



# National Transportation Safety Board Aviation Accident Final Report

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<b>Location:</b>	Manhattan, KS	<b>Accident Number:</b>	DEN06LA045
<b>Date &amp; Time:</b>	03/01/2006, 1140 CST	<b>Registration:</b>	N7824T
<b>Aircraft:</b>	Piper PA-32RT-300T	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>		<b>Injuries:</b>	2 None
<b>Flight Conducted Under:</b>	Part 91: General Aviation - Business		

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## Analysis

The pilot said "the engine began to surge in power slightly as the airplane was rotated for liftoff from runway 03. During climbout, he notified the tower of a "possible engine problem," and the engine continued surging. As the pilot executed a slow left turn towards runway 13, the engine started losing power. He managed to land on runway 13 near the intersection with runway 03-21. The airplane was not aligned with the runway centerline, and went off the side of the runway. The left wing struck an elevated runway marker and taxiway lights. Both wing spars were damaged and the left wing was twisted down. An FAA airworthiness inspector examined the airplane and engine and reported finding an exposed left magneto "P" lead touching the connector shell. This could "cause an intermittent grounding of the left magneto," and result in the "fuel control[er] hunting to compensate [and] producing an engine power surge."

## Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: A loss of engine power due to the intermittent grounding of the left magneto "P" lead, causing the fuel controller to search and the engine to surge then lose power, and the pilot's failure to attain proper runway alignment. Contributing factors were the runway sign and taxiway lights.

## Findings

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Occurrence #1: LOSS OF ENGINE POWER  
Phase of Operation: TAKEOFF - INITIAL CLIMB

### Findings

1. (C) IGNITION SYSTEM,MAGNETO GROUNDING LEAD (P-LEAD) - SHORTED
2. FUEL INJECTION CONTROL/SYSTEM - SURGE

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

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

### Findings

3. (C) PROPER ALIGNMENT - NOT ATTAINED - PILOT IN COMMAND
4. (F) OBJECT - SIGN
5. (F) OBJECT - TAXIWAY LIGHT

## Factual Information

On March 1, 2006, approximately 1140 central standard time, a Piper PA-32RT-300T, N7824T, piloted by a private pilot, was substantially damaged when it struck several runway lights and a taxiway sign during a forced landing at the Manhattan Regional Airport (MHK), Manhattan, Kansas. Visual meteorological conditions prevailed at the time of the accident. The business flight was being conducted under the provisions of Title 14 CFR Part 91, and a visual flight rules (VFR) flight plan had been filed. The pilot and his passenger were not injured. The cross-country flight was originating at the time of the accident and was en route to Olathe, Kansas.

According to the pilot's accident report, "the engine began to surge in power slightly" as the airplane was rotated for liftoff from runway 03. During climbout, the pilot notified the tower of a "possible engine problem," and the engine continued surging. As the pilot executed a slow left turn towards runway 13, the engine started losing power. He managed to land on runway 13 near the intersection with runway 03-21. The airplane was not aligned with the runway centerline, and went off the side of the runway. The left wing struck an elevated runway marker and taxiway lights. Both wing spars were damaged and the left wing was twisted down.

On March 8, an FAA airworthiness inspector examined the airplane and engine. In an e-mail dated March 17, he reported finding an exposed left magneto "P" lead touching the connector shell, which could "cause an intermittent grounding of the left magneto," resulting in the "fuel control[er] hunting to compensate [and] producing an engine power surge."

## Pilot Information

<b>Certificate:</b>	Private	<b>Age:</b>	56, Male
<b>Airplane Rating(s):</b>	Single-engine Land	<b>Seat Occupied:</b>	Left
<b>Other Aircraft Rating(s):</b>	None	<b>Restraint Used:</b>	Seatbelt, Shoulder harness
<b>Instrument Rating(s):</b>	Airplane	<b>Second Pilot Present:</b>	No
<b>Instructor Rating(s):</b>	None	<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>	Class 3 With Waivers/Limitations	<b>Last Medical Exam:</b>	09/01/2005
<b>Occupational Pilot:</b>		<b>Last Flight Review or Equivalent:</b>	08/01/2004
<b>Flight Time:</b>	1810 hours (Total, all aircraft), 950 hours (Total, this make and model), 1670 hours (Pilot In Command, all aircraft), 13 hours (Last 90 days, all aircraft), 10 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

## Aircraft and Owner/Operator Information

Aircraft Manufacturer:	Piper	Registration:	N7824T
Model/Series:	PA-32RT-300T	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Normal	Serial Number:	32R-7887032
Landing Gear Type:	Retractable - Tricycle	Seats:	6
Date/Type of Last Inspection:	01/01/2006, Annual	Certified Max Gross Wt.:	3600 lbs
Time Since Last Inspection:	11 Hours	Engines:	1 Reciprocating
Airframe Total Time:	2800 Hours	Engine Manufacturer:	Lycoming
ELT:	Installed, not activated	Engine Model/Series:	TIO-540-S1AD
Registered Owner:	Mark S. Holcomb	Rated Power:	300 hp
Operator:	Mark S. Holcomb	Air Carrier Operating Certificate:	None

## Meteorological Information and Flight Plan

Observation Facility, Elevation:	MHK, 1056 ft msl	Observation Time:	1152 CST
Distance from Accident Site:		Condition of Light:	Day
Direction from Accident Site:		Conditions at Accident Site:	Visual Conditions
Lowest Cloud Condition:	Clear	Temperature/Dew Point:	22° C / 7° C
Lowest Ceiling:	None	Visibility	10 Miles
Wind Speed/Gusts, Direction:	11 knots, 360°	Visibility (RVR):	
Altimeter Setting:	29.62 inches Hg	Visibility (RVV):	
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Manhattan, KS (MHK)	Type of Flight Plan Filed:	VFR
Destination:	Olathe, KS (OJC)	Type of Clearance:	VFR
Departure Time:	1140 CST	Type of Airspace:	

## Airport Information

Airport:	Manhattan Regional (MHK)	Runway Surface Type:	Asphalt
Airport Elevation:	1056 ft	Runway Surface Condition:	Dry
Runway Used:	13	IFR Approach:	None
Runway Length/Width:	3801 ft / 100 ft	VFR Approach/Landing:	Forced Landing

## 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
Total Injuries:	2 None		

## Administrative Information

**Investigator In Charge (IIC):** Arnold W Scott **Adopted Date:** 08/29/2006

**Additional Participating Persons:** Bobby Warren; FAA Flight Standards District Office; Wichita, KS

**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](mailto:pubinq@ntsb.gov), or at 800-877-6799. Dockets released after this date are available at <http://dms.nts.gov/pubdms/>.

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