



National Transportation Safety Board Aviation Accident Final Report

Location:	IRON MOUNTAIN, MI	Accident Number:	CHI90DEM05
Date & Time:	07/01/1990, 1600 CDT	Registration:	N176
Aircraft:	OO-CULLEY OSPREY	Aircraft Damage:	Destroyed
Defining Event:		Injuries:	1 Fatal

Flight Conducted Under: Part 91: General Aviation - Personal

Analysis

WITNESSES REPORTED SEEING THE AIRPLANE ENTER A SHALLOW LEFT BANK SHORTLY AFTER TAKEOFF. THEY STATED THE BANK GRADUALLY INCREASED TO APPROXIMATELY 60 DEGREES AT WHICH TIME THE NOSE DROPPED AND THE AIRPLANE ENTERED A DESCENDING SPIRAL UNTIL IT CRASHED INTO A RIVER. THE PILOT REPORTED HAVING PROBLEMS WITH THE RUDDER CONTROLS AND AIRSPEED INDICATOR PRIOR TO THE ACCIDENT. THE PILOT MADE SOME ADJUSTMENTS TO THE RUDDER CONTROLS PRIOR TO THIS FLIGHT. POST-ACCIDENT INSPECTION REVEALED DUCT TAPE ON THE FLIGHT CONTROL CABLES. THE RUDDER CONTROL CABLE HAD SLIPPED OFF IT'S PULLEY AND JAMMED BETWEEN THE PULLEY AND THE PULLEY SUPPORT BRACKET.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: JAMMING OF THE RUDDER CABLE BETWEEN THE PULLEY AND THE PULLEY SUPPORT BRACKET AND THE PILOT'S CONTINUED OPERATION OF THE AIRPLANE WITH A KNOWN DEFICIENCY.

Findings

Occurrence #1: AIRFRAME/COMPONENT/SYSTEM FAILURE/MALFUNCTION

Phase of Operation: CLIMB

Findings

1. (C) FLT CONTROL SYST, RUDDER CONTROL CABLE/ROD - JAMMED
2. (F) MAINTENANCE, ADJUSTMENT - ATTEMPTED - PILOT IN COMMAND
3. (F) OPERATION WITH KNOWN DEFICIENCIES IN EQUIPMENT - PERFORMED - PILOT IN COMMAND

Occurrence #2: LOSS OF CONTROL - IN FLIGHT

Phase of Operation: CRUISE

Findings

4. AIRCRAFT CONTROL - NOT POSSIBLE - PILOT IN COMMAND

Occurrence #3: IN FLIGHT COLLISION WITH TERRAIN/WATER

Phase of Operation: DESCENT - UNCONTROLLED

Findings

5. TERRAIN CONDITION - WATER

Factual Information

Pilot Information

Certificate:	Private	Age:	60, Male
Airplane Rating(s):	Single-engine Land	Seat Occupied:	Unknown
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	Yes
Medical Certification:	Class 3 Valid Medical--w/ waivers/lim.	Last FAA Medical Exam:	07/01/1988
Occupational Pilot:		Last Flight Review or Equivalent:	
Flight Time:	180 hours (Total, all aircraft), 2 hours (Total, this make and model), 2 hours (Last 90 days, all aircraft), 1 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	OO-CULLEY	Registration:	N176
Model/Series:	OSPREY OSPREY	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	Yes
Airworthiness Certificate:	Experimental	Serial Number:	176
Landing Gear Type:	Amphibian	Seats:	2
Date/Type of Last Inspection:	Unknown	Certified Max Gross Wt.:	
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:		Engine Manufacturer:	LYCOMING
ELT:		Engine Model/Series:	O-290
Registered Owner:	ERICKSON, CONRAD W.	Rated Power:	125 hp
Operator:	ERICKSON, CONRAD W.	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	IMT, 1182 ft msl	Distance from Accident Site:	2 Nautical Miles
Observation Time:	1545 CDT	Direction from Accident Site:	160°
Lowest Cloud Condition:	Scattered / 3000 ft agl	Visibility	15 Miles
Lowest Ceiling:	None / 0 ft agl	Visibility (RVR):	0 ft
Wind Speed/Gusts:	7 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	30°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	21° C / 12° C
Precipitation and Obscuration:			
Departure Point:	(IMT)	Type of Flight Plan Filed:	None
Destination:	(IMT)	Type of Clearance:	None
Departure Time:	1555 CDT	Type of Airspace:	Class G

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
Total Injuries:	1 Fatal	Latitude, Longitude:	

Administrative Information

Investigator In Charge (IIC):	WILL D ELLIOTT	Report Date:	12/30/1992
Additional Participating Persons:	JOHN BEEBY; GRAND RAPIDS, MI		
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/ .		

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. A factual report that may be admissible under 49 U.S.C. § 1154(b) is available [here](#).