

National Transportation Safety Board Aviation Accident Final Report

Location: FORT LAUDERDALE, FL Accident Number: MIA94LA075

Date & Time: 02/16/1994, 0921 EST Registration: N49K

Aircraft: BEECH G18S Aircraft Damage: Destroyed

Defining Event: Injuries: 1 Minor

Flight Conducted Under: Part 91: General Aviation - Business

Analysis

The pilot stated the left engine backfired and began to run rough shortly after takeoff. The engine was shut down and the propeller was feathered. He decided to return and land on the departure runway. Witnesses observed the aircraft on the downwind leg at 800 to 1,000 feet with the landing gear extended. As the aircraft turned to base leg it yawed sharply to the left and the left wing dropped. The aircraft descended rapidly. The pilot stated that as he turned from base to final leg at 75 to 100 feet the aircraft was buffeting and beginning to stall. He realized he would not make the runway and crash landed in a vacant lot. Examination of the left engine after the accident revealed no evidence to indicate precrash failure or malfunction of the engine.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: THE PILOT-IN-COMMAND'S IMPROPER APPROACH PLANNING AND PREMATURE EXTENSION OF THE LANDING GEAR, RESULTING IN THE FLIGHT BEING UNABLE TO MAINTAIN SUFFICIENT ALTITUDE AND AIRSPEED TO REACH THE RUNWAY. THE LOSS OF ENGINE POWER ON ONE ENGINE WAS A FACTOR.

Findings

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

Findings

1. 1 ENGINE

2. (F) REASON FOR OCCURRENCE UNDETERMINED

Occurrence #2: IN FLIGHT COLLISION WITH OBJECT

Phase of Operation: APPROACH - VFR PATTERN - FINAL APPROACH

Findings

- 3. (C) PLANNED APPROACH IMPROPER PILOT IN COMMAND
- 4. (C) GEAR EXTENSION PREMATURE PILOT IN COMMAND
- 5. ALTITUDE NOT POSSIBLE PILOT IN COMMAND
- 6. AIRSPEED(VS) NOT POSSIBLE PILOT IN COMMAND
- 7. OBJECT TREE(S)
- 8. OBJECT WIRE, TRANSMISSION

Occurrence #3: IN FLIGHT COLLISION WITH TERRAIN/WATER

Phase of Operation: DESCENT - UNCONTROLLED

Page 2 of 6 MIA94LA075

Factual Information

On February 16, 1994, about 0921 eastern standard time, a Beech G18S, N49K, registered to H and G Import Export Corp., crashed at Fort Lauderdale, Florida, while returning to land following loss of power in one engine. The flight was a 14 CFR Part 91, business flight. Visual meteorological conditions prevailed at the time and a visual flight rules flight plan was filed. The airplane was destroyed and the commercial-rated pilot received minor injuries. The flight originated at Fort Lauderdale, Florida, on February 16, 1994, at 0916.

The pilot stated that while climbing after departure from Fort Lauderdale International Airport, en route to Freeport, Bahamas, the left engine backfired and began to run rough. He moved the throttle to the idle position and the engine continued to run rough. He then shut down the engine and feathered the propeller. He elected to return to his departure runway 9 left due to the wind conditions. While turning from base leg to final approach he notices the altitude at 75-100 feet. "The aircraft was buffeting and beginning to stall." He was losing altitude rapidly and realized he would not make it across the highway before the runway. He then looked for an alternative landing spot which turned out to be a vacant lot between two buildings.

Witnesses observed the airplane on downwind approach to runway 9 left at 800 to 1,000 feet agl. The landing gear was extended at this time and the left engine not operating and the propeller was feathered. The airplane started a turn on to base leg and was observed to yaw into the left engine. The airplane rolled left and descended. The wings leveled at about 400 feet agl and the airplane was now heading east. The airplane continued to descend and collided with trees and the ground where it came to rest in a vacant lot about 1/4 mile from the runway.

Examination of the crash site indicated the aircraft collided with power lines and trees and then touched down upright in a vacant lot. As the aircraft skidded to a stop it collided with additional trees. The aircraft's landing gear and flaps were in the retracted position. The right and left engines had separated from the aircraft during the crash sequence. Tree limbs up to 3 inches in diameter were found cut in the path of the right engine. The right propeller blades were in the low pitch position and each blade had chordwise scratches and rotational twisting damage. One blade had separated from the hub during the crash sequence. The left propeller blades were in the feathered position and bent without rotational twisting. All cargo was removed from the aircraft and was found to weigh 2,080 pounds when weighed.

Examination of the left engine indicated that each cylinder had compressions below 55 pounds when tested. No evidence of cracked cylinders was noted. The crankshaft, camshaft, valve train, and all accessory drives operated normally when the engine was rotated. Each of the magnetos sustained impact damage. Testing of the magnetos revealed no evidence to indicate precrash failure or malfunction. Testing of the carburetor revealed no evidence to indicate precrash failure or malfunction. The carburetor inlet fuel screen was found to have been previously damaged during maintenance and allowed unfiltered fuel to enter the carburetor.

Page 3 of 6 MIA94LA075

Pilot Information

Certificate:	Commercial	Age:	47, Male
Airplane Rating(s):	Multi-engine Land; Single-engine Land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	Seatbelt
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 2 Valid Medicalw/waivers/lim.	Last FAA Medical Exam:	11/03/1992
Occupational Pilot:		Last Flight Review or Equivalent:	
Flight Time:	8700 hours (Total, all aircraft), 5000 Command, all aircraft)) hours (Total, this make and model),	7700 hours (Pilot In

Aircraft and Owner/Operator Information

Aircraft Make:	BEECH	Registration:	N49K
Model/Series:	G18S G18S	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Normal	Serial Number:	519
Landing Gear Type:	Retractable - Tricycle	Seats:	2
Date/Type of Last Inspection:	12/01/1993, Annual	Certified Max Gross Wt.:	10200 lbs
Time Since Last Inspection:	30 Hours	Engines:	2 Reciprocating
Airframe Total Time:	12099 Hours	Engine Manufacturer:	P&W
ELT:	Installed, activated, did not aid in locating accident	Engine Model/Series:	R-985-AN10
Registered Owner:	H AND G IMPORT AND EXPORT CORP	Rated Power:	450 hp
Operator:	H AND G IMPORT AND EXPORT CORP	Operating Certificate(s) Held:	None

Page 4 of 6 MIA94LA075

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	FLL, 11 ft msl	Distance from Accident Site:	1 Nautical Miles
Observation Time:	0921 EST	Direction from Accident Site:	90°
Lowest Cloud Condition:	Unknown / 0 ft agl	Visibility	10 Miles
Lowest Ceiling:	Broken / 10000 ft agl	Visibility (RVR):	0 ft
Wind Speed/Gusts:	9 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	60°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	24°C / 14°C
Precipitation and Obscuration:			
Departure Point:		Type of Flight Plan Filed:	VFR
Destination:	FREEPORT, OF (MYQF)	Type of Clearance:	VFR
Departure Time:	0900 EST	Type of Airspace:	Class D

Airport Information

Airport:	FT. LAUDERDALE-HOLLYWOOD (FLL)	Runway Surface Type:	Dirt
Airport Elevation:	11 ft	Runway Surface Condition:	Dry; Vegetation
Runway Used:	9L	IFR Approach:	None
Runway Length/Width:	9001 ft / 150 ft	VFR Approach/Landing:	Precautionary Landing; Traffic Pattern

Wreckage and Impact Information

Crew Injuries:	1 Minor	Aircraft Damage:	Destroyed
Passenger Injuries:	N/A	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Minor	Latitude, Longitude:	

Administrative Information

Investigator In Charge (IIC):	JEFFREY L KENNEDY	Report Date:	11/18/1994
Additional Participating Persons:	RICHARD D SHAFFER; FT. LAUDERDALE, FL STEVEN H GORDON; FT. LAUDERDALE, FL		
Publish Date:			
Investigation Docket:	NTSB accident and incident dockets serve as investigations. Dockets released prior to Jun-Record Management Division at publing@ntsb this date are available at http://dms.ntsb.gg	e 1, 2009 are public . <u>.gov</u> , or at 800-877-	ly available from the NTSB's

Page 5 of 6 MIA94LA075

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The Independent Safety Board Act, as codified at 49 U.S.C. Section 1154(b), precludes the admission into evidence or use of any part of an NTSB report related to an incident or accident in a civil action for damages resulting from a matter mentioned in the report. A factual report that may be admissible under 49 U.S.C. § 1154(b) is available here.

Page 6 of 6 MIA94LA075