



# Aviation Investigation Final Report

<b>Location:</b>	FRASER, Michigan	<b>Accident Number:</b>	CHI83LA159
<b>Date &amp; Time:</b>	April 1, 1983, 13:45 Local	<b>Registration:</b>	N1517R
<b>Aircraft:</b>	GRUMMAN AA-5B	<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 AIRCRAFT STALLED AND UNDERSHOT THE RUNWAY LANDING ABOUT 100 FEET SHORT, WHERE IT COLLIDED WITH A DITCH AND NOSED OVER. THE PILOT AND HIS WIFE ABOARD THE AIRCRAFT WERE NOT INJURED. THE AIRCRAFT LANDED ON RUNWAY 09 AND THE WIND WAS FROM 110 DEGREES AT 15 KTS GUSTING TO 24 KTS.

## Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be:

### Findings

Occurrence #1: UNDERSHOOT  
Phase of Operation: LANDING

#### Findings

1. (F) WEATHER CONDITION - GUSTS
2. (F) WEATHER CONDITION - TURBULENCE
3. (C) PROPER TOUCHDOWN POINT - NOT ATTAINED - PILOT IN COMMAND
4. (C) FLARE - IMPROPER - PILOT IN COMMAND
5. (C) STALL/MUSH - NOT CORRECTED - PILOT IN COMMAND

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Occurrence #2: HARD LANDING  
Phase of Operation: LANDING - FLARE/TOUCHDOWN

Findings

6. (C) PROPER DESCENT RATE - NOT MAINTAINED - PILOT IN COMMAND

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Occurrence #3: GEAR COLLAPSED

Phase of Operation: LANDING - FLARE/TOUCHDOWN

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Occurrence #4: NOSE OVER

Phase of Operation: LANDING - ROLL

## Factual Information

### Pilot Information

<b>Certificate:</b>	Private	<b>Age:</b>	30, Male
<b>Airplane Rating(s):</b>	Single-engine land	<b>Seat Occupied:</b>	Left
<b>Other Aircraft Rating(s):</b>		<b>Restraint Used:</b>	
<b>Instrument Rating(s):</b>	None	<b>Second Pilot Present:</b>	No
<b>Instructor Rating(s):</b>		<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>	Class 3 Valid Medical--no waivers/lim.	<b>Last FAA Medical Exam:</b>	December 22, 1982
<b>Occupational Pilot:</b>	UNK	<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>	89 hours (Total, all aircraft), 15 hours (Total, this make and model), 49 hours (Pilot In Command, all aircraft), 5 hours (Last 90 days, all aircraft), 2 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

### Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	GRUMMAN	<b>Registration:</b>	N1517R
<b>Model/Series:</b>	AA-5B AA-5B	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>		<b>Amateur Built:</b>	
<b>Airworthiness Certificate:</b>	Normal	<b>Serial Number:</b>	AA5B-0017
<b>Landing Gear Type:</b>	Tricycle	<b>Seats:</b>	4
<b>Date/Type of Last Inspection:</b>	February 3, 1983 Annual	<b>Certified Max Gross Wt.:</b>	1530 lbs
<b>Time Since Last Inspection:</b>	40 Hrs	<b>Engines:</b>	1 Reciprocating
<b>Airframe Total Time:</b>	3205 Hrs	<b>Engine Manufacturer:</b>	LYCOMING
<b>ELT:</b>	Installed, activated	<b>Engine Model/Series:</b>	O-360-A4K
<b>Registered Owner:</b>	LARRY ROHL	<b>Rated Power:</b>	180 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>	Day
<b>Observation Facility, Elevation:</b>	PET ,625 ft msl	<b>Distance from Accident Site:</b>	20 Nautical Miles
<b>Observation Time:</b>	13:49 Local	<b>Direction from Accident Site:</b>	360°
<b>Lowest Cloud Condition:</b>	Scattered / 8000 ft AGL	<b>Visibility</b>	6 miles
<b>Lowest Ceiling:</b>	Broken / 25000 ft AGL	<b>Visibility (RVR):</b>	
<b>Wind Speed/Gusts:</b>	15 knots / 24 knots	<b>Turbulence Type Forecast/Actual:</b>	/
<b>Wind Direction:</b>	110°	<b>Turbulence Severity Forecast/Actual:</b>	/
<b>Altimeter Setting:</b>	29 inches Hg	<b>Temperature/Dew Point:</b>	16°C
<b>Precipitation and Obscuration:</b>	N/A - None - Haze		
<b>Departure Point:</b>	CLEVELAND , OH (BKL )	<b>Type of Flight Plan Filed:</b>	VFR
<b>Destination:</b>	FRASER , MI (D-13)	<b>Type of Clearance:</b>	None
<b>Departure Time:</b>	12:25 Local	<b>Type of Airspace:</b>	Class E

## Airport Information

<b>Airport:</b>	MCKINLEY D-13	<b>Runway Surface Type:</b>	Asphalt
<b>Airport Elevation:</b>	613 ft msl	<b>Runway Surface Condition:</b>	Dry
<b>Runway Used:</b>	9	<b>IFR Approach:</b>	None
<b>Runway Length/Width:</b>	2910 ft / 50 ft	<b>VFR Approach/Landing:</b>	Traffic pattern

## 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>	42.530609,-82.940483(est)

## Administrative Information

**Investigator In Charge (IIC):** Michelangelo, James

**Additional Participating Persons:**

**Original Publish Date:**

**Last Revision Date:**

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

**Note:**

**Investigation Docket:** <https://data.nts.gov/Docket?ProjectID=12127>

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