



Aviation Investigation Final Report

Location:	NEW BERN, North Carolina	Accident Number:	ATL88LA212
Date & Time:	July 10, 1988, 02:00 Local	Registration:	N670R
Aircraft:	CESSNA 310	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 Minor, 4 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

THE PLT RPTD THE LT ENGINE LOST PWR ON 'VERY SHORT FINAL'. SHORTLY THEREAFTER, HE HEARD THE STALL WARNING. THE AIRPLANE ROLLED AND YAWED LEFT, AND CRASHED NOSE-DOWN SHORT OF THE RWY. THE ACFT WAS EXAMINED THE NEXT DAY BY AN FAA INSPECTOR; HE RPTD FINDING NO EVIDENCE OF A MECH MALFUNCTION. HE ESTIMATED THAT ONLY 3 GAL OF FUEL REMAINED IN THE LT MAIN TANK: THE RT MAIN & 2 AUX TANKS HAD SUSTAINED IMPACT DAMAGE AND WERE EMPTY. THE INST PANEL CONTAINED A PLACARD IAW AD 69-15-09 WHICH STATED THAT OPS W/ LESS THAN 5 GAL IN EA MAIN TANK WAS PROHIBITED. THE PLT INDICATED THAT HE THOUGHT THE UNUSABLE QTY WAS 1 GAL PER TANK. HE RPTD THAT THE FUEL GAUGES HAD INDICATED 7 GAL IN EA MAIN TANK AND 10-11 GAL IN EA AUX TANK DURING FINAL APPCH, AND THAT HE FOUND AN ESTIMATED 5-7 GAL OF FUEL REMAINING IN THE LT MAIN TANK SHORTLY AFTER THE ACCIDENT. HE NOTED THAT HE HAD STOPPED USING THE AUX TANKS EARLIER IN THE FLT WHEN THE RT ENGINE BEGAN TO RUN ROUGH; THE ROUGHNESS CEASED WHEN HE SWITCHED BACK TO THE MAINS.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be:

Findings

Occurrence #1: LOSS OF ENGINE POWER(TOTAL) - NONMECHANICAL
Phase of Operation: APPROACH - VFR PATTERN - FINAL APPROACH

Findings

1. (F) 1 ENGINE
 2. (C) FLUID,FUEL - STARVATION
 3. (C) PROCEDURES/DIRECTIVES - NOT FOLLOWED - PILOT IN COMMAND
 4. (F) LACK OF FAMILIARITY WITH AIRCRAFT - PILOT IN COMMAND
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Occurrence #2: LOSS OF CONTROL - IN FLIGHT
Phase of Operation: APPROACH - VFR PATTERN - FINAL APPROACH

Findings

5. (C) AIRSPEED(VMC) - NOT MAINTAINED - PILOT IN COMMAND
 6. (C) STALL - INADVERTENT - PILOT IN COMMAND
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Occurrence #3: IN FLIGHT COLLISION WITH TERRAIN/WATER
Phase of Operation: DESCENT - UNCONTROLLED

Factual Information

Pilot Information

Certificate:	Private	Age:	37, Male
Airplane Rating(s):	Single-engine land; Multi-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:	October 27, 1987
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:	615 hours (Total, all aircraft), 258 hours (Total, this make and model), 447 hours (Pilot In Command, all aircraft), 46 hours (Last 90 days, all aircraft), 3 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	CESSNA	Registration:	N670R
Model/Series:	310 310	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	35081
Landing Gear Type:	Retractable - Tricycle	Seats:	6
Date/Type of Last Inspection:	September 2, 1987 Annual	Certified Max Gross Wt.:	5200 lbs
Time Since Last Inspection:	21 Hrs	Engines:	2 Reciprocating
Airframe Total Time:	4126 Hrs	Engine Manufacturer:	CONTINENTAL
ELT:	Installed, not activated	Engine Model/Series:	IO-470
Registered Owner:	HEDGES, KENNETH C.	Rated Power:	260 Horsepower
Operator:	FALCON AIR SERVICE	Operating Certificate(s) Held:	None
Operator Does Business As:	FALCON AIR SERVICE	Operator Designator Code:	

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Night/dark
Observation Facility, Elevation:	EWN ,19 ft msl	Distance from Accident Site:	
Observation Time:	01:55 Local	Direction from Accident Site:	
Lowest Cloud Condition:	Clear	Visibility	7 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	6 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	220°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	24°C / 22°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	ELIZABETH CITY , NC (ECG)	Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	01:20 Local	Type of Airspace:	

Airport Information

Airport:	SIMMONS NOTT EWN	Runway Surface Type:	Asphalt
Airport Elevation:	19 ft msl	Runway Surface Condition:	Dry
Runway Used:	22	IFR Approach:	None
Runway Length/Width:	4804 ft / 150 ft	VFR Approach/Landing:	Full stop

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	1 Minor, 3 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Minor, 4 None	Latitude, Longitude:	35.110763,-77.070251(est)

Administrative Information

Investigator In Charge (IIC):	Strickland, Scott
Additional Participating Persons:	CHARLES W HOLLY; MORRISVILLE , NC
Original Publish Date:	September 25, 1989
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=7786

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The NTSB does not assign fault or blame for an accident or incident; rather, as specified by NTSB regulation, “accident/incident investigations are fact-finding proceedings with no formal issues and no adverse parties ... and are not conducted for the purpose of determining the rights or liabilities of any person” (Title 49 *Code of Federal Regulations* section 831.4). Assignment of fault or legal liability is not relevant to the NTSB’s statutory mission to improve transportation safety by investigating accidents and incidents and issuing safety recommendations. In addition, statutory language prohibits the admission into evidence or use of any part of an NTSB report related to an accident in a civil action for damages resulting from a matter mentioned in the report (Title 49 *United States Code* section 1154(b)). A factual report that may be admissible under 49 *United States Code* section 1154(b) is available [here](#).