

# **Aviation Investigation Final Report**

Location:	OKEECHOBEE, Flori	da	Accident Number:	MIA95LA241
Date & Time:	September 29, 1995	5, 16:50 Local	<b>Registration:</b>	N9351Y
Aircraft:	BEECH	D50E	Aircraft Damage:	Substantial
Defining Event:			Injuries:	1 Minor
Flight Conducted Under:	Part 91: General avi	ation - Personal		

### Analysis

THE PILOT CONTACTED THE AIRPORT OPERATOR AT THE OKEECHOBEE AIRPORT AND ASKED THAT HE STEP OUTSIDE AND OBSERVE HIS RIGHT PROPELLER AS HE FLEW OVER AND PERFORMED A FEATHERING CHECK. THE OPERATOR STEPPED OUT AND OBSERVED THE AIRPLANE FLY OVER THE AIRPORT AT 1,000 FEET, AND OBSERVED THE RIGHT PROPELLER GO INTO THE FEATHERED POSITION AND STOP ROTATING. THE PILOT STATED THAT WHEN HE UNFEATHERED THE PROPELLER THE ENGINE WOULD NOT START AND HE WAS UNABLE TO MAINTAIN ALTITUDE WITH THE PROPELLER WINDMILLING. A FORCED LANDING WAS MADE IN A FIELD. POSTACCIDENT EXAMINATION OF THE RIGHT PROPELLER SHOWED THE PROPELLER WAS LOCKED IN A LOW BLADE ANGLE BY THE MECHANICAL LOCKS. THE PROPELLER AND MECHANICAL LOCKS OPERATED NORMALLY.

#### **Probable Cause and Findings**

The National Transportation Safety Board determines the probable cause(s) of this accident to be: THE PILOT'S DECISION TO CONDUCT A FEATHERING CHECK OF THE RIGHT PROPELLER AT AN ALTITUDE INADEQUATE FOR A SAFE ENGINE RESTART OR REFEATHERING OF THE PROPELLER.

#### **Findings**

Occurrence #1: LOSS OF ENGINE POWER Phase of Operation: CRUISE Findings 1. (C) IN-FLIGHT PLANNING/DECISION - IMPROPER - PILOT IN COMMAND 2. (C) ALTITUDE - INADEQUATE - PILOT IN COMMAND 3. PROPELLER FEATHERING - PERFORMED - PILOT IN COMMAND 4. PROPELLER FEATHERING - NOT POSSIBLE - PILOT IN COMMAND

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

Occurrence #3: ON GROUND/WATER COLLISION WITH OBJECT Phase of Operation: LANDING

Findings 5. OBJECT - FENCE

#### **Factual Information**

On September 29, 1995, about 1650 eastern daylight time, a Beech D50E, N9351Y, registered to an individual, made a forced landing in a field near Okeechobee, Florida, while on a 14 CFR Part 91 personal flight. Visual meteorological conditions prevailed at the time and no flight plan was filed. The aircraft received substantial damage and the private-rated pilot received minor injuries. The flight originated from Lantana, Florida, the same day about 1600.

The pilot stated to Sheriff's Department deputies that he did a fly-by of the Okeechobee Airport to do a feathering check of the right propeller. While at an altitude of 1,500 feet the right engine was shutdown and the propeller was feathered. When he unfeathered the propeller the engine would not start and he could not feather the propeller again. The propeller remained at a low pitch position and was wind milling. He was unable to maintain altitude and made a forced landing in a field.

Witnesses stated that upon departure from Lantana, the pilot feathered the left propeller and did a fly-by of the airport. The left propeller was observed to start rotating again and the aircraft flew off to the west. A witness at the Okeechobee Airport stated the pilot contacted him on the radio and asked that he step outside and see if his right propeller feathered properly. When he stepped outside he observed N9351Y flying at an altitude of 1,000 feet. The pilot feathered the right propeller and it appeared to feather properly. The witness then went back inside his office.

Post-accident examination of the aircraft by an FAA inspector and a representative of Lycoming engines showed no evidence to indicate precrash malfunction of the right or left engine assemblies. The blades of the left and right propellers were below the mechanical latch position and the mechanical latches were extended. The left propeller blades were curled and bent aft. The blades on the right propeller were bent aft and were not curled. The propellers and propeller governors were removed for testing. Each propeller operated normally when placed on a test stand. The mechanical latches, which retract due to centrifugal forces at about 1,000 engine rpm, were free to retract and extend. Each propeller governor operated within manufacturer's specifications. See attached inspector statements.

#### **Pilot Information**

Certificate:	Private	Age:	64,Male
Airplane Rating(s):	Single-engine land; Single-engine sea; Multi-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	Yes
Medical Certification:	Class 3 Valid Medicalw/ waivers/lim	Last FAA Medical Exam:	June 15, 1994
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:	10000 hours (Total, all aircraft), 2500 hours (Total, this make and model), 20 hours (Last 90 days, all aircraft), 20 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

### Aircraft and Owner/Operator Information

Aircraft Make:	BEECH	Registration:	N9351Y
Model/Series:	D50E D50E	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	DH-301
Landing Gear Type:	Retractable - Tricycle	Seats:	6
Date/Type of Last Inspection:	September 23, 1995 Annual	Certified Max Gross Wt.:	6300 lbs
Time Since Last Inspection:	1 Hrs	Engines:	2 Reciprocating
Airframe Total Time:	2500 Hrs	Engine Manufacturer:	LYCOMING
ELT:	Installed, activated, did not aid in locating accident	Engine Model/Series:	GO-480-F6
Registered Owner:	MILTON L. THOMPSON	Rated Power:	295 Horsepower
Operator:		Operating Certificate(s) Held:	None
Operator Does Business As:		Operator Designator Code:	

### Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
<b>Observation Facility, Elevation:</b>	FPR ,26 ft msl	Distance from Accident Site:	35 Nautical Miles
Observation Time:	16:52 Local	Direction from Accident Site:	65°
Lowest Cloud Condition:	Scattered / 1300 ft AGL	Visibility	10 miles
Lowest Ceiling:	Broken / 6000 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	7 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	50°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29 inches Hg	Temperature/Dew Point:	
Precipitation and Obscuration:	No Obscuration; No Precipita	ation	
Departure Point:	LANTANA , FL (LNA )	Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	16:00 Local	Type of Airspace:	Class G

### **Airport Information**

Airport:		Runway Surface Type:	
Airport Elevation:		Runway Surface Condition:	
Runway Used:	0	IFR Approach:	None
Runway Length/Width:		VFR Approach/Landing:	Forced landing

## Wreckage and Impact Information

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

#### **Administrative Information**

Investigator In Charge (IIC):	Kennedy, Jeffrey
Additional Participating Persons:	SAL P CECERE; ORLANDO , FL ROBERT L CUNNINGHAM; ORLANDO , FL EDWARD ROGALSKI; BELLEVIEW , FL
Original Publish Date:	January 29, 1996
Last Revision Date:	
Investigation Class:	<u>Class</u>
Note:	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=37837

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The NTSB does not assign fault or blame for an accident or incident; rather, as specified by NTSB regulation, "accident/incident investigations are fact-finding proceedings with no formal issues and no adverse parties ... and are not conducted for the purpose of determining the rights or liabilities of any person" (Title 49 *Code of Federal Regulations* section 831.4). Assignment of fault or legal liability is not relevant to the NTSB's statutory mission to improve transportation safety by investigating accidents and incidents and issuing safety recommendations. In addition, statutory language prohibits the admission into evidence or use of any part of an NTSB report related to an accident in a civil action for damages resulting from a matter mentioned in the report (Title 49 *United States Code* section 1154(b)). A factual report that may be admissible under 49 *United States Code* section 1154(b) is available here.