



# Aviation Investigation Final Report

<b>Location:</b>	CONCORD, North Carolina	<b>Accident Number:</b>	ATL91LA055
<b>Date &amp; Time:</b>	February 14, 1991, 16:45 Local	<b>Registration:</b>	N9146S
<b>Aircraft:</b>	BEECH C23	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>		<b>Injuries:</b>	2 None
<b>Flight Conducted Under:</b>	Part 91: General aviation - Personal		

## Analysis

THE PILOT REPORTED THAT DURING TAKEOFF THE WIND SHIFTED FROM A HEADWIND TO A TAILWIND. ONE WING DIPPED & THE AIRPLANE DESCENDED BACK INTO GROUND EFFECT. THERE WERE TREES AT THE END OF THE RUNWAY SO, HE ELECTED TO ABORT. THE GRASS/DIRT RUNWAY WAS WET. A GROUND LOOP WAS ATTEMPTED BUT ACFT CONTINUED IN A STRAIGHT LINE, SIDEWAYS. IT WAS REALIGNED WITH THE RUNWAY, ROLLED OFF THE END INTO A STREAM, & NOSED OVER. A COLD FRONT HAD PASSED & WINDS WERE STRONG & GUSTY. THE PILOT REPORTED THE WINDS BUT FAILED TO NOTE THE CROSSWIND LIMITS IN THE PILOT'S HANDBOOK.

## Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: THE PILOT'S INADEQUATE PREFLIGHT PLANNING IN THAT HE DISREGARDED THE CROSSWIND LIMIT IN THE PILOT'S OPERATING HANDBOOK. FACTORS WERE THE WET RUNWAY AND THE RAVINE AT THE END OF THE RUNWAY.

## Findings

Occurrence #1: IN FLIGHT ENCOUNTER WITH WEATHER  
Phase of Operation: TAKEOFF - INITIAL CLIMB

### Findings

1. (C) PREFLIGHT PLANNING/PREPARATION - INADEQUATE - PILOT IN COMMAND

2. (C) PERFORMANCE DATA - DISREGARDED - PILOT IN COMMAND

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Occurrence #2: ON GROUND/WATER COLLISION WITH OBJECT

Phase of Operation: LANDING - ROLL

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Occurrence #3: OVERRUN

Phase of Operation: TAKEOFF - ABORTED

Findings

3. (F) AIRPORT FACILITIES, RUNWAY/LANDING AREA CONDITION - WET

4. (F) TERRAIN CONDITION - RAVINE

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Occurrence #4: NOSE OVER

Phase of Operation: LANDING - ROLL

## Factual Information

### Pilot Information

<b>Certificate:</b>	Private	<b>Age:</b>	35, 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>	Airplane	<b>Second Pilot Present:</b>	Yes
<b>Instructor Rating(s):</b>		<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>	Class 2 Valid Medical-w/ waivers/lim	<b>Last FAA Medical Exam:</b>	July 31, 1990
<b>Occupational Pilot:</b>	UNK	<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>	356 hours (Total, all aircraft), 77 hours (Total, this make and model), 246 hours (Pilot In Command, all aircraft), 8 hours (Last 90 days, all aircraft), 2 hours (Last 30 days, all aircraft)		

### Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	BEECH	<b>Registration:</b>	N9146S
<b>Model/Series:</b>	C23 C23	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>		<b>Amateur Built:</b>	
<b>Airworthiness Certificate:</b>		<b>Serial Number:</b>	M1769
<b>Landing Gear Type:</b>	Tricycle	<b>Seats:</b>	4
<b>Date/Type of Last Inspection:</b>	Unknown	<b>Certified Max Gross Wt.:</b>	2450 lbs
<b>Time Since Last Inspection:</b>	0 Hrs	<b>Engines:</b>	1 Reciprocating
<b>Airframe Total Time:</b>		<b>Engine Manufacturer:</b>	LYCOMING
<b>ELT:</b>	Installed, not activated	<b>Engine Model/Series:</b>	O-360-A4K
<b>Registered Owner:</b>		<b>Rated Power:</b>	180 Horsepower
<b>Operator:</b>	DAWSON, JOHN M.	<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>	Unknown	<b>Condition of Light:</b>	Not reported
<b>Observation Facility, Elevation:</b>	CLT ,749 ft msl	<b>Distance from Accident Site:</b>	20 Nautical Miles
<b>Observation Time:</b>	16:50 Local	<b>Direction from Accident Site:</b>	235°
<b>Lowest Cloud Condition:</b>	Clear	<b>Visibility</b>	
<b>Lowest Ceiling:</b>	Broken / 8000 ft AGL	<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>		<b>Temperature/Dew Point:</b>	-18°C / -18°C
<b>Precipitation and Obscuration:</b>			
<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>	16:45 Local	<b>Type of Airspace:</b>	

## Airport Information

<b>Airport:</b>	GOODNIGHT FIELD 4NC8	<b>Runway Surface Type:</b>	Grass/turf
<b>Airport Elevation:</b>	600 ft msl	<b>Runway Surface Condition:</b>	Wet
<b>Runway Used:</b>	33	<b>IFR Approach:</b>	None
<b>Runway Length/Width:</b>	2400 ft / 30 ft	<b>VFR Approach/Landing:</b>	None

## Wreckage and Impact Information

<b>Crew Injuries:</b>	1 None	<b>Aircraft Damage:</b>	Substantial
<b>Passenger Injuries:</b>	1 None	<b>Aircraft Fire:</b>	In-flight
<b>Ground Injuries:</b>	N/A	<b>Aircraft Explosion:</b>	In-flight
<b>Total Injuries:</b>	2 None	<b>Latitude, Longitude:</b>	35.400604,-80.589942(est)

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Hicks, Preston
<b>Additional Participating Persons:</b>	BOB SCHILLING; CHARLOTTE , NC
<b>Original Publish Date:</b>	March 31, 1993
<b>Last Revision Date:</b>	
<b>Investigation Class:</b>	<a href="#">Class</a>
<b>Note:</b>	
<b>Investigation Docket:</b>	<a href="https://data.nts.gov/Docket?ProjectID=8374">https://data.nts.gov/Docket?ProjectID=8374</a>

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