



National Transportation Safety Board Aviation Accident Final Report

Location:	BALTIMORE, MD	Accident Number:	BFO87MA007
Date & Time:	11/08/1986, 1200 EST	Registration:	N304D
Aircraft:	BEECH 65-A80	Aircraft Damage:	Destroyed
Defining Event:		Injuries:	1 Fatal, 3 Serious

Flight Conducted Under: Part 91: General Aviation - Public Aircraft

Analysis

DRG CLB AFTER TKOF, L ENG SEIZED. PLT SAID HE ATMTD 1 ENG RESTART; PROP WOULD NOT ROTATE OR FEATHER. NO EMERG DECLARED. PLT STATED ENG SHUT-DWN PROC WAS USED, SCIENTIFIC BUS SWS WERE SHUT OFF, R GEN WAS RECYCLED & APPEARED TO OPER NORMALLY. PLTS GOT IMT VECTOR TO RTRN TO MARTIN (MTN) ARPT, BUT RADAR CTC WAS LOST FOR ATB 5 MIN. ELEC PRBLMS WERE ENCTR'D & PLTS HAD PROBM MAINTG HDGS, THUS WERE DELAYED IN DIVERTING TO ALTN. WITH L PROP UNFEATHERED, THEY COULD NOT MAINT ALT. DUE TO BAD WX AT MTN, THEY DIVERTED TO BWI. RADAR & RDO CTC WERE LOST & THEY COULD NOT RCH BWI. DRG FORCED LNDG, ACFT HIT TREE & CRASHED SHORT OF INTENDED LNDG AREA. TEARDOWN OF L ENG REVEALED #4 & #5 CON RODS HAD FAILED AT CRANKSHAFT; THEY WERE DISCOLORED FM HEAT & SCORED; OTR ROD BRGS HAD INDCNS OF OIL STARVATION. METALLIC DEBRIS FM FAILED ENG FND IN OIL SYS. SVRL OIL FEED HOLES TO ROD BRGS WERE OBSTRUCTED WITH METALLIC DEBRIS. FIRE DMGD MOST OF THE ELEC SYS. ACFT (MODIFIED FORENVIRONMENTAL TESTING) NOT FLT TESTED FOR DRAG INDUCING MODS; WRITTEN FLT CREW INSTRNS NOT AVAIL FOR MODS.

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(PARTIAL) - MECH FAILURE/MALF
Phase of Operation: CLIMB - TO CRUISE

Findings

1. (C) FLUID,OIL - STARVATION
 2. (C) ENGINE ASSEMBLY,CONNECTING ROD - FAILURE,TOTAL
 3. PROPELLER FEATHERING - NOT POSSIBLE
 4. PRECAUTIONARY LANDING - INITIATED
-

Occurrence #2: AIRFRAME/COMPONENT/SYSTEM FAILURE/MALFUNCTION
Phase of Operation: DESCENT - EMERGENCY

Findings

5. (C) ELECTRICAL SYSTEM - UNDETERMINED
 6. (F) ELECTRICAL SYSTEM,BATTERY - LOW LEVEL
 7. FLIGHT/NAV INSTRUMENTS,HEADING INDICATOR - FALSE INDICATION
-

Occurrence #3: FORCED LANDING
Phase of Operation: DESCENT - EMERGENCY

Findings

8. (F) PROCEDURES/DIRECTIVES - NOT FOLLOWED - PILOT IN COMMAND
 9. (F) IN-FLIGHT PLANNING/DECISION - IMPROPER - PILOT IN COMMAND
 10. (F) INADEQUATE TRAINING(EMERGENCY PROCEDURE(S)) - COMPANY/OPERATOR MANAGEMENT
 11. (F) INSUFFICIENT STANDARDS/REQUIREMENTS,AIRMAN - COMPANY/OPERATOR MGMT
 12. ATTEMPTED
 13. (F) WEATHER CONDITION - LOW CEILING
 14. (F) WEATHER CONDITION - FOG
-

Occurrence #4: IN FLIGHT COLLISION WITH OBJECT
Phase of Operation: LANDING - FLARE/TOUCHDOWN

Findings

15. (F) OBJECT - TREE(S)
-

Occurrence #5: IN FLIGHT COLLISION WITH TERRAIN/WATER
Phase of Operation: DESCENT - UNCONTROLLED

Factual Information

Pilot Information

Certificate:	Airline Transport	Age:	41, Male
Airplane Rating(s):	Multi-engine Land	Seat Occupied:	Left
Other Aircraft Rating(s):	Helicopter	Restraint Used:	Seatbelt
Instrument Rating(s):	Airplane; Helicopter	Second Pilot Present:	Yes
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 1 Valid Medical--no waivers/lim.	Last FAA Medical Exam:	09/12/1986
Occupational Pilot:		Last Flight Review or Equivalent:	
Flight Time:	2294 hours (Total, all aircraft), 24 hours (Total, this make and model), 1882 hours (Pilot In Command, all aircraft), 49 hours (Last 90 days, all aircraft), 18 hours (Last 30 days, all aircraft), 7 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	BEECH	Registration:	N304D
Model/Series:	65-A80 65-A80	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Restricted	Serial Number:	LD226
Landing Gear Type:	Retractable - Tricycle	Seats:	4
Date/Type of Last Inspection:	05/07/1986, 100 Hour	Certified Max Gross Wt.:	8800 lbs
Time Since Last Inspection:		Engines:	2 Reciprocating
Airframe Total Time:	7479 Hours	Engine Manufacturer:	LYCOMING
ELT:	Installed, activated, did not aid in locating accident	Engine Model/Series:	IGSO-540-A1A
Registered Owner:	U.S. DEPT. OF ENERGY	Rated Power:	380 hp
Operator:	EXECUTIVE FLITEWAYS, INC.	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Instrument Conditions	Condition of Light:	Day
Observation Facility, Elevation:	BWI, 146 ft msl	Distance from Accident Site:	5 Nautical Miles
Observation Time:	1153 EST	Direction from Accident Site:	225°
Lowest Cloud Condition:	Unknown / 0 ft agl	Visibility	1 Miles
Lowest Ceiling:	Overcast / 400 ft agl	Visibility (RVR):	0 ft
Wind Speed/Gusts:	8 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	220°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	15° C / 14° C
Precipitation and Obscuration:			
Departure Point:	BALTIMORE, MD (MTN)	Type of Flight Plan Filed:	IFR
Destination:	ISLIP, NY (ISP)	Type of Clearance:	IFR
Departure Time:	1113 EST	Type of Airspace:	Class E

Airport Information

Airport:	BALTIMORE-WASHINGTON INTL (BWI)	Runway Surface Type:	Concrete
Airport Elevation:	146 ft	Runway Surface Condition:	Dry
Runway Used:	28	IFR Approach:	None
Runway Length/Width:	9452 ft / 200 ft	VFR Approach/Landing:	Forced Landing

Wreckage and Impact Information

Crew Injuries:	1 Fatal, 1 Serious	Aircraft Damage:	Destroyed
Passenger Injuries:	2 Serious	Aircraft Fire:	On-Ground
Ground Injuries:	N/A	Aircraft Explosion:	On-Ground
Total Injuries:	1 Fatal, 3 Serious	Latitude, Longitude:	

Administrative Information

Investigator In Charge (IIC): AL DICKINSON **Report Date:** 07/19/1988

Additional Participating Persons: JACK PETROU; BALTIMORE, MD
JAMES LEEDER; BALTIMORE, MD
JOHN WARD; WICHITA, KS
FRED BURNHAM; WILLIAMSPORT, PA

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/>.

The National Transportation Safety Board (NTSB), established in 1967, is an independent federal agency mandated by Congress through the Independent Safety Board Act of 1974 to investigate transportation accidents, determine the probable causes of the accidents, issue safety recommendations, study transportation safety issues, and evaluate the safety effectiveness of government agencies involved in transportation. The NTSB makes public its actions and decisions through accident reports, safety studies, special investigation reports, safety recommendations, and statistical reviews.

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](#).