



National Transportation Safety Board Aviation Accident Final Report

Location:	NASHVILLE, TN	Accident Number:	ATL85MA177
Date & Time:	05/31/1985, 2300 CDT	Registration:	N181TG
Aircraft:	GULFSTREAM G-159	Aircraft Damage:	Destroyed
Defining Event:		Injuries:	2 Fatal
Flight Conducted Under:	Part 121: Air Carrier - Non-scheduled		

Analysis

THE ACFT WAS BEING OPERATED AS GENERAL AVIATION FLT 115 & WAS DEPTG ON A ROUTINE NIGHT FLT. DRG TAKEOFF/INITIAL CLIMB, THE LEFT ENG LOST PWR. THE FLT CREW ATTEMPTED TO CONT THE CLIMB-OUT, BUT FOLLOWING THE APPLICATION OF WATER-METHANOL, THE PLT LOST DRCTNL CONTROL. SUBSEQUENTLY, THE ACFT BANKED TO THE LEFT, ENTERED A DSCNT & IMPACTED BETWEEN THE PARALLEL RWYS. AN INVESTIGATION DISCLOSED THAT THE LEFT PROPELLER'S BLADE ANGLE WAS 21 DEGS. NO PREIMPACT SYS MALFUNCTION OR FAILURE WAS FOUND. THE COCKPIT VOICE RECORDING INDICATED THAT THE FLT CREW DID NOT COMPLETE ALL OF THE ITEMS ON THE BEFORE TAXI/TAKEOFF CHECKLIST. ONE OF THE ITEMS (PRESUMABLY NOT COMPLETED) WAS A CHECK OF THE H.P. COCK LEVERS. THE CHECKLIST REQUIRED THAT THE H.P. COCK LEVERS BE IN 'CRUISE LOCKOUT' FOR TAKEOFF. THE LEFT H.P. COCK LEVER WAS FOUND BETWEEN THE 'FUEL OFF' & 'FEATHER' POSITIONS. MOVEMENT TO THIS POSITION WOULD HAVE DEACTIVATED THE AUTO-FEATHER SYS & SHUT DOWN THE LEFT ENG.

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: TAKEOFF - INITIAL CLIMB

Findings

1. (F) LIGHT CONDITION - NIGHT
 2. (C) PREFLIGHT PLANNING/PREPARATION - INADEQUATE - PILOT IN COMMAND
 3. (C) CHECKLIST - NOT FOLLOWED
 4. (C) POWERPLANT CONTROLS - IMPROPER USE OF - PILOT IN COMMAND
 5. (C) FLUID,FUEL - STARVATION
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Occurrence #2: LOSS OF CONTROL - IN FLIGHT
Phase of Operation: TAKEOFF - INITIAL CLIMB

Findings

6. (C) EMERGENCY PROCEDURE - IMPROPER - PILOT IN COMMAND
 7. (C) PROPELLER FEATHERING - NOT PERFORMED - PILOT IN COMMAND
 8. (C) REMEDIAL ACTION - NOT ATTAINED - COPILOT/SECOND PILOT
 9. (C) AIRSPEED(VMC) - NOT MAINTAINED - PILOT IN COMMAND
 10. DIRECTIONAL CONTROL - NOT POSSIBLE
 11. DESCENT - UNCONTROLLED
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Occurrence #3: IN FLIGHT COLLISION WITH TERRAIN/WATER
Phase of Operation: TAKEOFF

Findings

12. TERRAIN CONDITION - GROUND

Factual Information

Pilot Information

Certificate:	Airline Transport	Age:	25, 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):	Glider	Toxicology Performed:	Yes
Medical Certification:	Class 1 Valid Medical--w/ waivers/lim.	Last FAA Medical Exam:	03/01/1985
Occupational Pilot:		Last Flight Review or Equivalent:	
Flight Time:	2300 hours (Total, all aircraft), 877 hours (Total, this make and model), 107 hours (Last 90 days, all aircraft), 5 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	GULFSTREAM	Registration:	N181TG
Model/Series:	G-159 G-159	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Normal	Serial Number:	181
Landing Gear Type:	Retractable - Tricycle	Seats:	2
Date/Type of Last Inspection:	04/18/1985, Continuous Airworthiness	Certified Max Gross Wt.:	36000 lbs
Time Since Last Inspection:	68 Hours	Engines:	2 Turbo Prop
Airframe Total Time:	1363 Hours	Engine Manufacturer:	ROLLS-ROYCE
ELT:	Not installed	Engine Model/Series:	DART 529-8X/E
Registered Owner:	TAG	Rated Power:	1910 hp
Operator:	GENERAL AVIATION, INC.	Operating Certificate(s) Held:	Supplemental
Operator Does Business As:		Operator Designator Code:	GAIA

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Night/Bright
Observation Facility, Elevation:	BNA, 597 ft msl	Distance from Accident Site:	0 Nautical Miles
Observation Time:	0000	Direction from Accident Site:	0°
Lowest Cloud Condition:	Clear / 0 ft agl	Visibility	7 Miles
Lowest Ceiling:	None / 0 ft agl	Visibility (RVR):	0 ft
Wind Speed/Gusts:	4 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	230°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29 inches Hg	Temperature/Dew Point:	22° C / 19° C
Precipitation and Obscuration:			
Departure Point:	(BNA)	Type of Flight Plan Filed:	IFR
Destination:	INDIANAPOLIS, IN (IND)	Type of Clearance:	IFR
Departure Time:	2300 CDT	Type of Airspace:	Class E

Airport Information

Airport:	NASHVILLE METRO (BNA)	Runway Surface Type:	Concrete
Airport Elevation:	599 ft	Runway Surface Condition:	Dry
Runway Used:	20R	IFR Approach:	None
Runway Length/Width:	7700 ft / 150 ft	VFR Approach/Landing:	None

Wreckage and Impact Information

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

Administrative Information

Investigator In Charge (IIC):	PHILLIP POWELL	Report Date:	
Additional Participating Persons:	RICHARD O'LEARY; NASHVILLE, TN GARRY BERRY; GREENVILLE, TN RICHARD HAGGUIST; GREENVILLE, TN C. K WEDDINGTON; GREENVILLE, TN		
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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