveled to the scene, examination of the engine revealed that the P-lead had broken off of the right magneto. The P-lead had been rubbing against a bracket aft of the P-lead, prior to its failure. The FAA inspector stated further that an annual inspection should have discovered this situation.

Pilot Information

Certificate:	Commercial	**Age:**	77,Male
Airplane Rating(s):	Single-engine land	**Seat Occupied:**	Left
Other Aircraft Rating(s):	Glider	**Restraint Used:**	
Instrument Rating(s):	Airplane	**Second Pilot Present:**	No
Instructor Rating(s):	None	**Toxicology Performed:**	No
Medical Certification:	Class 2 Valid Medical--no waivers/lim.	**Last FAA Medical Exam:**	November 1, 2003
Occupational Pilot:	No	**Last Flight Review or Equivalent:**	November 4, 2004
Flight Time:	10500 hours (Total, all aircraft), 50 hours (Total, this make and model), 20 hours (Last 90 days, all aircraft), 10 hours (Last 30 days, all aircraft), 6 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Mooney	**Registration:**	N2695W
Model/Series:	M20E	**Aircraft Category:**	Airplane
Year of Manufacture:		**Amateur Built:**	
Airworthiness Certificate:	Normal	**Serial Number:**	1010
Landing Gear Type:	Retractable - Tricycle	**Seats:**	4
Date/Type of Last Inspection:	October 1, 2004 Annual	**Certified Max Gross Wt.:**	
Time Since Last Inspection:	6 Hrs	**Engines:**	1 Reciprocating
Airframe Total Time:		**Engine Manufacturer:**	Lycoming
ELT:	Installed, not activated	**Engine Model/Series:**	IO-360-A1A
Registered Owner:	On file	**Rated Power:**	200 Horsepower
Operator:	On file	**Operating Certificate(s) Held:**	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	**Condition of Light:**	Dawn
Observation Facility, Elevation:	LVS,6877 ft msl	**Distance from Accident Site:**	50 Nautical Miles
Observation Time:	13:53 Local	**Direction from Accident Site:**	330°
Lowest Cloud Condition:	Clear	**Visibility**	10 miles
Lowest Ceiling:	None	**Visibility (RVR):**	
Wind Speed/Gusts:	14 knots /	**Turbulence Type Forecast/Actual:**	/
Wind Direction:	220°	**Turbulence Severity Forecast/Actual:**	/
Altimeter Setting:	30.31 inches Hg	**Temperature/Dew Point:**	21°C / -17°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	MIAMI, OK (MIO)	**Type of Flight Plan Filed:**	None
Destination:	TUCUMCARI, NM (TCC)	**Type of Clearance:**	None
Departure Time:	12:30 Local	**Type of Airspace:**	Class G

Airport Information

Airport:	Off Airport NONE	**Runway Surface Type:**	Asphalt
Airport Elevation:		**Runway Surface Condition:**	Dry
Runway Used:		**IFR Approach:**	None
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:**	34.933612,-104.643333

Administrative Information

Investigator In Charge (IIC):	Bowling, David
Additional Participating Persons:	Aaron Robinson; FAA Flight Standards Field Office; Albuquerque, NM
Original Publish Date:	January 24, 2005
Last Revision Date:	
Investigation Class:	Class
Note:	This accident report documents the factual circumstances of this accident as described to the NTSB.
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=60533