



# Aviation Investigation Final Report

<b>Location:</b>	OSCEOLA, Arkansas	<b>Accident Number:</b>	FTW93LA225
<b>Date &amp; Time:</b>	August 1, 1993, 13:00 Local	<b>Registration:</b>	N4021C
<b>Aircraft:</b>	STINSON 108-3	<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

DURING THE TAKEOFF INITIAL CLIMB, THE RIGHT HALF OF THE ENGINE COWLING CAME LOOSE. THE PILOT STATED TO THE INVESTIGATOR IN CHARGE THAT HE IMPROPERLY LATCHED THE COWLING ON THE PREFLIGHT. A TURN WAS INITIATED TOWARD THE AIRPORT AND ON A 45 DEGREE ANGLE TO THE RUNWAY THE AIRPLANE STALLED AND IMPACTED THE TERRAIN SHORT OF THE RUNWAY.

## Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: INADVERTENT STALL. FACTORS WERE THE IMPROPER LATCHING OF THE ENGINE COWLING BY THE PILOT AND HIS INADEQUATE PREFLIGHT INSPECTION.

## Findings

Occurrence #1: LOSS OF CONTROL - IN FLIGHT  
Phase of Operation: MANEUVERING - TURN TO LANDING AREA (EMERGENCY)

- Findings
1. (F) ENGINE COMPARTMENT - NOT SECURED
  2. (F) AIRCRAFT PREFLIGHT - INADEQUATE - PILOT IN COMMAND
  3. PRECAUTIONARY LANDING - ATTEMPTED - PILOT IN COMMAND
  4. (C) STALL - INADVERTENT - PILOT IN COMMAND
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Occurrence #2: IN FLIGHT COLLISION WITH TERRAIN/WATER  
Phase of Operation: DESCENT - UNCONTROLLED

## Factual Information

On August 1, 1993, at approximately 1300 central daylight time, a Stinson 108-3 airplane, N4021C, sustained substantial damage near Osceola, Arkansas, during approach. The private pilot and passenger were not injured. Visual meteorological conditions prevailed for the personal cross country flight.

The Pilot/Operator report submitted to the Safety Board and a personal interview conducted by the investigator in charge revealed the following information. During a cross country flight a routine refueling stop was made at Osceola, Arkansas. As the air speed increased during the initial takeoff climb, the right half of the engine cowling came loose. The pilot observed the engine cowling chaffing against the windshield plexiglass. A 180 degree turn toward the airport was initiated by the pilot. During the approach, the airplane stalled and impacted the terrain short of the runway. The pilot stated that he had checked and filled the engine oil and had improperly latched the cowling during the preflight.

### Pilot Information

<b>Certificate:</b>	Private	<b>Age:</b>	22, Male
<b>Airplane Rating(s):</b>	Single-engine land	<b>Seat Occupied:</b>	Unknown
<b>Other Aircraft Rating(s):</b>	None	<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 2 Valid Medical--no waivers/lim.	<b>Last FAA Medical Exam:</b>	March 15, 1993
<b>Occupational Pilot:</b>	UNK	<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>	155 hours (Total, all aircraft), 150 hours (Total, this make and model), 155 hours (Pilot In Command, all aircraft)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	STINSON	<b>Registration:</b>	N4021C
<b>Model/Series:</b>	108-3 108-3	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>		<b>Amateur Built:</b>	
<b>Airworthiness Certificate:</b>	Normal	<b>Serial Number:</b>	108-5021
<b>Landing Gear Type:</b>	Tailwheel	<b>Seats:</b>	4
<b>Date/Type of Last Inspection:</b>	October 30, 1992 Annual	<b>Certified Max Gross Wt.:</b>	2400 lbs
<b>Time Since Last Inspection:</b>	100 Hrs	<b>Engines:</b>	1 Reciprocating
<b>Airframe Total Time:</b>	1260 Hrs	<b>Engine Manufacturer:</b>	FRANKLIN
<b>ELT:</b>	Installed, activated, did not aid in locating accident	<b>Engine Model/Series:</b>	GA4-165-B3
<b>Registered Owner:</b>	WISSMAN, JOHN C.	<b>Rated Power:</b>	165 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>		<b>Distance from Accident Site:</b>	
<b>Observation Time:</b>		<b>Direction from Accident Site:</b>	
<b>Lowest Cloud Condition:</b>	Scattered / 7000 ft AGL	<b>Visibility</b>	10 miles
<b>Lowest Ceiling:</b>	None	<b>Visibility (RVR):</b>	
<b>Wind Speed/Gusts:</b>	/	<b>Turbulence Type Forecast/Actual:</b>	/
<b>Wind Direction:</b>	80°	<b>Turbulence Severity Forecast/Actual:</b>	/
<b>Altimeter Setting:</b>		<b>Temperature/Dew Point:</b>	35°C
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>		<b>Type of Flight Plan Filed:</b>	None
<b>Destination:</b>		<b>Type of Clearance:</b>	None
<b>Departure Time:</b>	13:00 Local	<b>Type of Airspace:</b>	Class G

## Airport Information

<b>Airport:</b>	OSCEOLA MUNICIPAL 7M4	<b>Runway Surface Type:</b>	Asphalt
<b>Airport Elevation:</b>	234 ft msl	<b>Runway Surface Condition:</b>	Dry
<b>Runway Used:</b>	18	<b>IFR Approach:</b>	None
<b>Runway Length/Width:</b>	3800 ft / 40 ft	<b>VFR Approach/Landing:</b>	Precautionary landing

## 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>	35.699508,-89.990661(est)

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Smith, Joyce
<b>Additional Participating Persons:</b>	DAVID F HALL; LITTLE ROCK , AR
<b>Original Publish Date:</b>	September 13, 1994
<b>Last Revision Date:</b>	
<b>Investigation Class:</b>	<a href="#">Class</a>
<b>Note:</b>	
<b>Investigation Docket:</b>	<a href="https://data.ntsb.gov/Docket?ProjectID=18804">https://data.ntsb.gov/Docket?ProjectID=18804</a>

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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](#).