



# National Transportation Safety Board Aviation Accident Final Report

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<b>Location:</b>	FORT COLLINS, CO	<b>Accident Number:</b>	DEN86LA037
<b>Date &amp; Time:</b>	12/01/1985, 1120 MST	<b>Registration:</b>	N991OU
<b>Aircraft:</b>	GRUMMAN AA-5A	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>		<b>Injuries:</b>	3 None
<b>Flight Conducted Under:</b>	Part 91: General Aviation - Personal		

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## Analysis

THE PLT STATED THAT DURING TAKEOFF ROLL THE ACFT USED OVER TWICE THE NORMAL DISTANCE TO RWY TO BECOME AIRBORNE. AFTER BECOMING AIRBORNE, THE STALL WARNING SOUNDED, AND CONTINUED TO SOUND UNTIL THE FORCED LANDING WHEN THE PLT SAID HE COULDN'T MAINTAIN ALT. THE ACFT CONTACTED A ROAD SIGN APRX 1/2 MILE FROM THE RWY, PRIOR TO TOUCHDOWN ON THE HIGHWAY MEDIAN, AND LATER COMING TO REST OFF A HIGHWAY EXIT. THE ENTIRE SURFACE OF THE WINGS AND HORIZONTAL STABILIZER WERE COVERED WITH ROUGH ICE WHICH THE PLT STATED HE DID NOT ATTEMPT TO REMOVE PRIOR TO FLT. THE PLT ALSO STATED THAT THE ICE ON THE SURFACE OF THE AIRFOILS HAD NO BEARING ON THE ACCIDENT.

## Probable Cause and Findings

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

## Findings

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Occurrence #1: LOSS OF CONTROL - IN FLIGHT  
Phase of Operation: DESCENT - EMERGENCY

### Findings

1. WING - ICE
2. (C) ICE/FROST REMOVAL FROM AIRCRAFT - NOT PERFORMED - PILOT IN COMMAND
3. HORIZONTAL STABILIZER SURFACE - ICE

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

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Occurrence #3: IN FLIGHT COLLISION WITH OBJECT  
Phase of Operation: LANDING

### Findings

4. AIRPORT FACILITIES, RUNWAY/LANDING AREA CONDITION - ROUGH/UNEVEN

## Factual Information

### Pilot Information

<b>Certificate:</b>	Private	<b>Age:</b>	53, 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
<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>	05/14/1984
<b>Occupational Pilot:</b>		<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>	1151 hours (Total, all aircraft), 171 hours (Total, this make and model), 1100 hours (Pilot In Command, all aircraft), 20 hours (Last 90 days, all aircraft)		

### Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	GRUMMAN	<b>Registration:</b>	N991OU
<b>Model/Series:</b>	AA-5A AA-5A	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>		<b>Amateur Built:</b>	No
<b>Airworthiness Certificate:</b>	Normal	<b>Serial Number:</b>	AA5A0310
<b>Landing Gear Type:</b>	Tricycle	<b>Seats:</b>	4
<b>Date/Type of Last Inspection:</b>	09/20/1985, Annual	<b>Certified Max Gross Wt.:</b>	2000 lbs
<b>Time Since Last Inspection:</b>	16 Hours	<b>Engines:</b>	1 Reciprocating
<b>Airframe Total Time:</b>	2030 Hours	<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>	JOHN A. ALLEN	<b>Rated Power:</b>	150 hp
<b>Operator:</b>	JOHN D. HARDING	<b>Operating Certificate(s) Held:</b>	None

## Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	, 0 ft msl	Distance from Accident Site:	0 Nautical Miles
Observation Time:	0000	Direction from Accident Site:	0°
Lowest Cloud Condition:	Scattered / 9000 ft agl	Visibility	10 Miles
Lowest Ceiling:	None / 0 ft agl	Visibility (RVR):	0 ft
Wind Speed/Gusts:	Calm /	Turbulence Type Forecast/Actual:	/
Wind Direction:		Turbulence Severity Forecast/Actual:	/
Altimeter Setting:		Temperature/Dew Point:	-18°C
Precipitation and Obscuration:			
Departure Point:	FORT COLLINS, CO (3V5)	Type of Flight Plan Filed:	None
Destination:	COUNCIL BLUFFS, IA (CBF)	Type of Clearance:	None
Departure Time:	1120 MST	Type of Airspace:	Airport Advisory Area

## Airport Information

Airport:		Runway Surface Type:	Asphalt; Grass/turf
Airport Elevation:		Runway Surface Condition:	Snow--dry
Runway Used:	0	IFR Approach:	None
Runway Length/Width:		VFR Approach/Landing:	Forced Landing

## Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	2 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	3 None	Latitude, Longitude:	

## Administrative Information

Investigator In Charge (IIC):	RONALD E MICKLE	Report Date:	
Additional Participating Persons:	LOUIS MONGER; BROOMFIELD, CO		
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 <a href="mailto:pubinq@ntsb.gov">pubinq@ntsb.gov</a> , or at 800-877-6799. Dockets released after this date are available at <a href="http://dms.nts.gov/pubdms/">http://dms.nts.gov/pubdms/</a> .		

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The Independent Safety Board Act, as codified at 49 U.S.C. Section 1154(b), precludes the admission into evidence or use of any part of an NTSB report related to an incident or accident in a civil action for damages resulting from a matter mentioned in the report. A factual report that may be admissible under 49 U.S.C. § 1154(b) is available [here](#).