



National Transportation Safety Board Aviation Accident Final Report

Location:	ATLANTA, GA	Accident Number:	ATL84MA296
Date & Time:	09/24/1984, 1609 EDT	Registration:	N9193Y
Aircraft:	PIPER PA-31T3	Aircraft Damage:	Substantial
Defining Event:		Injuries:	6 Serious, 5 Minor
Flight Conducted Under:	Part 135: Air Taxi & Commuter - Scheduled		

Analysis

THE NORMAL FUEL LOAD FOR THE FLT WAS 1500 LBS, BUT WITH A FORECAST TAIL WIND & AN ESTIMATED FLT TIME FOR ONLY 1+10, THE CREW ACCEPTED THE LOWER INDCTD (950 LB) FUEL LOAD. THE FLT WAS UNEVENTFUL UNTIL AN INDCTN OF 250 LBS PER SIDE, THEN THE FUEL 'SEEMED TO DISSIPATE FASTER.' WITH AN INDCTN OF 150 LBS ON DWNWND, THE COPLT RCMDD DECLARING AN EMERGENCY. THE CAPT'S RESPONSE WAS TO ASK ATC FOR THE ANTICIPATED LENGTH OF THE DWNWND LEG. HE WAS TOLD 20 MI. PRIORITY HNDLG WAS REQUESTED, BUT WAS ONLY AVAILABLE FOR A DECLARED EMERGENCY. THE APCH WAS CONTD WITH NORMAL HNDLG FOR APRX 10 MIN. AT 1608:39, THE CREW DECLARED AN EMERGENCY, THEN RPRTD THE ACFT WAS OUT OF FUEL. IT CRASH LANDED ON ROUGH TERRAIN, SHORT OF RWY 8. AN EXAM REVEALED FUEL SENSORS HAD BEEN IMPROPERLY INSTALLED (INTERCHANGED BTN THE INBRD & OUTBRD TANKS). THUS THE GAGES INDCTD ABOUT 180 LBS MORE THAN THE APRX 763 LBS THAT WAS ACTUALLY ABOARD AT TKOF. A SPCL 500 HR INSPN OF THE ENTIRE FUEL SYS WAS MADE ON 7/8/84 USING THE 'WET' METHOD, BUT ONLY THE CAPACITANCE METHOD CHECKS EACH INDIVIDUAL SENSOR

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 - FAF/OUTER MARKER TO THRESHOLD (IFR)

Findings

1. (F) FUEL SYSTEM - INCORRECT
2. (F) MAINTENANCE, INSTALLATION - IMPROPER
3. (F) ENGINE INSTRUMENTS, FUEL QUANTITY GAGE - FALSE INDICATION
4. MAINTENANCE, INSPECTION - INADEQUATE
5. (F) PROCEDURE INADEQUATE - MANUFACTURER
6. (F) FLUID, FUEL - LOW LEVEL
7. (C) IN-FLIGHT PLANNING/DECISION - IMPROPER - PILOT IN COMMAND
8. (C) REMEDIAL ACTION - DELAYED - PILOT IN COMMAND
9. (C) FLUID, FUEL - EXHAUSTION
10. FUEL SUPPLY - INADEQUATE

Occurrence #2: FORCED LANDING
Phase of Operation: APPROACH - FAF/OUTER MARKER TO THRESHOLD (IFR)

Occurrence #3: IN FLIGHT COLLISION WITH TERRAIN/WATER
Phase of Operation: LANDING - FLARE/TOUCHDOWN

Findings

11. (F) TERRAIN CONDITION - ROUGH/UNEVEN

Factual Information

Pilot Information

Certificate:	Airline Transport; Flight Instructor	Age:	34, Male
Airplane Rating(s):	Multi-engine Land; Single-engine Land	Seat Occupied:	Left
Other Aircraft Rating(s):		Restraint Used:	Seatbelt, Shoulder harness
Instrument Rating(s):	Airplane	Second Pilot Present:	Yes
Instructor Rating(s):	Airplane Multi-engine; Helicopter	Toxicology Performed:	No
Medical Certification:	Class 2 Valid Medical--no waivers/lim.	Last FAA Medical Exam:	05/05/1984
Occupational Pilot:	Last Flight Review or Equivalent:		
Flight Time:	3309 hours (Total, all aircraft), 439 hours (Total, this make and model), 3154 hours (Pilot In Command, all aircraft), 245 hours (Last 90 days, all aircraft), 87 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	PIPER	Registration:	N9193Y
Model/Series:	PA-31T3 PA-31T3	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Normal	Serial Number:	31T-8275010
Landing Gear Type:	Retractable - Tricycle	Seats:	11
Date/Type of Last Inspection:	09/18/1984, AAIP	Certified Max Gross Wt.:	9050 lbs
Time Since Last Inspection:	30 Hours	Engines:	2 Turbo Prop
Airframe Total Time:	1857 Hours	Engine Manufacturer:	P&W
ELT:	Installed, activated	Engine Model/Series:	PT6A-11
Registered Owner:	HRS TEXTILES, INC.	Rated Power:	500 hp
Operator:	PEE DEE AIR EXPRESS, INC	Operating Certificate(s) Held:	Commuter Air Carrier (135)
Operator Does Business As:	TRANS SOUTHERN AIRWAYS	Operator Designator Code:	

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	AT, 1024 ft msl	Distance from Accident Site:	1 Nautical Miles
Observation Time:	1614 EDT	Direction from Accident Site:	90°
Lowest Cloud Condition:	Thin Broken / 25000 ft agl	Visibility	7 Miles
Lowest Ceiling:	None / 0 ft agl	Visibility (RVR):	0 ft
Wind Speed/Gusts:	6 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	150°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	29° C / 13° C
Precipitation and Obscuration:			
Departure Point:	FLORENCE, SC (FLO)	Type of Flight Plan Filed:	IFR
Destination:		Type of Clearance:	IFR
Departure Time:	1446 EDT	Type of Airspace:	Class D; Class E

Airport Information

Airport:	HARTSFIELD AIRPORT (ATL)	Runway Surface Type:	Concrete
Airport Elevation:	1026 ft	Runway Surface Condition:	Dry
Runway Used:	8	IFR Approach:	ILS
Runway Length/Width:	10000 ft / 150 ft	VFR Approach/Landing:	Forced Landing

Wreckage and Impact Information

Crew Injuries:	1 Serious, 1 Minor	Aircraft Damage:	Substantial
Passenger Injuries:	5 Serious, 4 Minor	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	6 Serious, 5 Minor	Latitude, Longitude:	

Administrative Information

Investigator In Charge (IIC):	PRESTON E HICKS	Report Date:	
Additional Participating Persons:			
Publish Date:			
Investigation Docket:	NTSB accident and incident dockets serve as permanent archival information for the NTSB's investigations. Dockets released prior to June 1, 2009 are publicly available from the NTSB's Record Management Division at pubinquiry@ntsb.gov , or at 800-877-6799. Dockets released after this date are available at http://dms.nts.gov/pubdms/ .		

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