



# Aviation Investigation Final Report

<b>Location:</b>	WEWAHITCHKA, Florida	<b>Accident Number:</b>	MIA98LA120
<b>Date &amp; Time:</b>	April 3, 1998, 09:00 Local	<b>Registration:</b>	N508DD
<b>Aircraft:</b>	Bell 205	<b>Aircraft Damage:</b>	Destroyed
<b>Defining Event:</b>		<b>Injuries:</b>	1 None
<b>Flight Conducted Under:</b>	Part 133: Rotorcraft ext. load		

## Analysis

The pilot was about to start agricultural operations, and had turned on the fertilizer bucket, when he reported that the hydraulic gauges started to 'surge.' He said the helicopter, '...then took a violent turn to the left...the helicopter jerked for a third time and came back level.' He released the fertilizer bucket, and elected to make a forced landing. He stated, '...the control was going left to right, the collective was not reacting properly, so I spooled off the throttle and landed in the trees.' Examination of the helicopter's hydraulic system after the accident revealed that impact damage had destroyed the servos and the hydraulic fluid reservoir. No discrepancies were found with the hydraulic system.

## Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's loss of control as a result of erratic flight control movement due to a surge in hydraulic pressure for undetermined reasons.

## Findings

Occurrence #1: AIRFRAME/COMPONENT/SYSTEM FAILURE/MALFUNCTION  
Phase of Operation: MANEUVERING

### Findings

1. (C) HYDRAULIC SYSTEM - SURGE
2. REASON FOR OCCURRENCE UNDETERMINED

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Occurrence #2: LOSS OF CONTROL - IN FLIGHT  
Phase of Operation: MANEUVERING

Findings

- 3. ROTORCRAFT FLIGHT CONTROL
- 4. AIRCRAFT CONTROL - NOT POSSIBLE - PILOT IN COMMAND

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Occurrence #3: FORCED LANDING  
Phase of Operation: EMERGENCY DESCENT/LANDING

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Occurrence #4: IN FLIGHT COLLISION WITH OBJECT  
Phase of Operation: EMERGENCY DESCENT/LANDING

Findings

- 5. OBJECT - TREE(S)

## Factual Information

On April 3, 1998, about 0830 central standard time, a Bell UH-1H (205) helicopter, N508DD, registered to Precision Air Services, operating as a Title 14 CFR Part 133, agricultural flight, impacted with trees during a forced landing near Wewahitchka, Florida. Visual meteorological conditions prevailed and no flight plan was filed. The helicopter was destroyed. The commercial-rated pilot was not injured. The flight had originated at 0800.

The pilot was about to start agricultural operations, and had turned on the fertilizer bucket, when he reported that the hydraulic gauges started to "surge." He said the helicopter, "...then took a violent turn to the left...the helicopter jerked for a third time and came back level." He released the fertilizer bucket, and elected to make a forced landing. He stated, "...the control was going left to right, the collective was not reacting properly, so I spooled off the throttle and landed in the trees."

Examination of the helicopter's hydraulic system after the accident revealed that impact damage had destroyed the servos and the hydraulic fluid reservoir. No discrepancies were found with the hydraulic system.

### Pilot Information

<b>Certificate:</b>	Commercial	<b>Age:</b>	46, Male
<b>Airplane Rating(s):</b>	Single-engine land	<b>Seat Occupied:</b>	Left
<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-w/ waivers/lim	<b>Last FAA Medical Exam:</b>	January 2, 1998
<b>Occupational Pilot:</b>	Yes	<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>	11000 hours (Total, all aircraft), 500 hours (Total, this make and model), 11000 hours (Pilot In Command, all aircraft), 200 hours (Last 90 days, all aircraft), 100 hours (Last 30 days, all aircraft)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	Bell	<b>Registration:</b>	N508DD
<b>Model/Series:</b>	205 205	<b>Aircraft Category:</b>	Helicopter
<b>Year of Manufacture:</b>		<b>Amateur Built:</b>	
<b>Airworthiness Certificate:</b>	Restricted (Special)	<b>Serial Number:</b>	67-17678
<b>Landing Gear Type:</b>	Skid	<b>Seats:</b>	2
<b>Date/Type of Last Inspection:</b>	100 hour	<b>Certified Max Gross Wt.:</b>	9500 lbs
<b>Time Since Last Inspection:</b>	15 Hrs	<b>Engines:</b>	1 Turbo shaft
<b>Airframe Total Time:</b>		<b>Engine Manufacturer:</b>	Lycoming
<b>ELT:</b>	Installed, activated, did not aid in locating accident	<b>Engine Model/Series:</b>	T53-L-13BA
<b>Registered Owner:</b>	PRESISION AIR SERVICE	<b>Rated Power:</b>	1300 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>	Clear	<b>Visibility</b>	10 miles
<b>Lowest Ceiling:</b>	None	<b>Visibility (RVR):</b>	
<b>Wind Speed/Gusts:</b>	10 knots /	<b>Turbulence Type Forecast/Actual:</b>	/
<b>Wind Direction:</b>	130°	<b>Turbulence Severity Forecast/Actual:</b>	/
<b>Altimeter Setting:</b>		<b>Temperature/Dew Point:</b>	22°C / 19°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>	08:00 Local	<b>Type of Airspace:</b>	Class D

## 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>	None
<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>	Destroyed
<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>	30.110288,-85.189392(est)

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Yurman, Alan
<b>Additional Participating Persons:</b>	RODGER HOLSTROM; BIRMINGHAM , AL
<b>Original Publish Date:</b>	February 11, 2000
<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=38487">https://data.ntsb.gov/Docket?ProjectID=38487</a>

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