



# Aviation Investigation Final Report

<b>Location:</b>	GILBERTSVILLE, Kentucky	<b>Accident Number:</b>	ATL84LA211
<b>Date &amp; Time:</b>	June 23, 1984, 20:10 Local	<b>Registration:</b>	N90414
<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 91: General aviation - Personal		

## Analysis

THE ACFT WAS USED FOR PUBLIC RIDES AT AN AMUSEMENT PARK. DURING THE TAKEOFF TO FERRY THE ACFT BACK TO AN OVERNIGHT PARKING SPACE THE ENGINE QUIT AT 100 FT AGL. THE PLT SAID HE STARTED THE ACFT AND HOVERED USING FUEL FROM THE AFT FUEL TANK. WHEN THE ENGINE COUGHED HE LANDED, SWITCHED TANKS AND TOOK OFF. AFTER TAKEOFF THE ENGINE QUIT. INVESTIGATION SHOWED THE AFT FUEL TANK WAS EMPTY WHILE THE FORWARD TANK HAD RUPTURED. SOME FUEL LINES HAD BEEN CUT FOR WRECKAGE REMOVAL BUT THERE WAS FUEL IN THE LINE BETWEEN THE CARBURETOR AND THE FUEL PUMP.

## 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: TAKEOFF - INITIAL CLIMB

#### Findings

1. (C) REASON FOR OCCURRENCE UNDETERMINED

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Occurrence #2: FORCED LANDING

Phase of Operation: DESCENT - EMERGENCY

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Occurrence #3: IN FLIGHT COLLISION WITH TERRAIN/WATER

Phase of Operation: LANDING

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Occurrence #4: ROLL OVER

Phase of Operation: LANDING

## Factual Information

### Pilot Information

<b>Certificate:</b>	Commercial	<b>Age:</b>	37, Male
<b>Airplane Rating(s):</b>	None	<b>Seat Occupied:</b>	Right
<b>Other Aircraft Rating(s):</b>	Helicopter	<b>Restraint Used:</b>	
<b>Instrument Rating(s):</b>	Helicopter	<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 29, 1984
<b>Occupational Pilot:</b>	No	<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>	1550 hours (Total, all aircraft), 26 hours (Total, this make and model), 1410 hours (Pilot In Command, all aircraft), 26 hours (Last 90 days, all aircraft)		

### Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	SIKORSKY	<b>Registration:</b>	N90414
<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>	55-3211
<b>Landing Gear Type:</b>		<b>Seats:</b>	9
<b>Date/Type of Last Inspection:</b>	April 27, 1984 Annual	<b>Certified Max Gross Wt.:</b>	7200 lbs
<b>Time Since Last Inspection:</b>	40 Hrs	<b>Engines:</b>	1 Reciprocating
<b>Airframe Total Time:</b>	2215 Hrs	<b>Engine Manufacturer:</b>	WRIGHT
<b>ELT:</b>		<b>Engine Model/Series:</b>	R-1300-3D
<b>Registered Owner:</b>	AERIAL RESEARCH & DEVELOP CORP	<b>Rated Power:</b>	
<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>	PAH ,410 ft msl	<b>Distance from Accident Site:</b>	25 Nautical Miles
<b>Observation Time:</b>	19:50 Local	<b>Direction from Accident Site:</b>	270°
<b>Lowest Cloud Condition:</b>	Clear	<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>	0°	<b>Turbulence Severity Forecast/Actual:</b>	/
<b>Altimeter Setting:</b>	29 inches Hg	<b>Temperature/Dew Point:</b>	32°C / 21°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>	20:10 Local	<b>Type of Airspace:</b>	Class G

## Airport Information

<b>Airport:</b>		<b>Runway Surface Type:</b>	
<b>Airport Elevation:</b>		<b>Runway Surface Condition:</b>	
<b>Runway Used:</b>	0	<b>IFR Approach:</b>	
<b>Runway Length/Width:</b>		<b>VFR Approach/Landing:</b>	Forced landing

## 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):** Hicks, Preston

**Additional Participating Persons:**

**Original Publish Date:**

**Last Revision Date:**

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

**Note:**

**Investigation Docket:** <https://data.nts.gov/Docket?ProjectID=6487>

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