



# Aviation Investigation Final Report

<b>Location:</b>	CAPE CORAL, Florida	<b>Accident Number:</b>	MIA91LA010
<b>Date &amp; Time:</b>	October 14, 1990, 17:56 Local	<b>Registration:</b>	N5825L
<b>Aircraft:</b>	AMERICAN AA-5	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>		<b>Injuries:</b>	2 None
<b>Flight Conducted Under:</b>	Part 91: General aviation - Personal		

## Analysis

THE PILOT DEPARTED PAGE FIELD, FORT MYERS, FLORIDA, ON A PERSONAL FLIGHT. VFR CONDITIONS PREVAILED AT THE TIME. NO FLIGHT PLAN WAS FILED. WHILE IN CRUISE FLIGHT, THE AIRPLANE EXPERIENCED A PARTIAL LOSS OF ENGINE POWER. THE PILOT MADE AN EMERGENCY LANDING TO AN OPEN FIELD. DURING LANDING ROLL, THE AIRPLANE EXPERIENCED AN ON GROUND COLLISION WITH A HOUSE. THE AIRPLANE SUSTAINED SUBSTANTIAL DAMAGE. THE PILOT AND ONE PASSENGER WERE NOT INJURED. TEAR DOWN ANALYSIS OF THE ENGINE REVEALED THE EXHAUST VALVE ON THE NUMBER THREE ENGINE CYLINDER HAD FAILED AT THE EXHAUST STEM FOR UNDETERMINED REASONS.

## 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, CAUSED BY MECHANICAL FAILURE OF THE NUMBER 3 CYLINDER ENGINE EXHAUST VALVE, FOR AN UNDETERMINED REASON.

### Findings

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

#### Findings

1. (C) ENGINE ASSEMBLY, VALVE, EXHAUST - FAILURE, TOTAL

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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: LANDING - ROLL

Findings  
2. OBJECT - RESIDENCE

## Factual Information

### Pilot Information

<b>Certificate:</b>	Commercial; Private	<b>Age:</b>	36, Male
<b>Airplane Rating(s):</b>	Single-engine land	<b>Seat Occupied:</b>	Left
<b>Other Aircraft Rating(s):</b>	Glider	<b>Restraint Used:</b>	
<b>Instrument Rating(s):</b>	None	<b>Second Pilot Present:</b>	No
<b>Instructor Rating(s):</b>	None	<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>	Class 3 Valid Medical--no waivers/lim.	<b>Last FAA Medical Exam:</b>	June 1, 1989
<b>Occupational Pilot:</b>	No	<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>	286 hours (Total, all aircraft), 38 hours (Total, this make and model), 229 hours (Pilot In Command, all aircraft), 22 hours (Last 90 days, all aircraft), 7 hours (Last 30 days, all aircraft)		

### Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	AMERICAN	<b>Registration:</b>	N5825L
<b>Model/Series:</b>	AA-5 AA-5	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>		<b>Amateur Built:</b>	
<b>Airworthiness Certificate:</b>	Normal	<b>Serial Number:</b>	0025
<b>Landing Gear Type:</b>	Tricycle	<b>Seats:</b>	4
<b>Date/Type of Last Inspection:</b>	September 8, 1990 Annual	<b>Certified Max Gross Wt.:</b>	2200 lbs
<b>Time Since Last Inspection:</b>	8 Hrs	<b>Engines:</b>	1 Reciprocating
<b>Airframe Total Time:</b>	1689 Hrs	<b>Engine Manufacturer:</b>	LYCOMING
<b>ELT:</b>	Installed, activated, did not aid in locating accident	<b>Engine Model/Series:</b>	O-320-E2G
<b>Registered Owner:</b>	ROBERT A. STONER	<b>Rated Power:</b>	150 Horsepower
<b>Operator:</b>		<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>	Not reported
<b>Observation Facility, Elevation:</b>	FMY ,18 ft msl	<b>Distance from Accident Site:</b>	10 Nautical Miles
<b>Observation Time:</b>	18:03 Local	<b>Direction from Accident Site:</b>	270°
<b>Lowest Cloud Condition:</b>	Scattered / 5500 ft AGL	<b>Visibility</b>	20 miles
<b>Lowest Ceiling:</b>	None	<b>Visibility (RVR):</b>	
<b>Wind Speed/Gusts:</b>	4 knots /	<b>Turbulence Type Forecast/Actual:</b>	/
<b>Wind Direction:</b>	250°	<b>Turbulence Severity Forecast/Actual:</b>	/
<b>Altimeter Setting:</b>	29 inches Hg	<b>Temperature/Dew Point:</b>	31°C / 18°C
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>	FORT MYERS , FL (FMY )	<b>Type of Flight Plan Filed:</b>	None
<b>Destination:</b>		<b>Type of Clearance:</b>	None
<b>Departure Time:</b>	17:40 Local	<b>Type of Airspace:</b>	Class G

## Airport Information

<b>Airport:</b>		<b>Runway Surface Type:</b>	
<b>Airport Elevation:</b>	0 ft msl	<b>Runway Surface Condition:</b>	
<b>Runway Used:</b>	0	<b>IFR Approach:</b>	None
<b>Runway Length/Width:</b>	0 ft / 0 ft	<b>VFR Approach/Landing:</b>	Forced landing

## Wreckage and Impact Information

<b>Crew Injuries:</b>	1 None	<b>Aircraft Damage:</b>	Substantial
<b>Passenger Injuries:</b>	1 None	<b>Aircraft Fire:</b>	None
<b>Ground Injuries:</b>	N/A	<b>Aircraft Explosion:</b>	None
<b>Total Injuries:</b>	2 None	<b>Latitude, Longitude:</b>	26.550481,-82.020271(est)

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Smith, Carrol
<b>Additional Participating Persons:</b>	PETER J STRUNK; ORLANDO , FL
<b>Original Publish Date:</b>	September 15, 1992
<b>Last Revision Date:</b>	
<b>Investigation Class:</b>	<a href="#">Class</a>
<b>Note:</b>	
<b>Investigation Docket:</b>	<a href="https://data.nts.gov/Docket?ProjectID=32784">https://data.nts.gov/Docket?ProjectID=32784</a>

The National Transportation Safety Board (NTSB) is an independent federal agency charged by Congress with investigating every civil aviation accident in the United States and significant events in other modes of transportation—railroad, transit, highway, marine, pipeline, and commercial space. We determine the probable causes of the accidents and events we investigate, and issue safety recommendations aimed at preventing future occurrences. In addition, we conduct transportation safety research studies and offer information and other assistance to family members and survivors for each accident or event we investigate. We also serve as the appellate authority for enforcement actions involving aviation and mariner certificates issued by the Federal Aviation Administration (FAA) and US Coast Guard, and we adjudicate appeals of civil penalty actions taken by the FAA.

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