



National Transportation Safety Board Aviation Accident Final Report

Location:	TITUSVILLE, FL	Accident Number:	MIA90FA166
Date & Time:	08/05/1990, 0940 EDT	Registration:	N599BB
Aircraft:	Rockwell 680-E	Aircraft Damage:	Destroyed
Defining Event:		Injuries:	1 Serious

Flight Conducted Under: Part 91: General Aviation - Ferry

Analysis

ABOUT 5-10 MIN AFTER TAKEOFF THE PILOT LEANED THE MIXTURE ON A ROUGH RUNNING ENG. ABOUT 30 MIN LATERFTER THE LEFT ENG BEGAN TO OVERSPEED. THE PLT WAS UNABLE TO FEATHER THE PROP. THE PLT RETURNED TOWARD THE DEPARTURE POINT WITH MAX POWER ON THE RIGHT ENG. UNABLE TO REACH THE ARPT, AN EMERG LANDING WAS MADE ON A HIGHWAY, DIRECTIONAL CONTROL WAS LOST, AND THE AIRPLANE COLLIDED WITH TREES. LAST ANNUAL WAS IN 1978. LEFT PROP START LOCK PIN BLADE L₃ CORRODED, IN EXT PSN. LEFT PROP PITCH CONTROL CABLE SEPARATED, FRAYED, CORRODED. GENERAL DETERIORATION OF PISTON RINGS AND #6 CONROD. RIGHT PROP GOVERNOR CONTROL CABLES CORRODED, FRAYED. RIGHT ENG #5 INTAKE PIPE CONNECTION AND HOSE MISSING. ALL COMPRESSION RINGS PISTONS #1 AND #5 SEVERELY WORN, TOP TWO COMPRESSION RINGS PISTON #2 SEIZED. NO RECORD THAT THE AIRPLANE HAD BEEN INSPECTED BY AN A&P MECHANIC OR FAA APPROVED AIRFRAME REPAIR STATION. PLT STATED FLIGHT MANUAL NOT AVAILABLE OR USED DURING GROUND OR FLIGHT OPERATIONS.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: THE PILOT'S DECISION TO CONTINUE THE FLIGHT WITH A KNOWN UNAIRWORTHY MECHANICAL CONDITION RESULTING IN A SUBSEQUENT LOSS OF ENGINE POWER AND FORCED LANDING.

Findings

Occurrence #1: LOSS OF ENGINE POWER(TOTAL) - MECH FAILURE/MALF
Phase of Operation: CLIMB - TO CRUISE

Findings

1. 1 ENGINE
 2. (C) MAINTENANCE - NOT PERFORMED - OTHER MAINTENANCE PERSONNEL
 3. (C) PREFLIGHT PLANNING/PREPARATION - INADEQUATE - PILOT IN COMMAND
 4. (C) ENGINE ASSEMBLY - OVERTEMPERATURE
 5. (C) POWERPLANT CONTROLS - IMPROPER USE OF - PILOT IN COMMAND
 6. (F) LACK OF TOTAL EXPERIENCE IN TYPE OF AIRCRAFT - PILOT IN COMMAND
 7. (C) PROPELLER GOVERNOR CONTROL,CABLE - FAILURE,TOTAL
 8. (C) ENGINE ASSEMBLY,PISTON - FAILURE,TOTAL
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Occurrence #2: LOSS OF ENGINE POWER
Phase of Operation: CRUISE

Findings

9. ALL ENGINES
 10. (C) ENGINE ASSEMBLY - OVERTEMPERATURE
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Occurrence #3: FIRE
Phase of Operation: CRUISE

Findings

11. (C) INDUCTION AIR CONTROL,INTAKE MANIFOLD - LOOSE
 12. (C) ENGINE COMPARTMENT - FIRE
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Occurrence #4: FORCED LANDING
Phase of Operation: LANDING - FLARE/TOUCHDOWN

Occurrence #5: ON GROUND/WATER COLLISION WITH OBJECT
Phase of Operation: LANDING - ROLL

Findings

13. OBJECT - TREE(S)

Factual Information

Pilot Information

Certificate:	Flight Instructor; Commercial	Age:	23, 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):	Airplane Multi-engine; Airplane Single-engine; Instrument Airplane	Toxicology Performed:	Yes
Medical Certification:	Class 1 Unknown	Last FAA Medical Exam:	02/05/1990
Occupational Pilot:		Last Flight Review or Equivalent:	
Flight Time:	3000 hours (Total, all aircraft), 1 hours (Total, this make and model), 1800 hours (Pilot In Command, all aircraft), 150 hours (Last 90 days, all aircraft), 70 hours (Last 30 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Rockwell	Registration:	N599BB
Model/Series:	680-E 680-E	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Normal	Serial Number:	680-372-57
Landing Gear Type:	Retractable - Tricycle	Seats:	7
Date/Type of Last Inspection:	04/02/1978, Annual	Certified Max Gross Wt.:	7500 lbs
Time Since Last Inspection:	1 Hours	Engines:	2 Reciprocating
Airframe Total Time:		Engine Manufacturer:	LYCOMING
ELT:	Not installed	Engine Model/Series:	GSO-480-B1A6
Registered Owner:	GORDON BRUMM	Rated Power:	340 hp
Operator:	GORDON BRUMM	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	TIX, 35 ft msl	Distance from Accident Site:	1 Nautical Miles
Observation Time:	0943 EDT	Direction from Accident Site:	270°
Lowest Cloud Condition:	Scattered / 2000 ft agl	Visibility	6 Miles
Lowest Ceiling:	Unknown / 0 ft agl	Visibility (RVR):	0 ft
Wind Speed/Gusts:	6 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	20°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	30° C / -18° C
Precipitation and Obscuration:			
Departure Point:		Type of Flight Plan Filed:	None
Destination:	UNKNOWN, UN	Type of Clearance:	None
Departure Time:	0830 EDT	Type of Airspace:	Class D

Wreckage and Impact Information

Crew Injuries:	1 Serious	Aircraft Damage:	Destroyed
Passenger Injuries:	N/A	Aircraft Fire:	In-Flight
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Serious	Latitude, Longitude:	

Administrative Information

Investigator In Charge (IIC):	CARROL A SMITH	Report Date:	12/14/1992
Additional Participating Persons:	SAL P CECERE; ORLANDO, FL ROGER W STALLKAMP; PIQUA, OH JAMES F BROWN; 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/ .		

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