



# Aviation Investigation Final Report

<b>Location:</b>	MAHOPAC, New York	<b>Accident Number:</b>	NYC91LA104
<b>Date &amp; Time:</b>	April 7, 1991, 12:48 Local	<b>Registration:</b>	N23179
<b>Aircraft:</b>	PIPER J-4A	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>		<b>Injuries:</b>	2 Minor
<b>Flight Conducted Under:</b>	Part 91: General aviation - Personal		

## Analysis

DURING AN INITIATED GO-AROUND AT MAHOPAC AIRPORT, MAHOPAC, NEW YORK, THE ENGINE EXPERIENCED PARTIAL POWER LOSS. FULL POWER COULD NOT BE DEVELOPED RESULTING IN DETERIORATED CLIMB CAPABILITIES. THE AIRPLANE COULD NOT CLEAR RISING TERRAIN AND HIT TREETOPS, EVENTUALLY CONTACTING THE GROUND. POST ACCIDENT EXAMINATION OF THE ENGINE REVEALED THAT THE LEFT MAGNETO WAS EXCESSIVELY WORN AND DETERIORATED CAUSING THE SPARKS TO BE ERRATICALLY DISPLACED TO THE SPARK PLUGS.

## Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: THE ERRATIC PERFORMANCE OF THE LEFT MAGNETO RESULTING IN INADEQUATE CLIMB CAPABILITIES AND IN FLIGHT COLLISION WITH TERRAIN.

## Findings

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

### Findings

1. IGNITION SYSTEM,IGNITION COIL - DETERIORATED
2. MAINTENANCE - INADEQUATE - PILOT IN COMMAND
3. IGNITION SYSTEM,DISTRIBUTOR - WORN
4. IGNITION SYSTEM,MAGNETO - ERRATIC

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Occurrence #2: IN FLIGHT COLLISION WITH OBJECT  
Phase of Operation: MANEUVERING

Findings

- 5. OBJECT - TREE(S)
- 6. TERRAIN CONDITION - RISING
- 7. TERRAIN CONDITION - GROUND

## Factual Information

### Pilot Information

<b>Certificate:</b>	Private	<b>Age:</b>	49, Male
<b>Airplane Rating(s):</b>	Single-engine land	<b>Seat Occupied:</b>	Unknown
<b>Other Aircraft Rating(s):</b>	Glider	<b>Restraint Used:</b>	
<b>Instrument Rating(s):</b>	None	<b>Second Pilot Present:</b>	Yes
<b>Instructor Rating(s):</b>	None	<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>	Class 3 Valid Medical--w/ waivers/lim	<b>Last FAA Medical Exam:</b>	December 28, 1990
<b>Occupational Pilot:</b>	UNK	<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>	249 hours (Total, all aircraft), 20 hours (Total, this make and model), 150 hours (Pilot In Command, all aircraft), 3 hours (Last 90 days, all aircraft), 1 hours (Last 30 days, all aircraft)		

### Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	PIPER	<b>Registration:</b>	N23179
<b>Model/Series:</b>	J-4A J-4A	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>		<b>Amateur Built:</b>	
<b>Airworthiness Certificate:</b>	Normal	<b>Serial Number:</b>	4-546
<b>Landing Gear Type:</b>	Tailwheel	<b>Seats:</b>	2
<b>Date/Type of Last Inspection:</b>	October 1, 1990 Annual	<b>Certified Max Gross Wt.:</b>	1301 lbs
<b>Time Since Last Inspection:</b>	25 Hrs	<b>Engines:</b>	1 Reciprocating
<b>Airframe Total Time:</b>	1853 Hrs	<b>Engine Manufacturer:</b>	CONTINENTAL
<b>ELT:</b>	Installed, not activated	<b>Engine Model/Series:</b>	A-65
<b>Registered Owner:</b>	MICHAEL DEMAIO	<b>Rated Power:</b>	65 Horsepower
<b>Operator:</b>	MICHAEL DEMAIO	<b>Operating Certificate(s) Held:</b>	None
<b>Operator Does Business As:</b>		<b>Operator Designator Code:</b>	

## Meteorological Information and Flight Plan

<b>Conditions at Accident Site:</b>	Visual (VMC)	<b>Condition of Light:</b>	Day
<b>Observation Facility, Elevation:</b>		<b>Distance from Accident Site:</b>	
<b>Observation Time:</b>		<b>Direction from Accident Site:</b>	
<b>Lowest Cloud Condition:</b>	Clear	<b>Visibility</b>	15 miles
<b>Lowest Ceiling:</b>	None	<b>Visibility (RVR):</b>	
<b>Wind Speed/Gusts:</b>	/	<b>Turbulence Type Forecast/Actual:</b>	/
<b>Wind Direction:</b>	250°	<b>Turbulence Severity Forecast/Actual:</b>	/
<b>Altimeter Setting:</b>		<b>Temperature/Dew Point:</b>	29°C / 9°C
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>	DANBURY , CT (DXR )	<b>Type of Flight Plan Filed:</b>	None
<b>Destination:</b>		<b>Type of Clearance:</b>	None
<b>Departure Time:</b>	16:00 Local	<b>Type of Airspace:</b>	Class G

## Airport Information

<b>Airport:</b>		<b>Runway Surface Type:</b>	
<b>Airport Elevation:</b>		<b>Runway Surface Condition:</b>	
<b>Runway Used:</b>	0	<b>IFR Approach:</b>	None
<b>Runway Length/Width:</b>		<b>VFR Approach/Landing:</b>	Go around

## Wreckage and Impact Information

<b>Crew Injuries:</b>	1 Minor	<b>Aircraft Damage:</b>	Substantial
<b>Passenger Injuries:</b>	1 Minor	<b>Aircraft Fire:</b>	None
<b>Ground Injuries:</b>	N/A	<b>Aircraft Explosion:</b>	None
<b>Total Injuries:</b>	2 Minor	<b>Latitude, Longitude:</b>	41.359058,-73.739799(est)

## Administrative Information

**Investigator In Charge (IIC):** Twine, Chauncey

**Additional Participating Persons:**  
M. MCCLAIN; TETERBORO , NJ  
D. DILEO; TETERBORO , NJ  
W. FORMAN; TETERBORO , NJ

**Original Publish Date:** May 27, 1993

**Last Revision Date:**

**Investigation Class:** [Class](#)

**Note:**

**Investigation Docket:** <https://data.nts.gov/Docket?ProjectID=36901>

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