



Aviation Investigation Final Report

Location:	DRUMMOND ISLAND, Michigan	Accident Number:	CHI84LA211
Date & Time:	May 28, 1984, 16:15 Local	Registration:	N10174
Aircraft:	BELL 47G	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 Serious, 1 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

THE PLT HAD PREVIOUSLY MADE 2 LOCAL FLTS, DURING WHICH, HE PRACTICED WATER LANDINGS & TAKEOFFS AS WELL AS OTHER MANEUVERS. ON THE 3RD FLT, HE MADE SEVERAL WATER TAKEOFFS & LANDINGS. THEN WHILE ON A LANDING, THE HELICOPTER BEGAN TO ROLL QUICKLY TO THE RIGHT. HE APPLIED LEFT CYCLIC & UP COLLECTIVE, BUT THE ROTOR BLADES STRUCK THE WATER. THE HELICOPTER ROLLED INVERTED, BUT CONTINUED TO BE SUPPORTED BY THE FLOATS. THE PASSENGER SUFFERED WATER INJECTION & WAS HOSPITALIZED. THE PLT ESTIMATED THAT THE WIND WAS FROM THE NORTHWEST AT 15 KTS.

Probable Cause and Findings

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

Findings

Occurrence #1: ROLL OVER
Phase of Operation: LANDING - FLARE/TOUCHDOWN

Findings

1. (C) PLANNING/DECISION - IMPROPER - PILOT IN COMMAND
2. (F) WEATHER CONDITION - HIGH WIND
3. (F) TERRAIN CONDITION - WATER,ROUGH

Factual Information

Pilot Information

Certificate:	Commercial	Age:	40, Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	Helicopter	Restraint Used:	
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 1 Valid Medical--no waivers/lim.	Last FAA Medical Exam:	December 28, 1983
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	
Flight Time:	7647 hours (Total, all aircraft), 47 hours (Total, this make and model), 5065 hours (Pilot In Command, all aircraft), 118 hours (Last 90 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	BELL	Registration:	N10174
Model/Series:	47G 47G	Aircraft Category:	Helicopter
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:		Serial Number:	691
Landing Gear Type:	Float	Seats:	2
Date/Type of Last Inspection:	October 30, 1983 Annual	Certified Max Gross Wt.:	2450 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	9090 Hrs	Engine Manufacturer:	FRANKLIN
ELT:	Not installed	Engine Model/Series:	6VS 335A
Registered Owner:	LEWIS P. BENUA	Rated Power:	225 Horsepower
Operator:		Operating Certificate(s) Held:	
Operator Does Business As:		Operator Designator Code:	

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:		Distance from Accident Site:	
Observation Time:		Direction from Accident Site:	
Lowest Cloud Condition:	Clear	Visibility	20 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	15 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	315°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:		Temperature/Dew Point:	16°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	BALD ISLAND , MI	Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	00:00 Local	Type of Airspace:	Class G

Airport Information

Airport:		Runway Surface Type:	Water
Airport Elevation:		Runway Surface Condition:	Water-choppy
Runway Used:	0	IFR Approach:	None
Runway Length/Width:		VFR Approach/Landing:	Full stop

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	1 Serious	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Serious, 1 None	Latitude, Longitude:	46.000137,-83.670104(est)

Administrative Information

Investigator In Charge (IIC): Rathke, Frederick

Additional Participating Persons:

Original Publish Date:

Last Revision Date:

Investigation Class: [Class](#)

Note:

Investigation Docket: <https://data.nts.gov/Docket?ProjectID=12628>

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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](#).