



# Aviation Investigation Final Report

<b>Location:</b>	CHAPEL HILL, North Carolina	<b>Accident Number:</b>	ATL94LA106
<b>Date &amp; Time:</b>	May 25, 1994, 14:30 Local	<b>Registration:</b>	N8527Q
<b>Aircraft:</b>	CESSNA A185F	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>		<b>Injuries:</b>	4 None
<b>Flight Conducted Under:</b>	Part 91: General aviation - Personal		

## Analysis

THE AIRPLANE WAS LANDING ON RUNWAY 27. THE PILOT REPORTED THE SURFACE WINDS TO BE FROM THE SOUTH AT 7 TO 10 KNOTS, WITH GUSTS TO 15 KNOTS. DURING THE LANDING ROLLOUT, A GUST OF WIND WAS ENCOUNTERED. THE PILOT LOST DIRECTIONAL CONTROL, AND THE AIRCRAFT DEPARTED THE RUNWAY SURFACE TO THE RIGHT. THE AIRCRAFT THEN GROUND LOOPED. THE PILOT REPORTED NO MECHANICAL MALFUNCTION OR FAILURE WITH THE AIRCRAFT.

## Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: THE PILOT'S INADEQUATE COMPENSATION FOR WIND CONDITIONS, AND HIS FAILURE TO MAINTAIN DIRECTIONAL CONTROL DURING THE LANDING ROLL. FACTORS WERE THE CROSSWINDS AND GUSTS PREVAILING AT THE AIRPORT AT THE TIME OF THE ACCIDENT.

## Findings

Occurrence #1: LOSS OF CONTROL - ON GROUND/WATER  
Phase of Operation: LANDING - ROLL

### Findings

1. (F) WEATHER CONDITION - GUSTS
2. (F) WEATHER CONDITION - CROSSWIND
3. (C) COMPENSATION FOR WIND CONDITIONS - INADEQUATE - PILOT IN COMMAND
4. (C) DIRECTIONAL CONTROL - NOT MAINTAINED - PILOT IN COMMAND

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Occurrence #2: ON GROUND/WATER ENCOUNTER WITH TERRAIN/WATER  
Phase of Operation: LANDING - ROLL

## Factual Information

On May 25, 1994, at 1430 eastern daylight time, a Cessna A185F, N8527Q, was substantially damaged during a loss of directional control while landing at the Horace Williams Airport in Chapel Hill, North Carolina. The airline transport pilot and three passengers were not injured. The aircraft was operated under 14 CFR Part 91 by the pilot. Visual meteorological conditions existed at the time, and an instrument flight rules flight plan was filed for the personal flight. The flight originated in Columbia, South Carolina at 1330.

The pilot reported the following: He landed the airplane on runway 27 following a normal approach. During the landing rollout, a gust of wind was encountered, which turned the aircraft sideways (toward the south). The aircraft departed the runway surface and ground looped. Structural damage to the right wing, right horizontal stabilizer, and right, main landing gear resulted. He reported no mechanical malfunction or failure with the aircraft.

The Horace Williams Airport does not have weather reporting capability. The pilot estimated the winds at the time of the accident to be out of the south at 7 to 10 knots, with gusts to 15 knots. The Raleigh-Durham International Airport, located about 13 miles east-southeast of Horace Williams, was reporting surface winds from 230 degrees at 10 knots, with no gusts, about 20 minutes after the accident.

### Pilot Information

<b>Certificate:</b>	Airline transport; Commercial	<b>Age:</b>	43, Male
<b>Airplane Rating(s):</b>	Single-engine land; Multi-engine land	<b>Seat Occupied:</b>	Left
<b>Other Aircraft Rating(s):</b>	None	<b>Restraint Used:</b>	
<b>Instrument Rating(s):</b>	Airplane	<b>Second Pilot Present:</b>	No
<b>Instructor Rating(s):</b>	Airplane single-engine; None	<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>	Class 1 Valid Medical-w/ waivers/lim	<b>Last FAA Medical Exam:</b>	March 28, 1994
<b>Occupational Pilot:</b>	UNK	<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>	4000 hours (Total, all aircraft), 2000 hours (Total, this make and model), 3850 hours (Pilot In Command, all aircraft)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	CESSNA	<b>Registration:</b>	N8527Q
<b>Model/Series:</b>	A185F A185F	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>		<b>Amateur Built:</b>	
<b>Airworthiness Certificate:</b>	Normal; Provisional (Special)	<b>Serial Number:</b>	18503726
<b>Landing Gear Type:</b>	Tailwheel	<b>Seats:</b>	6
<b>Date/Type of Last Inspection:</b>	April 1, 1994 Annual	<b>Certified Max Gross Wt.:</b>	3350 lbs
<b>Time Since Last Inspection:</b>	38 Hrs	<b>Engines:</b>	1 Reciprocating
<b>Airframe Total Time:</b>	2020 Hrs	<b>Engine Manufacturer:</b>	CONTINENTAL
<b>ELT:</b>	Installed, not activated	<b>Engine Model/Series:</b>	IO-520-D
<b>Registered Owner:</b>	NORTH STATE AIR SERVICE, INC.	<b>Rated Power:</b>	300 Horsepower
<b>Operator:</b>	COFFMAN, EDWARD K.	<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>	RDU ,437 ft msl	<b>Distance from Accident Site:</b>	14 Nautical Miles
<b>Observation Time:</b>	14:50 Local	<b>Direction from Accident Site:</b>	115°
<b>Lowest Cloud Condition:</b>	Scattered / 3000 ft AGL	<b>Visibility</b>	7 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>	230°	<b>Turbulence Severity Forecast/Actual:</b>	/
<b>Altimeter Setting:</b>	29 inches Hg	<b>Temperature/Dew Point:</b>	29°C / 19°C
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>	COLUMBIA , SC (CUB )	<b>Type of Flight Plan Filed:</b>	IFR
<b>Destination:</b>		<b>Type of Clearance:</b>	VFR;IFR
<b>Departure Time:</b>	13:30 Local	<b>Type of Airspace:</b>	Class G

## Airport Information

<b>Airport:</b>	HORACE WILLIAMS W52	<b>Runway Surface Type:</b>	Asphalt
<b>Airport Elevation:</b>	509 ft msl	<b>Runway Surface Condition:</b>	Dry
<b>Runway Used:</b>	27	<b>IFR Approach:</b>	None
<b>Runway Length/Width:</b>	4005 ft / 75 ft	<b>VFR Approach/Landing:</b>	Full stop;Traffic pattern

## Wreckage and Impact Information

<b>Crew Injuries:</b>	1 None	<b>Aircraft Damage:</b>	Substantial
<b>Passenger Injuries:</b>	3 None	<b>Aircraft Fire:</b>	None
<b>Ground Injuries:</b>	N/A	<b>Aircraft Explosion:</b>	None
<b>Total Injuries:</b>	4 None	<b>Latitude, Longitude:</b>	35.920364,-79.040725(est)

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Hicks, Ralph
<b>Additional Participating Persons:</b>	JANE T LAMBERT; WINSTON-SALEM , NC
<b>Original Publish Date:</b>	February 24, 1995
<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=3390">https://data.ntsb.gov/Docket?ProjectID=3390</a>

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