



Aviation Investigation Final Report

Location:	WAXHAW, North Carolina	Accident Number:	ATL91LA158
Date & Time:	August 14, 1991, 11:47 Local	Registration:	N6262P
Aircraft:	PIPER PA-24-250	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

THE NON-INSTRUMENT RATED PILOT WAS INFORMED THAT THE WEATHER AT HIS DESTINATION AIRPORT WAS IFR, HOWEVER HE ELECTED TO COMMENCE THE FLIGHT UNDER A VFR FLIGHT PLAN. WHILE FLYING BETWEEN CLOUD LAYERS EN ROUTE, THE WEATHER DETERIORATED, AND HE ENTERED IMC. WHILE BEING VECTORED TOWARD BETTER WEATHER CONDITIONS, HE BECAME DISORIENTED, AND ENTERED A HIGH SPEED DIVE. DURING THE RECOVERY FROM THE DIVE, APPROXIMATELY 50 PERCENT OF THE STABILATOR SEPARATED FROM THE AIRPLANE. THE PILOT WAS ABLE TO FLY THE AIRPLANE TO A NEARBY PRIVATE AIRPORT. HE LANDED THE AIRPLANE HARD ON THE GRASS ADJACENT TO THE RUNWAY. AN INSPECTION OF THE STABILATOR SURFACES REVEALED A POSITIVE 'G' OVERLOAD FAILURE; THERE WAS NO EVIDENCE OF METAL FATIGUE.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: THE SPATIAL DISORIENTATION EXPERIENCED BY THE PILOT IN IMC, HIS FAILURE TO MAINTAIN AIRCRAFT CONTROL, AND THE EXCEEDING OF THE DESIGN STRESS LIMITS OF THE AIRCRAFT. FACTOR(S) IN THIS ACCIDENT WERE: THE PILOT'S INADEQUATE PREFLIGHT PLANNING, THE VFR FLIGHT INTO IMC, HIS POOR JUDGEMENT, HIS OVERCONFIDENCE IN HIS PERSONAL ABILITY, AND HIS LACK OF EXPERIENCE IN INSTRUMENT FLYING.

Findings

Occurrence #1: IN FLIGHT ENCOUNTER WITH WEATHER

Phase of Operation: CRUISE

Findings

1. WEATHER CONDITION - CLOUDS
2. (F) PREFLIGHT PLANNING/PREPARATION - INADEQUATE - PILOT IN COMMAND
3. (F) VFR FLIGHT INTO IMC - PERFORMED - PILOT IN COMMAND
4. (F) JUDGMENT - POOR - PILOT IN COMMAND
5. (F) OVERCONFIDENCE IN PERSONAL ABILITY - PILOT IN COMMAND
6. (F) LACK OF TOTAL EXPERIENCE IN TYPE OPERATION - PILOT IN COMMAND

Occurrence #2: LOSS OF CONTROL - IN FLIGHT

Phase of Operation: CRUISE

Findings

7. (C) AIRCRAFT CONTROL - NOT MAINTAINED - PILOT IN COMMAND
8. (C) SPATIAL DISORIENTATION - PILOT IN COMMAND

Occurrence #3: AIRFRAME/COMPONENT/SYSTEM FAILURE/MALFUNCTION

Phase of Operation: DESCENT - UNCONTROLLED

Findings

9. FLIGHT CONTROL, STABILATOR - OVERLOAD
10. (C) DESIGN STRESS LIMITS OF AIRCRAFT - EXCEEDED - PILOT IN COMMAND

Occurrence #4: HARD LANDING

Phase of Operation: LANDING - FLARE/TOUCHDOWN

Factual Information

Pilot Information

Certificate:	Private	Age:	60, Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 2 Valid Medical-w/ waivers/lim	Last FAA Medical Exam:	January 14, 1991
Occupational Pilot:	UNK	Last Flight Review or Equivalent:	
Flight Time:	3098 hours (Total, all aircraft), 316 hours (Total, this make and model), 3098 hours (Pilot In Command, all aircraft), 6 hours (Last 90 days, all aircraft), 3 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	PIPER	Registration:	N6262P
Model/Series:	PA-24-250 PA-24-250	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	241370
Landing Gear Type:	Retractable - Tricycle	Seats:	4
Date/Type of Last Inspection:	August 31, 1991 Annual	Certified Max Gross Wt.:	2800 lbs
Time Since Last Inspection:	69 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	2706 Hrs	Engine Manufacturer:	LYCOMING
ELT:		Engine Model/Series:	O-540-A1A4
Registered Owner:	KEMP, JAMES O.	Rated Power:	250 Horsepower
Operator:	KEMP, JAMES O.	Operating Certificate(s) Held:	None
Operator Does Business As:		Operator Designator Code:	

Meteorological Information and Flight Plan

Conditions at Accident Site:	Instrument (IMC)	Condition of Light:	Day
Observation Facility, Elevation:	CLT ,749 ft msl	Distance from Accident Site:	15 Nautical Miles
Observation Time:	11:50 Local	Direction from Accident Site:	340°
Lowest Cloud Condition:	Unknown	Visibility	1 miles
Lowest Ceiling:	Broken / 800 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	3 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	110°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	23°C / 22°C
Precipitation and Obscuration:	N/A - None - Fog		
Departure Point:	JACKSONVILLE , FL (CRG)	Type of Flight Plan Filed:	VFR
Destination:	HICKORY , NC (HKY)	Type of Clearance:	VFR
Departure Time:	08:03 Local	Type of Airspace:	

Airport Information

Airport:	AERO PLANTATION NC21	Runway Surface Type:	Asphalt
Airport Elevation:	634 ft msl	Runway Surface Condition:	
Runway Used:	6	IFR Approach:	None
Runway Length/Width:	2400 ft / 60 ft	VFR Approach/Landing:	Full stop

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 None	Latitude, Longitude:	34.919624,-80.740875(est)

Administrative Information

Investigator In Charge (IIC): Hicks jr., Ralph

Additional Participating Persons: HAROLD R CADMUS; CHARLOTTE , NC
DONALD E GARDNER; CHARLOTTE , NC

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Last Revision Date:

Investigation Class: [Class](#)

Note:

Investigation Docket: <https://data.nts.gov/Docket?ProjectID=8456>

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