Aviation Investigation Final Report

Location:	ATLANTA, Georgia	**Accident Number:**	ATL99FA102
Date & Time:	June 29, 1999, 06:25 Local	**Registration:**	N17915
Aircraft:	Beech BE-58	**Aircraft Damage:**	Destroyed
Defining Event:		**Injuries:**	2 Fatal
Flight Conducted Under:	Part 135: Air taxi & commuter - Non-scheduled		

Analysis

Shortly after takeoff the pilot reported that he had an engine problem and requested to return to the airport. The controller cleared the flight to land on any runway. A witness reported hearing only one engine running. The pilot maneuvered west of the airport and subsequently collided with trees and burst into flames. Both propellers revealed low-pitch blade angle. No evidence of mechanical malfunction was found.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The loss of engine power for undetermined reasons, and the pilot's failure to follow emergency procedures that resulted in the uncontrolled collision with trees.

Findings

Occurrence #1: LOSS OF ENGINE POWER
Phase of Operation: TAKEOFF - INITIAL CLIMB

Findings
1. 1 ENGINE
2. (C) REASON FOR OCCURRENCE UNDETERMINED

Occurrence #2: FORCED LANDING
Phase of Operation: DESCENT - EMERGENCY

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

Findings
3. (C) EMERGENCY PROCEDURE - NOT FOLLOWED - PILOT IN COMMAND

Occurrence #4: IN FLIGHT COLLISION WITH OBJECT
Phase of Operation: DESCENT - UNCONTROLLED

Findings
4. OBJECT - TREE(S)

Factual Information

HISTORY OF FLIGHT

On June 29, 1999, at 0625, eastern daylight time, a Beech 58, N17915, collided with trees and burst into flames during an attempted forced landing following a takeoff from Fulton County Airport, in Atlanta, Georgia. The cargo flight was operated by Paragon Air Express as Flight 711 under the provisions of 14 CFR Part 135 with an instrument flight rules (IFR) clearance. Instrument meteorological conditions prevailed at the time of the accident. The commercial pilot and the second pilot were fatally injured; the airplane was destroyed. The cargo flight departed Atlanta, Georgia, at 0623.

At 0612, the pilot of N17915 radioed Fulton County Control Tower and requested taxi instructions and an instrument flight clearance to Mobile, Alabama. The pilot was instructed to taxi to runway 26 for takeoff. The pilot was issued an as-filed instrument flight clearance and was subsequently cleared for takeoff. Shortly after takeoff, the pilot radioed to Fulton County Tower that he had an engine problem, and requested to return to the airport. The tower controller cleared the airplane to land on any runway at the airport.

According to an aircraft mechanic located in a hangar at Fulton County Airport, he could only hear one engine running as the pilot maneuvered west of the airport. Another witness driving east on Interstate 20 observed the airplane as it flew low over the highway, made a right turn and subsequently collided with trees and burst into flames. Within minutes of the accident, rescue efforts were attempted by volunteers and others traveling east on interstate I-20.

AIRCRAFT INFORMATION

The Beech BE-58, N17915, was owned and operated by Paragon Air Express Inc., of Nashville, Tennessee. The BE-58 is a low-wing, multi-engine airplane powered by two Teledyne Continental IO-520C8, 285 horsepower engines. The airplane was also equipped with two two-bladed McCauley propeller assemblies. The airplane was equipped with standard navigation lights. A review of recovered aircraft maintenance logbooks showed that the airplane had undergone a hundred-hour inspection on June 16, 1999, and flown 80 hours since that inspection. The review of the Beech BE-58 performance data showed that the airplane is certified to operate in a single-engine configuration at gross weight.

PERSONNEL INFORMATION

The Beech BE-58 pilot-in-command, held a commercial pilot certificate with airplane single and multiengine land instrument ratings. His total flying time was 1500 hours, approximately 210 hours of which were in the Beech BE-58 airplane. The pilot also held a current first class

medical certificate with no limitations. Official training and employment records for the pilot-in-command showed that he was hired by Paragon Air Express Inc., on April 12, 1999. The flight training records also showed that the pilot in command completed flight check requirements Parts 135. 293,297,and 299 on April 19, 1999. According to the FAA Airman Competency /Proficiency Check form, the pilot-in-command completed all required maneuvers and emergency procedures in the Beech BE-58 airplane in accordance with established standards.

The second pilot or second-in-command, held a commercial pilot certificate with airplane single and multiengine land instrument ratings. His total flying time was 613 hours, approximately 113 hours of which were in the Beech BE-58 airplane. The second-in command also held a current second-class medical certificate with no limitations.

Official training records for the pilot-in-command showed that he was hired by Paragon Air Express Inc., on April 12, 1999, and he had completed the Airman Proficiency Check in accordance with FAA 135.293 on April 19, 1999.

The flight training records showed that the second-in-command had initially failed a FAA Airman Competency /Proficiency Check on May 20, 1999, and then passed a second Proficiency check flight later that same day. He was authorized to fly as second-in-command in accordance with FAR 135.293 on May 21, 1999.

METEOROLOGICAL INFORMATION

Instrument weather conditions prevailed at the time of the accident. The 0620 hours surface weather observation taken at the Fulton County Airport reported winds 220 degrees at five knots, visibility seven miles, sky conditions were broken at 500 feet, temperature 76 degrees, dew point 74 degrees, altimeter 29.87 inches of mercury.

WRECKAGE AND IMPACT INFORMATION

Examination of the accident site disclosed that wreckage debris was scattered over an area 220 feet long and 45 feet wide. The wreckage path was orientated on a 085-degree magnetic heading, and the main wreckage was orientated on a 270-degree magnetic heading. Examination of the main wreckage also disclosed extensive fire damage to the airframe center section. The left wing assembly was located 120 feet west of the main wreckage. The outboard half of the left wing assembly rested vertically against a tree along the wreckage path.

Further examination of the aircraft revealed fuel in the right engine. The fuel valve for the right engine was found in the off position but the fuel valve selector was found in the on position. The left fuel valve selector was found in the on position, no evidence of fuel was found in the left engine. Fifty gallons of fuel was estimated to have been in each tank at the time of the accident. The fuel system sustained extensive fire damage at the accident site.

The post-accident examination of both propellers assemblies revealed low-pitch blade angles, rotational scarring and minimal propeller blade damage. The left engine was substantially damaged and sustained extensive post-crash fire damage. The left engine examination failed to disclose mechanical malfunctions or component failure. A teardown examination of the right engine was performed and no evidence of mechanical malfunction was found. However, the examination of the wreckage path showed slash marks on freshly damaged trees.

Charred flight control debris and flight control cables were recovered from the wreckage path. The cockpit throttle and propeller controls sustained fire and impact damage.

MEDICAL AND PATHOLOGICAL INFORMATION

On September 26, 1999, the postmortem examination on the pilot-in-command was conducted by Dr. Joyce L. DeJong and the postmortem examination of the second-in-command was conducted by Dr. Randy L. Hanzlick at the office of the Medical Examiner in Atlanta, Georgia. The toxicological examinations for both pilots were negative for alcohol.

ADDITIONAL INFORMATION

A witness reported seeing the airplane after takeoff flying low over the interstate "...it was turned slightly to the left ...and flipped a full turn to the right and nosed down into the woods".

According to the Beech Baron BE-58 Pilots Operating Handbook (POH), under Section 3, Emergency Procedures Checklist, page 3-5, ENGINE FAILURE AFTER LIFT-OFF AND IN FLIGHT: 1) Landing Gear and Flaps - UP 2) Throttle (inoperative engine) - CLOSED 3) Propeller (inoperative engine) - FEATHER 4) Power (operative engine) - AS REQUIIRED 5) Airspeed - MAINTAIN SPEED AT ENGINE FAILURE (100 KTS/115 MPH MAX.) UNTIL OBSTACLES ARE CLEARED.

Section 10, Safety Information of the POH, page 10-43, states, " Drag caused by wind-milling propeller, will severely degrade or destroy single engine climb performance."

The airplane N17915 was authorized to operate with a single pilot, a second-in-command was not required under FAR 135 for this flight.

Attempts to release the wreckage to representatives of the airplane owners failed. The fuel nozzles from the right engine were presented to Federal Court in Atlanta, Georgia.

Pilot Information

Certificate:	Commercial	**Age:**	29,Male
Airplane Rating(s):	Single-engine land; Multi-engine land	**Seat Occupied:**	Left
Other Aircraft Rating(s):	None	**Restraint Used:**	
Instrument Rating(s):	Airplane	**Second Pilot Present:**	Yes
Instructor Rating(s):	None	**Toxicology Performed:**	Yes
Medical Certification:	Class 1 Valid Medical--no waivers/lim.	**Last FAA Medical Exam:**	December 15, 1998
Occupational Pilot:	Yes	**Last Flight Review or Equivalent:**	
Flight Time:	1500 hours (Total, all aircraft), 210 hours (Total, this make and model), 1070 hours (Pilot In Command, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Beech	**Registration:**	N17915
Model/Series:	BE-58 BE-58	**Aircraft Category:**	Airplane
Year of Manufacture:		**Amateur Built:**	
Airworthiness Certificate:	Normal	**Serial Number:**	TH-78
Landing Gear Type:	Retractable - Tricycle	**Seats:**	2
Date/Type of Last Inspection:	June 15, 1999 100 hour	**Certified Max Gross Wt.:**	5400 lbs
Time Since Last Inspection:	80 Hrs	**Engines:**	2 Reciprocating
Airframe Total Time:	14036 Hrs	**Engine Manufacturer:**	Continental
ELT:	Installed, activated, did not aid in locating accident	**Engine Model/Series:**	IO-520-C8
Registered Owner:	PARAGON AIR EXPRESS INC.,	**Rated Power:**	285 Horsepower
Operator:		**Operating Certificate(s) Held:**	Air cargo, On-demand air taxi (135)
Operator Does Business As:		**Operator Designator Code:**	

Meteorological Information and Flight Plan

Conditions at Accident Site:	Instrument (IMC)	**Condition of Light:**	Day
Observation Facility, Elevation:	FTY ,841 ft msl	**Distance from Accident Site:**	2 Nautical Miles
Observation Time:	06:24 Local	**Direction from Accident Site:**	200°
Lowest Cloud Condition:	500 ft AGL	**Visibility**	7 miles
Lowest Ceiling:	Broken / 500 ft AGL	**Visibility (RVR):**	
Wind Speed/Gusts:	7 knots /	**Turbulence Type Forecast/Actual:**	/
Wind Direction:	220°	**Turbulence Severity Forecast/Actual:**	/
Altimeter Setting:	29 inches Hg	**Temperature/Dew Point:**	76°C / 74°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	(FTY)	**Type of Flight Plan Filed:**	IFR
Destination:	MOBILE , AL (MOB)	**Type of Clearance:**	IFR
Departure Time:	06:23 Local	**Type of Airspace:**	Class C

Airport Information

Airport:	FULTON COUNTY AIRPORT FTY	**Runway Surface Type:**	Asphalt
Airport Elevation:	841 ft msl	**Runway Surface Condition:**	Dry
Runway Used:	26	**IFR Approach:**	None
Runway Length/Width:	5796 ft / 100 ft	**VFR Approach/Landing:**	None

Wreckage and Impact Information

Crew Injuries:	2 Fatal	**Aircraft Damage:**	Destroyed
Passenger Injuries:		**Aircraft Fire:**	On-ground
Ground Injuries:	N/A	**Aircraft Explosion:**	None
Total Injuries:	2 Fatal	**Latitude, Longitude:**	

Administrative Information

Investigator In Charge (IIC):	Powell, Phillip
Additional Participating Persons:	ROBERT WEST; COLLEGE PARK , GA
Original Publish Date:	August 13, 2001
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=46718