



# Aviation Investigation Final Report

<b>Location:</b>	DECATUR, Indiana	<b>Accident Number:</b>	CHI98LA311
<b>Date &amp; Time:</b>	August 13, 1998, 12:30 Local	<b>Registration:</b>	N74827
<b>Aircraft:</b>	Grumman American AA-5B	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>		<b>Injuries:</b>	1 None
<b>Flight Conducted Under:</b>	Part 91: General aviation - Personal		

## Analysis

The pilot reported the airplane lifted off about 1/2 way down the airstrip at 65 knots with 10 degrees of flaps. He reported he attempted to keep the airplane close to the ground to gain airspeed because it felt a 'little mushy.' The pilot removed the flaps hoping to pick up airspeed, but 'things just got worse.' The airplane struck a runway marker along the right side of the runway. It then bounced on the airstrip, crossed over a road, and came to rest in a soybean field.

## Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: the pilot's failure to maintain adequate airspeed during the takeoff and his premature raising of the flaps which resulted in the stall/mush condition.

## Findings

Occurrence #1: LOSS OF CONTROL - IN FLIGHT  
Phase of Operation: TAKEOFF - INITIAL CLIMB

### Findings

1. (C) AIRSPEED - INADEQUATE - PILOT IN COMMAND
2. (C) RAISING OF FLAPS - PREMATURE - PILOT IN COMMAND
3. (C) STALL/MUSH - PILOT IN COMMAND

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Occurrence #2: IN FLIGHT COLLISION WITH TERRAIN/WATER  
Phase of Operation: TAKEOFF - INITIAL CLIMB

Findings

4. OBJECT - AIRPORT SIGN/MARKER
5. TERRAIN CONDITION - CROP

## Factual Information

On August 13, 1998, at 1230 eastern daylight time (edt), a Grumman American AA-5B, N74827, registered to Sky Rangers of Detroit, Inc., of Detroit, Michigan, was substantially damaged during a collision with a runway marker and the terrain shortly after takeoff from the Decatur Hi-Way Airstrip, Decatur, Indiana. The private pilot reported no injuries. The personal 14 CFR Part 91 flight was operating in visual meteorological conditions without a flight plan. The flight was departing at the time of the accident with a destination of Port Huron, Michigan.

The pilot reported that the local winds were calm so he decided to use runway 18 for takeoff because of the downhill grade. He reported that he began the takeoff 20 feet from the beginning of the airstrip because the grass was long. The pilot reported the airplane lifted off about 1/2 way down the airstrip at 65 knots with 10 degrees of flaps. He reported he attempted to keep the airplane close to the ground to gain airspeed because it felt a "little mushy." The pilot reported he removed the flaps hoping to pick up airspeed, but "things just got worse." The airplane struck a runway marker along the right side of the runway. It then bounced on the airstrip, crossed over a road, and came to rest in a soybean field.

A post accident test run of the engine was performed. The engine operated up to 2,000 rpm with no abnormalities noted.

### Pilot Information

<b>Certificate:</b>	Private	<b>Age:</b>	61, 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>	
<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 Valid Medical--w/ waivers/lim	<b>Last FAA Medical Exam:</b>	November 19, 1996
<b>Occupational Pilot:</b>	UNK	<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>	1200 hours (Total, all aircraft), 400 hours (Total, this make and model), 950 hours (Pilot In Command, all aircraft), 14 hours (Last 90 days, all aircraft), 2 hours (Last 30 days, all aircraft)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	Grumman American	<b>Registration:</b>	N74827
<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>	AA5B0373
<b>Landing Gear Type:</b>	Tricycle	<b>Seats:</b>	4
<b>Date/Type of Last Inspection:</b>	April 20, 1998 Annual	<b>Certified Max Gross Wt.:</b>	2000 lbs
<b>Time Since Last Inspection:</b>	175 Hrs	<b>Engines:</b>	1 Reciprocating
<b>Airframe Total Time:</b>	5475 Hrs	<b>Engine Manufacturer:</b>	Lycoming
<b>ELT:</b>		<b>Engine Model/Series:</b>	O-360
<b>Registered Owner:</b>	SKY RANGERS OF DETROIT, INC.	<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>	FWA ,815 ft msl	<b>Distance from Accident Site:</b>	17 Nautical Miles
<b>Observation Time:</b>	12:54 Local	<b>Direction from Accident Site:</b>	300°
<b>Lowest Cloud Condition:</b>	Scattered / 2500 ft AGL	<b>Visibility</b>	9 miles
<b>Lowest Ceiling:</b>	None	<b>Visibility (RVR):</b>	
<b>Wind Speed/Gusts:</b>	5 knots /	<b>Turbulence Type Forecast/Actual:</b>	/
<b>Wind Direction:</b>	50°	<b>Turbulence Severity Forecast/Actual:</b>	/
<b>Altimeter Setting:</b>	30 inches Hg	<b>Temperature/Dew Point:</b>	24°C / 18°C
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>	(DCR )	<b>Type of Flight Plan Filed:</b>	None
<b>Destination:</b>	PORT HURON , MI (PHN )	<b>Type of Clearance:</b>	None
<b>Departure Time:</b>	00:00 Local	<b>Type of Airspace:</b>	Class G

## Airport Information

<b>Airport:</b>	DECATUR HI-WAY DCR	<b>Runway Surface Type:</b>	Grass/turf
<b>Airport Elevation:</b>	842 ft msl	<b>Runway Surface Condition:</b>	Dry
<b>Runway Used:</b>	18	<b>IFR Approach:</b>	
<b>Runway Length/Width:</b>	2509 ft / 140 ft	<b>VFR Approach/Landing:</b>	

## Wreckage and Impact Information

<b>Crew Injuries:</b>	1 None	<b>Aircraft Damage:</b>	Substantial
<b>Passenger Injuries:</b>		<b>Aircraft Fire:</b>	None
<b>Ground Injuries:</b>	N/A	<b>Aircraft Explosion:</b>	None
<b>Total Injuries:</b>	1 None	<b>Latitude, Longitude:</b>	40.829105,-84.920448(est)

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Carlson, Todd
<b>Additional Participating Persons:</b>	HENRY T AUNG; SOUTH BEND , IN
<b>Original Publish Date:</b>	January 28, 2000
<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=44071">https://data.nts.gov/Docket?ProjectID=44071</a>

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