

Aviation Investigation Final Report

Location:	RIDGELAND, South Carolina	Accident Number:	ATL86LA216
Date & Time:	August 5, 1986, 12:00 Local	Registration:	N7946V
Aircraft:	AERO COMMANDER CALLAIR A-9B	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

THE PILOT WAS PERFORMING A TEST FLIGHT TO TEST A NEW SPRAY PUMP WHICH WAS RECENTLY INSTALLED ON THE AIRCRAFT. FOLLOWING A LOW PASS OVER THE RUNWAY THE PILOT HEARD A GRINDING NOISE FROM THE LEFT SIDE OF THE AIRCRAFT. SHORTLY THEREAFTER THE AIRCRAFT LOST TOTAL POWER AND THE PILOT LANDED IN A FIELD SHORT OF THE RUNWAY. POST CRASH EXAMINATION REVEALED THAT THE ENGINE LOST POWER DUE TO FUEL STARVATION. THE PILOT ALLOWED THE LEFT FUEL TANK TO RUN DRY. THE CAUSE OF THE GRINDING NOISE WAS NOT DISCOVERED IN POST ACC INVESTIGATION.

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: MANEUVERING - TURN TO REVERSE DIRECTION

Findings

- 1. (C) FLUID, FUEL EXHAUSTION
- 2. (C) FUEL TANK SELECTOR POSITION IMPROPER PILOT IN COMMAND
- 3. (C) PROCEDURES/DIRECTIVES NOT UNDERSTOOD PILOT IN COMMAND

Occurrence #2: FORCED LANDING Phase of Operation: LANDING - FLARE/TOUCHDOWN

Occurrence #3: HARD LANDING Phase of Operation: LANDING - FLARE/TOUCHDOWN

Factual Information

Pilot Information

Certificate:	Commercial	Age:	36,Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Center
Other Aircraft Rating(s):	Helicopter	Restraint Used:	
Instrument Rating(s):	Helicopter	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 2 Valid Medicalno waivers/lim.	Last FAA Medical Exam:	August 9, 1985
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	
Flight Time:	1744 hours (Total, all aircraft), 4 hours (Total, this make and model), 4 hours (Last 90 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	AERO COMMANDER	Registration:	N7946V
Model/Series:	CALLAIR A-9B CALLAIR A-	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Restricted (Special)	Serial Number:	1567
Landing Gear Type:	Tricycle	Seats:	1
Date/Type of Last Inspection:	July 23, 1986 Annual	Certified Max Gross Wt.:	3000 lbs
Time Since Last Inspection:	5 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	2651 Hrs	Engine Manufacturer:	LYCOMING
ELT:	Not installed	Engine Model/Series:	IO-540-T4B5D
Registered Owner:		Rated Power:	260 Horsepower
Operator:	JAMES E.TUTEN	Operating Certificate(s) Held:	None
Operator Does Business As:		Operator Designator Code:	

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:		Distance from Accident Site:	
Observation Time:		Direction from Accident Site:	
Lowest Cloud Condition:	Clear	Visibility	5 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	5 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	120°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:		Temperature/Dew Point:	32°C / 24°C
Precipitation and Obscuration:	No Obscuration; No Precipita	ation	
Departure Point:	RIDGELAND , SC	Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	12:30 Local	Type of Airspace:	Class G

Airport Information

Airport:		Runway Surface Type:	
Airport Elevation:		Runway Surface Condition:	
Runway Used:	0	IFR Approach:	None
Runway Length/Width:		VFR Approach/Landing:	

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:	32.480693,-80.980781(est)

Administrative Information

Investigator In Charge (IIC):	Henderson, Dennis	
Additional Participating Persons:	WILLIAM NEELY; COLUMBIA , SC	
Original Publish Date:		
Last Revision Date:		
Investigation Class:	<u>Class</u>	
Note:		
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=7164	

The National Transportation Safety Board (NTSB) is an independent federal agency charged by Congress with investigating every civil aviation accident in the United States and significant events in other modes of transportation—railroad, transit, highway, marine, pipeline, and commercial space. We determine the probable causes of the accidents and events we investigate, and issue safety recommendations aimed at preventing future occurrences. In addition, we conduct transportation safety research studies and offer information and other assistance to family members and survivors for each accident or event we investigate. We also serve as the appellate authority for enforcement actions involving aviation and mariner certificates issued by the Federal Aviation Administration (FAA) and US Coast Guard, and we adjudicate appeals of civil penalty actions taken by the FAA.

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.