



National Transportation Safety Board Aviation Accident Final Report

Location:	MUSKEGON, MI	Accident Number:	CHI83FA347
Date & Time:	08/01/1983, 2050 EDT	Registration:	N29938
Aircraft:	NORTH AMERICAN AT-6D	Aircraft Damage:	Destroyed
Defining Event:		Injuries:	1 Fatal, 2 Serious
Flight Conducted Under:	Part 91: General Aviation - Personal		

Analysis

THE ACFT COLLIDED WITH TREES AFTER PERFORMING AN AEROBATIC MANEUVER AT LOW ALTITUDE. WITNESSES NEAR THE SCENE SAID THE ACFT WAS FLYING LOW; MOST HEARD THE ENGINE RUNNING.SOME SAID THAT AT THE TOP OF A LOOP THE ENGINE SOUNDED LIKE IT STOPPED. ON THE DESCENT FOLLOWING THE LOOP THE ACFT MADE ABOUT 2 ROLLS TO THE RIGHT AND LEVELED OFF. THEN A CRASH WASHEARD. A SINGLE WITNESS SAW THE ACFT ABOUT 50 FT ABOVE THE TREES. HE HEARD THE ENGINE ROAR AND SAW THE ACFT BANK ABOUT 45 DEGREES TO THE LEFT THEN COLLIDED WITH THE TREES. HE SAID THE ACFT HAD 'GOOD SPEED.' NO EVIDENCE OF FAILURE OR MALFUNCTION OF THE ACFT WAS FOUND DURING THE INVESTIGATION. THE BACK SEAT ADULT PASSENGER SAID THE ACFT PERFORMED WELL.

Probable Cause and Findings

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

Findings

Occurrence #1: IN FLIGHT COLLISION WITH TERRAIN/WATER
Phase of Operation: MANEUVERING

Findings

1. (C) AEROBATICS - PERFORMED - PILOT IN COMMAND
2. (C) JUDGMENT - NOT USED - PILOT IN COMMAND
3. (C) PROPER ALTITUDE - NOT MAINTAINED - PILOT IN COMMAND
4. (C) CLEARANCE - INADEQUATE - PILOT IN COMMAND

Factual Information

Pilot Information

Certificate:	Private	Age:	35, Male
Airplane Rating(s):	Single-engine Land	Seat Occupied:	Front
Other Aircraft Rating(s):		Restraint Used:	Seatbelt, Shoulder harness
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):		Toxicology Performed:	Yes
Medical Certification:	Class 3 Valid Medical--no waivers/lim.	Last FAA Medical Exam:	02/24/1982
Occupational Pilot:		Last Flight Review or Equivalent:	
Flight Time:	422 hours (Total, all aircraft), 84 hours (Total, this make and model), 377 hours (Pilot In Command, all aircraft), 26 hours (Last 90 days, all aircraft), 6 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	NORTH AMERICAN	Registration:	N29938
Model/Series:	AT-6D AT-6D	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Normal	Serial Number:	49-3215
Landing Gear Type:	Retractable - Tailwheel	Seats:	2
Date/Type of Last Inspection:	04/25/1983, Annual	Certified Max Gross Wt.:	5300 lbs
Time Since Last Inspection:	20 Hours	Engines:	1 Reciprocating
Airframe Total Time:	8136 Hours	Engine Manufacturer:	P&W
ELT:	Installed, activated	Engine Model/Series:	R1340-AN1
Registered Owner:	T. P. BALCH & M. G. QUESNELL	Rated Power:	600 hp
Operator:	T. P. BALCH & M. G. QUESNELL	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	MKG, 628 ft msl	Distance from Accident Site:	5 Nautical Miles
Observation Time:	2141 EDT	Direction from Accident Site:	190°
Lowest Cloud Condition:	Clear / 0 ft agl	Visibility	20 Miles
Lowest Ceiling:	None / 0 ft agl	Visibility (RVR):	0 ft
Wind Speed/Gusts:	6 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	310°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	21° C / 17° C
Precipitation and Obscuration:			
Departure Point:	OSHKOSH, WI (OSH)	Type of Flight Plan Filed:	None
Destination:	GREENVILLE, MI (6D6)	Type of Clearance:	None
Departure Time:	1900 CDT	Type of Airspace:	Class G

Wreckage and Impact Information

Crew Injuries:	1 Fatal	Aircraft Damage:	Destroyed
Passenger Injuries:	2 Serious	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Fatal, 2 Serious	Latitude, Longitude:	

Administrative Information

Investigator In Charge (IIC):	FRED A RATHKE, JR.	Report Date:	
Additional Participating Persons:			
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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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](#).