

# **Aviation Investigation Final Report**

Location:	ATHENS, New York		Accident Number:	NYC90LA116
Date & Time:	May 28, 1990, 10:45	Local	<b>Registration:</b>	N77WC
Aircraft:	STINSON	108-1	Aircraft Damage:	Substantial
Defining Event:			Injuries:	1 Serious, 1 None
Flight Conducted Under:	Part 91: General aviation - Personal			

## **Analysis**

THE PILOT'S SEAT BACK BROKE JUST AFTER THE AIRPLANE BECAME AIRBORNE. THE PILOT TILTED AFT AND PULLED BACK ON THE CONTROL WHEEL. THE AIRCRAFT CLIMBED STEEPLY, TURNED RIGHT, STALLED, AND IMPACTED INVERTED. REMEDIAL ACTION WAS NOT POSSIBLE. THE FRACTURE WAS LOCATED ADJACENT TO A WELDED JUNCTION OF THE SEAT BACK ATTACH POINT. EXAMINATION REVEALED THE TUBE FRAME FAILED IN DUCTILE OVERLOAD WITH NO EVIDENCE OF CORROSION OF FATIGUE.

## **Probable Cause and Findings**

The National Transportation Safety Board determines the probable cause(s) of this accident to be: INFLIGHT LOSS OF CONTROL DUE TO LOSS OF AIRSPEED AND SUBSEQUENT STALL WHEN THE PILOT'S SEAT BACK FAILED AND THE PILOT HUNG ONTO THE CONTROL WHEEL, RESULTING IN AN EXCESSIVE NOSE HIGH ATTITUDE.

#### **Findings**

Occurrence #1: AIRFRAME/COMPONENT/SYSTEM FAILURE/MALFUNCTION Phase of Operation: TAKEOFF - INITIAL CLIMB

Findings 1. (C) FUSELAGE,SEAT - FAILURE,PARTIAL

Occurrence #2: LOSS OF CONTROL - IN FLIGHT

Phase of Operation: TAKEOFF - INITIAL CLIMB

Findings 2. (F) AIRSPEED - NOT MAINTAINED - PILOT IN COMMAND 3. (C) STALL - INADVERTENT - PILOT IN COMMAND 4. (F) REMEDIAL ACTION - NOT POSSIBLE - PILOT IN COMMAND

Occurrence #3: IN FLIGHT COLLISION WITH OBJECT Phase of Operation: DESCENT - UNCONTROLLED

Findings 5. OBJECT - TREE(S)

# **Factual Information**

#### **Pilot Information**

Certificate:	Private	Age:	44,Male
Airplane Rating(s):	Single-engine land; Single-engine sea	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 3 Valid Medicalno waivers/lim.	Last FAA Medical Exam:	
Occupational Pilot:	UNK	Last Flight Review or Equivalent:	
Flight Time:			

### Aircraft and Owner/Operator Information

Aircraft Make:	STINSON	Registration:	N77WC
Model/Series:	108-1 108-1	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	108-279
Landing Gear Type:	Tailwheel	Seats:	4
Date/Type of Last Inspection:	Annual	Certified Max Gross Wt.:	2000 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:		Engine Manufacturer:	FRANKLIN
ELT:		Engine Model/Series:	6A4-150
Registered Owner:	RODNEY C. GEIGER	Rated Power:	150 Horsepower
Operator:		Operating Certificate(s) Held:	None
Operator Does Business As:		Operator Designator Code:	

### Meteorological Information and Flight Plan

Conditions at Accident Site:	Vieual (V/MC)	Condition of Light:	Dov
Conditions at Accident Site.	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:		Distance from Accident Site:	
Observation Time:	11:30 Local	Direction from Accident Site:	
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	/	Turbulence Type Forecast/Actual:	/
Wind Direction:	0°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:		Temperature/Dew Point:	21°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:		Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	10:45 Local	Type of Airspace:	Class G

## **Airport Information**

Airport:	ATHENS NY03	Runway Surface Type:	Grass/turf
Airport Elevation:	709 ft msl	Runway Surface Condition:	Dry
Runway Used:	20	IFR Approach:	None
Runway Length/Width:	2600 ft / 60 ft	VFR Approach/Landing:	None

## Wreckage and Impact Information

Crew Injuries:	1 Serious	Aircraft Damage:	Substantial
Passenger Injuries:	1 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Serious, 1 None	Latitude, Longitude:	42.260829,-73.809608(est)

#### **Administrative Information**

Investigator In Charge (IIC):	Hancock, Robert	
Additional Participating Persons:	DAN TAYLOR; ALBANY , NY	
Original Publish Date:	October 2, 1992	
Last Revision Date:		
Investigation Class:	<u>Class</u>	
Note:		
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=36650	

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The NTSB does not assign fault or blame for an accident or incident; rather, as specified by NTSB regulation, "accident/incident investigations are fact-finding proceedings with no formal issues and no adverse parties ... and are not conducted for the purpose of determining the rights or liabilities of any person" (Title 49 *Code of Federal Regulations* section 831.4). Assignment of fault or legal liability is not relevant to the NTSB's statutory mission to improve transportation safety by investigating accidents and incidents and issuing safety recommendations. In addition, statutory language prohibits the admission into evidence or use of any part of an NTSB report related to an accident in a civil action for damages resulting from a matter mentioned in the report (Title 49 *United States Code* section 1154(b)). A factual report that may be admissible under 49 *United States Code* section 1154(b) is available here.