



National Transportation Safety Board Aviation Accident Data Summary

Location:	MARTINDALE, TX	Accident Number:	FTW84FA374
Date & Time:	09/01/1984, 1115 CDT	Registration:	N177M
Aircraft:	MILLER AIR SPORTS GEM 260	Injuries:	1 Fatal
Flight Conducted Under:	Part 91: General Aviation - Personal		

Analysis

NOTES LEFT BY PLT INDICATE HE HAD BEEN TESTING THE FLIGHT ENVELOPE OF THIS EXPERIMENTAL RACING ACFT, INCLUDING OPERATION OF THE ENGINE BEYOND PROP LIMIT OF 4000 RPM. WITNESSES HEARD ENGINE SOUND SUDDENLY SPEED UP TO HIGH RPM THEN CEASE ALTOGETHER. SOME WITNESSES REPORTED HEARING AN EXPLOSIVE SOUND. ACFT WRECKAGE WAS SCATTERED OVER 1-1/2 MILES. HORIZONTAL AIRFRAME SURFACES WERE DISINTEGRATED; LARGEST PIECE WEIGHED LESS THAN 10 LBS. 3 PROP BLADES (WOOD CORE) HAD SEPARATED 8' OUTBOARD OF HUB; FOURTH BLADE SEPARATED INSIDE SPINNER. ONLY ONE BLADE WAS RECOVERED. EXAMINATION OF AIRFRAME FRACTURES REVEALED SEPARATIONS OCCURRED ALONG MULTIPLE AXES; SIGNATURES IN CONVENTIONAL MATERIALS SHOWED CHARACTERISTICS OF GROSS OVERLOAD. COMPOSITE MATERIAL SEPARATIONS PARALLELED WARP OF 'CLOTH' EXCEPT IN AREAS OF HIGH PEEL STRESS. ALL COMPOSITE STRUCTURES EXHIBITED UNIFORM SATURATION OF RESIN; NO AIR BUBBLES FOUND IN LAYUP.

Probable Cause

The National Transportation Safety Board determines the probable cause(s) of this accident to be:

Findings

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

Findings

1. (C) DESIGN STRESS LIMITS OF AIRCRAFT - EXCEEDED - PILOT IN COMMAND
2. (F) OVERCONFIDENCE IN AIRCRAFT'S ABILITY - PILOT IN COMMAND
3. (F) PROPELLER SYSTEM/ACCESSORIES, BLADE - SEPARATION
4. STABILIZER - OVERLOAD
5. STABILIZER - DISINTEGRATED
6. WING - OVERLOAD
7. WING - DISINTEGRATED

Occurrence #2: IN FLIGHT COLLISION WITH TERRAIN/WATER
Phase of Operation: DESCENT - UNCONTROLLED

Pilot Information

Certificate:	Flight Instructor; Commercial	Age:	47
Airplane Rating(s):	Multi-engine Land; Single-engine Land	Instrument Rating(s):	Airplane
Other Aircraft Rating(s):	Helicopter	Instructor Rating(s):	Airplane Multi-engine; Airplane Single-engine
Flight Time:	27487 hours (Total, all aircraft), 1 hours (Total, this make and model)		

Aircraft and Owner/Operator Information

Aircraft Make:	MILLER AIR SPORTS	Registration:	N177M
Model/Series:	GEM 260 GEM 260	Engines:	1 Reciprocating
Operator:	JAMES W. MILLER	Engine Manufacturer:	CONTINENTAL
Operating Certificate(s) Held:	None	Engine Model/Series:	O-200-B
Flight Conducted Under:	Part 91: General Aviation - Personal		

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	AUS, 632 ft msl	Weather Information Source:	Weather Observation Facility
Lowest Ceiling:	None / 0 ft agl	Wind Speed/Gusts, Direction:	5 knots / , 160°
Temperature:	29° C	Visibility	10 Miles
Precipitation and Obscuration:			
Departure Point:	Destination:		

Wreckage and Impact Information

Crew Injuries:	1 Fatal	Aircraft Damage:	Destroyed
Passenger Injuries:	N/A	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Latitude, Longitude:			

Administrative Information

Investigator In Charge (IIC):	JEAN H DAUGHERTY	Adopted 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.