

**National Transportation Safety Board
Washington, DC 20594**

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Brief of Accident

Adopted 10/20/1994

ATL94FA030 File No. 1921	12/11/1993	CHAPEL HILL ,NC	Aircraft Reg No. N9864R	Time (Local): 16:15 EST
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Make/Model:	Beech/M35
Engine Make/Model:	Continental / IO-470-C
Aircraft Damage:	Destroyed
Number of Engines:	1
Operating Certificate(s):	None
Type of Flight Operation:	Personal
Reg. Flight Conducted Under:	Part 91: General Aviation

	Fatal	Serious	Minor/None
Crew	1	0	0
Pass	2	0	0

Last Depart. Point:	Same as Accident/Incident Location
Destination:	MANTEO, NC
Airport Proximity:	Off Airport/Airstrip

Condition of Light:	Day
Weather Info Src:	Weather Observation Facility
Basic Weather:	Visual Conditions
Lowest Ceiling:	9000 Ft. AGL, Broken
Visibility:	15.00 SM
Wind Dir/Speed:	310 / 018 kts
Temperature (°C):	3
Precip/Obscuration:	

Pilot-in-Command	Age: 43
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Flight Time (Hours)

Certificate(s)/Rating(s)
Private; Single-engine Land

Total All Aircraft: 280
Last 90 Days: Unk/Nr
Total Make/Model: Unk/Nr
Total Instrument Time: Unk/Nr

Instrument Ratings
None

*** Note: NTSB investigators either traveled in support of this investigation or conducted a significant amount of investigative work without any travel, and used data obtained from various sources to prepare this aircraft accident report. ***

AT ABOUT 2500 FEET, SHORTLY AFTER DEPARTURE, THE PILOT REPORTED TO ATC THAT HE WAS EXPERIENCING ENGINE PROBLEMS AND NEEDED TO RETURN TO THE AIRPORT. THE PILOT WAS GIVEN A WESTERLY HEADING TO THE AIRPORT, BUT HE REPORTED HE DID NOT HAVE SUFFICIENT ALTITUDE TO REACH THE AIRPORT. THE AIRCRAFT IMPACTED THE TERRAIN IN A WOODED AREA ABOUT 15 FEET WEST OF AN OPEN FIELD. THE AIRCRAFT FUSELAGE WAS CONSUMED IN THE POST CRASH FIRE. EXAMINATION OF THE ENGINE REVEALED THAT THE CONNECTING ROD END BUSHINGS HAD NOT BEEN BORED TO THE PROPER DIAMETER. THE ENGINE CRANKSHAFT FRACTURED FOLLOWING HEAT STRESS FROM THE CONNECTING ROD RUBBING AGAINST THE CRANKSHAFT CHEEK.

Brief of Accident (Continued)

ATL94FA030
File No. 1921 12/11/1993 CHAPEL HILL ,NC Aircraft Reg No. N9864R Time (Local): 16:15 EST

Occurrence #1: LOSS OF ENGINE POWER
Phase of Operation: CLIMB - TO CRUISE

Findings

1. ENGINE ASSEMBLY,CONNECTING ROD - MOVEMENT RESTRICTED
 2. ENGINE ASSEMBLY,OTHER - BINDING(MECHANICAL)
 3. (C) MAINTENANCE,OVERHAUL - IMPROPER - OTHER MAINTENANCE PERSONNEL
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Occurrence #2: FORCED LANDING
Phase of Operation: DESCENT - EMERGENCY

Occurrence #3: LOSS OF CONTROL - IN FLIGHT
Phase of Operation: LANDING

Findings

4. AIRCRAFT CONTROL - NOT MAINTAINED - PILOT IN COMMAND
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Occurrence #4: IN FLIGHT COLLISION WITH TERRAIN/WATER
Phase of Operation: DESCENT - UNCONTROLLED

Findings Legend: (C) = Cause, (F) = Factor

The National Transportation Safety Board determines the probable cause(s) of this accident as follows:
The improper engine overhaul by maintenance personnel. A factor in the accident was the failure of the engine crankshaft.