



# Aviation Investigation Final Report

<b>Location:</b>	DE QUINCY, Louisiana	<b>Accident Number:</b>	FTW87LA101
<b>Date &amp; Time:</b>	April 23, 1987, 14:00 Local	<b>Registration:</b>	N414A
<b>Aircraft:</b>	SIKORSKY S-55B	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>		<b>Injuries:</b>	1 Serious
<b>Flight Conducted Under:</b>	Part 137: Agricultural		

## Analysis

THE PILOT EXPERIENCED AN ENGINE SURGE FOLLOWED BY A COMPLETE LOSS OF POWER DURING A SWATH RUN OF A TREE SPRAYING AG OPERATION. THE HELICOPTER WAS OVER A DENSELY WOODED AREA AND AUTOROTATED INTO TREES. THE OWNER WAS AWARE OF A CARBURETOR PROBLEM AND HAD ALREADY OBTAINED A REBUILT CARBURETOR FOR THE ENGINE, HOWEVER, IT HAD NOT YET BEEN INSTALLED WHEN THE ACCIDENT OCCURRED. A POST ACCIDENT EXAMINATION OF THE ENGINE WAS NOT CONDUCTED. THEREFORE, THE EXACT CAUSE OF THE ENGINE FAILURE IS UNDETERMINED.

## Probable Cause and Findings

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

### Findings

Occurrence #1: LOSS OF ENGINE POWER  
Phase of Operation: MANEUVERING - AERIAL APPLICATION

#### Findings

1. (C) REASON FOR OCCURRENCE UNDETERMINED
2. (F) OPERATION WITH KNOWN DEFICIENCIES IN EQUIPMENT - INTENTIONAL - COMPANY/OPERATOR MANAGEMENT

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

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

Findings

3. (F) OBJECT - TREE(S)

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Occurrence #4: IN FLIGHT COLLISION WITH TERRAIN/WATER  
Phase of Operation: DESCENT - UNCONTROLLED

Findings

4. (F) TERRAIN CONDITION - NONE SUITABLE

## Factual Information

### Pilot Information

<b>Certificate:</b>	Commercial	<b>Age:</b>	39, Male
<b>Airplane Rating(s):</b>	Single-engine land; Single-engine sea; Multi-engine land; Multi-engine sea	<b>Seat Occupied:</b>	Unknown
<b>Other Aircraft Rating(s):</b>	Helicopter	<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>	
<b>Occupational Pilot:</b>	Yes	<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>	8000 hours (Total, all aircraft), 6000 hours (Total, this make and model), 5 hours (Last 24 hours, all aircraft)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	SIKORSKY	<b>Registration:</b>	N414A
<b>Model/Series:</b>	S-55B S-55B	<b>Aircraft Category:</b>	Helicopter
<b>Year of Manufacture:</b>		<b>Amateur Built:</b>	
<b>Airworthiness Certificate:</b>	Restricted (Special)	<b>Serial Number:</b>	55279
<b>Landing Gear Type:</b>	Tricycle	<b>Seats:</b>	1
<b>Date/Type of Last Inspection:</b>	Annual	<b>Certified Max Gross Wt.:</b>	7200 lbs
<b>Time Since Last Inspection:</b>	70 Hrs	<b>Engines:</b>	1 Reciprocating
<b>Airframe Total Time:</b>		<b>Engine Manufacturer:</b>	WRIGHT
<b>ELT:</b>	Not installed	<b>Engine Model/Series:</b>	R-1300
<b>Registered Owner:</b>	GULF SOUTH	<b>Rated Power:</b>	600 Horsepower
<b>Operator:</b>	DENNIS W. ROGERS	<b>Operating Certificate(s) Held:</b>	
<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>	Clear	<b>Visibility</b>	7 miles
<b>Lowest Ceiling:</b>	None	<b>Visibility (RVR):</b>	
<b>Wind Speed/Gusts:</b>	2 knots /	<b>Turbulence Type Forecast/Actual:</b>	/
<b>Wind Direction:</b>	360°	<b>Turbulence Severity Forecast/Actual:</b>	/
<b>Altimeter Setting:</b>		<b>Temperature/Dew Point:</b>	29°C
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>	DEQUINEY , LA (5R8 )	<b>Type of Flight Plan Filed:</b>	None
<b>Destination:</b>		<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>		<b>Runway Surface Type:</b>	Dirt
<b>Airport Elevation:</b>	0 ft msl	<b>Runway Surface Condition:</b>	Vegetation
<b>Runway Used:</b>	0	<b>IFR Approach:</b>	None
<b>Runway Length/Width:</b>	0 ft / 0 ft	<b>VFR Approach/Landing:</b>	None

## Wreckage and Impact Information

<b>Crew Injuries:</b>	1 Serious	<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 Serious	<b>Latitude, Longitude:</b>	

## Administrative Information

**Investigator In Charge (IIC):** Johnson, J

**Additional Participating Persons:** EARL MCCARTHY; BATON ROUGE , LA

**Original Publish Date:** October 6, 1988

**Last Revision Date:**

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

**Note:**

**Investigation Docket:** <https://data.ntsb.gov/Docket?ProjectID=22352>

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