



Aviation Investigation Final Report

Location:	MIDDLEVILLE, Michigan	Accident Number:	CHI90LA073
Date & Time:	January 30, 1990, 10:10 Local	Registration:	N828WA
Aircraft:	BELL 222	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 None
Flight Conducted Under:	Part 91: General aviation - Positioning		

Analysis

THE PILOT STATED THAT THE HELICOPTER WAS IN CRUISE FLIGHT AT 1,500 FEET MSL (500 TO 600 FEET AGL) ON A REPOSITIONING FLIGHT, WHEN IT STRUCK A GUY WIRE ON A 1,060 FOOT HIGH TV TOWER. THE MAIN ROTOR BLADE SEVERED THE WIRE/CABLE, AND THE PILOT PERFORMED AN EMERGENCY DESCENT TO A FORCED LANDING IN A NEARBY FIELD. THE PILOT TOLD THE STATE POLICE THAT THE HELICOPTER WAS ON AUTOPILOT, AND 'HE WAS CHECKING HIS LOG (AND PAPERS) AND VARIOUS INSTRUMENTS IN THE COCKPIT . . . HAPPENED TO LOOK UP JUST PRIOR TO STRIKING THE CABLE.' A REPRESENTATIVE FOR THE OWNERS OF THE TV TOWER REPORTED THAT IT WAS MARKED (PAINTED, LIT, ETC.) IN ACCORDANCE WITH FAA REGULATIONS. THE PILOT'S LOGBOOK RECORDS INDICATED A TOTAL FLIGHT TIME OF 10,434 HOURS, OF WHICH 9,549 HOURS WERE ACCUMULATED IN ROTORCRAFT (INCLUDING 91 HOURS IN THE ACCIDENT MAKE AND MODEL AIRCRAFT).

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: THE PILOT'S INADEQUATE VISUAL LOOKOUT AND FAILURE TO MAINTAIN PROPER ALTITUDE AND CLEARANCE FROM THE TV TOWER. THE TV TOWER (GUY WIRE) WAS A RELATED FACTOR.

Findings

Occurrence #1: IN FLIGHT COLLISION WITH OBJECT
Phase of Operation: CRUISE - NORMAL

Findings

1. (C) PROPER ALTITUDE - NOT MAINTAINED - PILOT IN COMMAND
2. (C) VISUAL LOOKOUT - INADEQUATE - PILOT IN COMMAND
3. (F) OBJECT - GUY WIRE
4. (C) CLEARANCE - NOT MAINTAINED - PILOT IN COMMAND

Occurrence #2: FORCED LANDING

Phase of Operation: DESCENT - EMERGENCY

Occurrence #3: IN FLIGHT COLLISION WITH TERRAIN/WATER

Phase of Operation: LANDING

Factual Information

Pilot Information

Certificate:	Commercial; Flight instructor	Age:	48, Male
Airplane Rating(s):	Single-engine land; Single-engine sea; Multi-engine land	Seat Occupied:	Right
Other Aircraft Rating(s):	Helicopter	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	Helicopter	Toxicology Performed:	No
Medical Certification:	Class 2 Valid Medical--w/ waivers/lim	Last FAA Medical Exam:	April 14, 1989
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	
Flight Time:	10434 hours (Total, all aircraft), 91 hours (Total, this make and model), 10400 hours (Pilot In Command, all aircraft), 58 hours (Last 90 days, all aircraft), 22 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	BELL	Registration:	N828WA
Model/Series:	222 222	Aircraft Category:	Helicopter
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	47086
Landing Gear Type:	Retractable - Tricycle	Seats:	8
Date/Type of Last Inspection:	October 8, 1989 100 hour	Certified Max Gross Wt.:	7850 lbs
Time Since Last Inspection:	80 Hrs	Engines:	2 Turbo shaft
Airframe Total Time:	1588 Hrs	Engine Manufacturer:	LYCOMING
ELT:	Installed, not activated	Engine Model/Series:	LTS-101-650C
Registered Owner:	J.W. LEASING	Rated Power:	650 Horsepower
Operator:	MCPMAHON HELICOPTERS SERVICES	Operating Certificate(s) Held:	On-demand air taxi (135)
Operator Does Business As:		Operator Designator Code:	GL23

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	GRR ,794 ft msl	Distance from Accident Site:	11 Nautical Miles
Observation Time:	09:50 Local	Direction from Accident Site:	360°
Lowest Cloud Condition:	Scattered / 8500 ft AGL	Visibility	10 miles
Lowest Ceiling:	Broken / 9500 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	15 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	200°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29 inches Hg	Temperature/Dew Point:	1°C / -7°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	HOLLAND , MI (C19)	Type of Flight Plan Filed:	None
Destination:	CANTON , MI (1D2)	Type of Clearance:	None
Departure Time:	10:00 Local	Type of Airspace:	Class G

Airport Information

Airport:		Runway Surface Type:	
Airport Elevation:	0 ft msl	Runway Surface Condition:	
Runway Used:	0	IFR Approach:	None
Runway Length/Width:	0 ft / 0 ft	VFR Approach/Landing:	Forced landing

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 None	Latitude, Longitude:	42.710018,-85.4607(est)

Administrative Information

Investigator In Charge (IIC):	Reeves, Jodi
Additional Participating Persons:	B. NAYMICK; GRAND RAPIDS , MI
Original Publish Date:	March 5, 1993
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=14625

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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](#).