



# Aviation Investigation Final Report

<b>Location:</b>	NEW RICHMOND, Indiana	<b>Accident Number:</b>	CHI89DEX05
<b>Date &amp; Time:</b>	July 13, 1989, 11:00 Local	<b>Registration:</b>	N10002
<b>Aircraft:</b>	TEXAS HELICOPTER 13H/M74A	OH-	<b>Aircraft Damage:</b> Substantial
<b>Defining Event:</b>		<b>Injuries:</b>	1 None
<b>Flight Conducted Under:</b>	Part 137: Agricultural		

## Analysis

A TOTAL LOSS OF ENGINE POWER WAS EXPERIENCED DURING THE AG FLIGHT SHORTLY AFTER TAKEOFF AT AN ALTITUDE OF APPROXIMATELY 75 TO 100 FT AGL. THE TAIL BOOM OF THE HELICOPTER CONTACTED THE GROUND DURING THE AUTOROTATION IN A CORN FIELD WHICH RESULTED IN SUBSTANTIAL DAMAGE TO THE HELICOPTER. POST ACCIDENT INSPECTION REVEALED FUEL EXHAUSTION. THE PILOT REPORTED HE VISUALLY CHECKED THE FUEL QUANTITY AGAINST THE FUEL GAUGES AT THE BEGINNING OF THE FLYING DAY. HE STATED THAT JUST PRIOR TO THE ACCIDENT TAKEOFF, THE FUEL GAUGES INDICATED 10 TO 14 GALLONS OF FUEL REMAINED. THE HELICOPTER OWNER STATED THAT AT LOW FUEL LEVELS THE GAUGES WERE KNOWN TO BE UNRELIABLE.

## Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: THE PILOT'S MISJUDGEMENT OF THE FUEL SUPPLY WHICH RESULTED IN FUEL EXHAUSTION.

### Findings

Occurrence #1: LOSS OF ENGINE POWER(TOTAL) - NONMECHANICAL  
Phase of Operation: TAKEOFF - INITIAL CLIMB

Findings

1. FLUID,FUEL - EXHAUSTION
2. (C) FUEL SUPPLY - MISJUDGED - PILOT IN COMMAND

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

Findings

3. AUTOROTATION - ATTEMPTED - PILOT IN COMMAND

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Occurrence #3: IN FLIGHT COLLISION WITH TERRAIN/WATER  
Phase of Operation: LANDING - FLARE/TOUCHDOWN

Findings

4. TERRAIN CONDITION - CROP

## Factual Information

### Pilot Information

<b>Certificate:</b>	Commercial; Flight instructor	<b>Age:</b>	41, Male
<b>Airplane Rating(s):</b>	Single-engine land; Multi-engine land	<b>Seat Occupied:</b>	Center
<b>Other Aircraft Rating(s):</b>	Helicopter	<b>Restraint Used:</b>	
<b>Instrument Rating(s):</b>	Airplane	<b>Second Pilot Present:</b>	No
<b>Instructor Rating(s):</b>	Airplane single-engine	<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>	Class 2 Valid Medical-w/ waivers/lim	<b>Last FAA Medical Exam:</b>	December 22, 1988
<b>Occupational Pilot:</b>	Yes	<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>	9093 hours (Total, all aircraft), 2500 hours (Total, this make and model), 9024 hours (Pilot In Command, all aircraft), 95 hours (Last 90 days, all aircraft), 37 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	TEXAS HELICOPTER	<b>Registration:</b>	N10002
<b>Model/Series:</b>	OH-13H/M74A OH-13H/M74	<b>Aircraft Category:</b>	Helicopter
<b>Year of Manufacture:</b>		<b>Amateur Built:</b>	
<b>Airworthiness Certificate:</b>	Restricted (Special)	<b>Serial Number:</b>	79-030
<b>Landing Gear Type:</b>	Skid	<b>Seats:</b>	1
<b>Date/Type of Last Inspection:</b>	May 4, 1989 Annual	<b>Certified Max Gross Wt.:</b>	2750 lbs
<b>Time Since Last Inspection:</b>	79 Hrs	<b>Engines:</b>	1 Reciprocating
<b>Airframe Total Time:</b>	679 Hrs	<b>Engine Manufacturer:</b>	LYCOMING
<b>ELT:</b>	Not installed	<b>Engine Model/Series:</b>	VO-435-A1F
<b>Registered Owner:</b>	SWING WING, INC.	<b>Rated Power:</b>	260 Horsepower
<b>Operator:</b>		<b>Operating Certificate(s) Held:</b>	
<b>Operator Does Business As:</b>		<b>Operator Designator Code:</b>	SWWG

## Meteorological Information and Flight Plan

<b>Conditions at Accident Site:</b>	Visual (VMC)	<b>Condition of Light:</b>	Day
<b>Observation Facility, Elevation:</b>	IND ,650 ft msl	<b>Distance from Accident Site:</b>	50 Nautical Miles
<b>Observation Time:</b>	11:52 Local	<b>Direction from Accident Site:</b>	280°
<b>Lowest Cloud Condition:</b>	Clear	<b>Visibility</b>	20 miles
<b>Lowest Ceiling:</b>	None	<b>Visibility (RVR):</b>	
<b>Wind Speed/Gusts:</b>	9 knots /	<b>Turbulence Type Forecast/Actual:</b>	/
<b>Wind Direction:</b>	20°	<b>Turbulence Severity Forecast/Actual:</b>	/
<b>Altimeter Setting:</b>	29 inches Hg	<b>Temperature/Dew Point:</b>	26°C / 15°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>	11:00 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 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>	40.18959,-86.970428(est)

## Administrative Information

**Investigator In Charge (IIC):** Blackman, Gary

**Additional Participating Persons:** BILL DEVINE;

**Original Publish Date:** June 30, 1992

**Last Revision Date:**

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

**Note:**

**Investigation Docket:** <https://data.ntsb.gov/Docket?ProjectID=14232>

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