



National Transportation Safety Board Aviation Accident Final Report

Location:	CASTROVILLE, TX	Accident Number:	FTW92LA125
Date & Time:	05/02/1992, 2015 CDT	Registration:	N68DS
Aircraft:	SHEWMAKER BD5	Aircraft Damage:	Destroyed
Defining Event:		Injuries:	1 Serious
Flight Conducted Under:	Part 91: General Aviation -		

Analysis

THE PILOT WAS ATTEMPTING A HIGH SPEED TAXI TEST WHEN THE AIRPLANE BECAME AIRBORNE. A NORMAL CLIMB WAS MADE TO APPROXIMATELY 1,000 FEET AGL. THE PILOT MADE SEVERAL LEFT TURNS WHILE IN LEVEL FLIGHT AND PROCEEDED BACK TOWARD THE AIRPORT. DURING THE APPROACH, THE PROPELLER SYSTEM'S VARIABLE CONTROL MECHANISM SLIPPED WHICH ALLOWED THE PROPELLER TO GO TO THE FULL FEATHER POSITION. THE AIRPLANE'S AIRSPEED WAS BETWEEN 160 TO 180 MPH WHEN THIS OCCURRED, ACCORDING TO THE PILOT. THE AIRSPEED THEN DROPPED TO APPROXIMATELY 100 MPH AND THE PILOT INITIATED A FORCED LANDING TO AN OPEN FIELD. DURING THE FLARE PRIOR TO TOUCHDOWN, THE PILOT ADDED POWER AND THE AIRPLANE YAWED. THE LEFT WING TIP STRUCK THE GROUND AND THE PILOT LOST CONTROL OF THE AIRPLANE WHICH THEN IMPACTED THE TERRAIN. THE PILOT STATED THE PROPELLER CONTROL SYSTEM PROBABLY VIBRATED LOOSE DURING THE FLIGHT. THIS SYSTEM IS CONTROLLED BY THE PILOT FROM THE COCKPIT WITH A VERNIER KNOB. THE PILOT BUILT THE AIRPLANE AND HAD NOT FLOWN IT BEFORE THE ACCIDENT.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: THE PILOT'S FAILURE TO MAINTAIN AIRCRAFT CONTROL DURING THE FLARE. FACTORS WERE THE ENGAGEMENT OF THE PROPELLER FEATHERING SYSTEM AND THE PILOT'S TOTAL LACK OF EXPERIENCE IN TYPE AIRCRAFT AND THE SLIPPED PROPELLER PITCH CHANGE SYSTEM.

Findings

Occurrence #1: AIRFRAME/COMPONENT/SYSTEM FAILURE/MALFUNCTION
Phase of Operation: APPROACH

Findings

1. (F) PROPELLER SYSTEM/ACCESSORIES,PITCH CHANGE MECH - SLIPPED
2. (F) PROPELLER SYSTEM/ACCESSORIES,FEATHERING SYSTEM - ENGAGED

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

Occurrence #3: IN FLIGHT COLLISION WITH TERRAIN/WATER
Phase of Operation: LANDING - FLARE/TOUCHDOWN

Findings

3. (C) AIRCRAFT CONTROL - NOT MAINTAINED - PILOT IN COMMAND
4. (F) LACK OF TOTAL EXPERIENCE IN TYPE OF AIRCRAFT - PILOT IN COMMAND

Factual Information

Pilot Information

Certificate:	Airline Transport; Flight Instructor; Commercial	Age:	44, Male
Airplane Rating(s):	Multi-engine Land; Single-engine Land	Seat Occupied:	Center
Other Aircraft Rating(s):	None	Restraint Used:	Seatbelt, Shoulder harness
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	Airplane Multi-engine; Airplane Single-engine	Toxicology Performed:	No
Medical Certification:	Class 1 Valid Medical--w/ waivers/lim.	Last FAA Medical Exam:	04/20/1992
Occupational Pilot:		Last Flight Review or Equivalent:	
Flight Time:	17650 hours (Total, all aircraft), 1 hours (Total, this make and model), 17350 hours (Pilot In Command, all aircraft), 145 hours (Last 90 days, all aircraft), 45 hours (Last 30 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	SHEWMAKER	Registration:	N68DS
Model/Series:	BD5 BD5	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	Yes
Airworthiness Certificate:	Experimental	Serial Number:	0014
Landing Gear Type:	Retractable - Tricycle	Seats:	1
Date/Type of Last Inspection:	01/02/2000, Unknown	Certified Max Gross Wt.:	1500 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	1 Hours	Engine Manufacturer:	HONDA
ELT:	Not installed	Engine Model/Series:	EB3
Registered Owner:	SHEWMAKER, DARRYL D.	Rated Power:	105 hp
Operator:	SHEWMAKER, DARRYL D.	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	SAT, 809 ft msl	Distance from Accident Site:	20 Nautical Miles
Observation Time:	1955 CDT	Direction from Accident Site:	60°
Lowest Cloud Condition:	Unknown / 0 ft agl	Visibility	8 Miles
Lowest Ceiling:	Broken / 4000 ft agl	Visibility (RVR):	0 ft
Wind Speed/Gusts:	9 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	130°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	27° C / 19° C
Precipitation and Obscuration:			
Departure Point:		Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	2008 CDT	Type of Airspace:	Class G

Wreckage and Impact Information

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

Administrative Information

Investigator In Charge (IIC):	RAY WALL	Report Date:	07/26/1993
Additional Participating Persons:	JOHN FODERMAIER; SAN ANTONIO, TX FRANK D DOBING; SAN ANTONIO, TX		
Publish Date:			
Investigation Docket:	NTSB accident and incident docket 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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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](#).