



National Transportation Safety Board Aviation Accident Final Report

Location:	DALLAS, TX	Accident Number:	FTW90FA097
Date & Time:	04/20/1990, 0111 CDT	Registration:	N770X
Aircraft:	BEECH 58	Aircraft Damage:	Destroyed
Defining Event:		Injuries:	1 Fatal
Flight Conducted Under:	Part 135: Air Taxi & Commuter - Non-scheduled		

Analysis

THE PLT STARTED TO TAKE OFF ON RWY 13R, BUT ABORTED, TAXIED OFF THE RWY & WENT TO THE ENG RUN-UP AREA. ABT 2 MIN LATER, HE ANNOUNCED AGAIN THAT HE WAS READY TO DEPART & WAS CLRD TO TAKE OFF. DURING THE INITIAL CLIMB AFTER LIFT-OFF, THE PLT STATED THAT HE NEEDED TO RETURN FOR LNDG. HE WAS CLRD TO LND ON ANY RWY & HE DECIDED TO LND ON RWY 31L. WITNESSES OBSERVED THE ACFT IN A SHARP DSCNDG TURN FROM ABT 800' AGL AS IT WAS MANEUVERED BACK TOWARD THE RWY. HOWEVER, THE DSCNT RATE INCREASED, THEN THE ACFT CRASHED ABT 1000' SHORT OF THE RWY. DURING IMPACT, IT HIT A LAMP POLE & POWER LINE, THEN CAME TO REST & BURNED. THE FUEL BOOST PUMP SWITCHES WERE FND IN THE 'HIGH' BOOST POSITIONS & THE RGT PROP CONTROL WAS FND IN THE FEATHER POSITION. THE FLT MANUAL RCMDD THAT THE BOOST PUMPS BE IN THE 'LOW' POSITION FOR TAKEOFFS & LNDGS. A TEST OF THE USE OF THE HIGH BOOST POSITION IN A SIMILAR ACFT RESULTED IN A ROUGH RUNNING ENG & ENG STOPPAGE. A WITNESS TO THE ACDNT RPRTD THAT HE HEARD THE ENG SPUTTERING & MISFIRING BEFORE THE ACFT CRASHED.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: THE PILOT'S IMPROPER USE OF THE FUEL BOOST PUMPS FOR TAKE, AND HIS FAILURE TO MAINTAIN AIRSPEED ABOVE THE MINIMUM SINGLE ENGINE CONTROL SPEED (VMC), WHICH RESULTED IN A LOSS OF AIRCRAFT CONTROL.

Findings

Occurrence #1: LOSS OF ENGINE POWER(TOTAL) - NONMECHANICAL
Phase of Operation: TAKEOFF - INITIAL CLIMB

Findings

1. 1 ENGINE
2. (C) FUEL BOOST PUMP SELECTOR POSITION - IMPROPER - PILOT IN COMMAND

Occurrence #2: LOSS OF CONTROL - IN FLIGHT
Phase of Operation: MANEUVERING - TURN TO LANDING AREA (EMERGENCY)

Findings

3. PRECAUTIONARY LANDING - INITIATED - PILOT IN COMMAND
4. (C) AIRSPEED(VMC) - NOT MAINTAINED - PILOT IN COMMAND
5. (C) AIRCRAFT CONTROL - NOT MAINTAINED - PILOT IN COMMAND

Occurrence #3: IN FLIGHT COLLISION WITH TERRAIN/WATER
Phase of Operation: MANEUVERING - TURN TO LANDING AREA (EMERGENCY)

Factual Information

Pilot Information

Certificate:	Airline Transport; Flight Instructor; Commercial	Age:	36, Male
Airplane Rating(s):	Multi-engine Land; Single-engine Land	Seat Occupied:	Unknown
Other Aircraft Rating(s):	None	Restraint Used:	Seatbelt, Shoulder harness
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):		Toxicology Performed:	Yes
Medical Certification:	Class 1 Valid Medical--no waivers/lim.	Last FAA Medical Exam:	02/13/1990
Occupational Pilot:		Last Flight Review or Equivalent:	
Flight Time:	3631 hours (Total, all aircraft), 120 hours (Total, this make and model), 3516 hours (Pilot In Command, all aircraft), 120 hours (Last 90 days, all aircraft), 63 hours (Last 30 days, all aircraft), 3 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	BEECH	Registration:	N770X
Model/Series:	58 58	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:		Serial Number:	TH23
Landing Gear Type:	Retractable - Tricycle	Seats:	2
Date/Type of Last Inspection:	Unknown	Certified Max Gross Wt.:	5400 lbs
Time Since Last Inspection:	0 Hours	Engines:	2 Reciprocating
Airframe Total Time:		Engine Manufacturer:	CONTINENTAL
ELT:	Installed, not activated	Engine Model/Series:	IO-520-C
Registered Owner:		Rated Power:	285 hp
Operator:	AIR EXCHANGE INC	Operating Certificate(s) Held:	On-demand Air Taxi (135)

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Night/Dark
Observation Facility, Elevation:	DAL, 487 ft msl	Distance from Accident Site:	1 Nautical Miles
Observation Time:	0124 CDT	Direction from Accident Site:	310°
Lowest Cloud Condition:	Unknown / 0 ft agl	Visibility	7 Miles
Lowest Ceiling:	Overcast / 4000 ft agl	Visibility (RVR):	0 ft
Wind Speed/Gusts:	12 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	160°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30.1 inches Hg	Temperature/Dew Point:	19° C / 16° C
Precipitation and Obscuration:			
Departure Point:	(DAL)	Type of Flight Plan Filed:	IFR
Destination:	ABILENE, TX (ABI)	Type of Clearance:	IFR
Departure Time:	0110 CDT	Type of Airspace:	

Airport Information

Airport:	LOVE FIELD (DAL)	Runway Surface Type:	Concrete
Airport Elevation:	487 ft	Runway Surface Condition:	Dry
Runway Used:	31L	IFR Approach:	None
Runway Length/Width:	8800 ft / 150 ft	VFR Approach/Landing:	Precautionary Landing

Wreckage and Impact Information

Crew Injuries:	1 Fatal	Aircraft Damage:	Destroyed
Passenger Injuries:	N/A	Aircraft Fire:	On-Ground
Ground Injuries:	N/A	Aircraft Explosion:	On-Ground
Total Injuries:	1 Fatal	Latitude, Longitude:	

Administrative Information

Investigator In Charge (IIC):	RAY WALL	Report Date:	03/17/1992
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 pubinq@ntsb.gov , or at 800-877-6799. Dockets released after this date are available at http://dms.nts.gov/pubdms/ .		

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