



Aviation Investigation Final Report

Location:	CLARINDA, Iowa	Accident Number:	CHI93LA305
Date & Time:	July 31, 1993, 17:30 Local	Registration:	N8480E
Aircraft:	BELL 47G-3B	Aircraft Damage:	Destroyed
Defining Event:		Injuries:	1 Minor
Flight Conducted Under:	Part 137: Agricultural		

Analysis

THE COMMERCIAL PILOT WAS ENGAGED IN AERIAL APPLICATION MANEUVERS OVER FLAT TERRAIN. HE REPORTED HE ASSESSED THE FIELD TO LOCATE OBSTACLES, THEN MADE THE FIRST SPRAY RUN FROM EAST TO WEST. AS THE HELICOPTER APPROACHED THE EAST END OF THE FIELD AT THE END OF THE SECOND SPRAY RUN, THE PILOT '...WAS AGAIN VERIFYING THE EXISTANCE AND LOCATION OF POWER POLES AND LOOKING FOR POWER LINES. DURING CLIMBOUT ON EAST END OF FIELD POWER LINES WERE IMPACTED BY SKIDS... .' THE HELICOPTER CAME TO REST INVERTED.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: THE COMMERCIAL PILOT'S FAILURE TO MAINTAIN ADEQUATE CLEARANCE FROM OBSTACLES DURING AERIAL APPLICATION MANEUVERS.

Findings

Occurrence #1: IN FLIGHT COLLISION WITH OBJECT
Phase of Operation: MANEUVERING - AERIAL APPLICATION

Findings

1. VISUAL LOOKOUT - INADEQUATE - PILOT IN COMMAND
2. OBJECT - WIRE, TRANSMISSION
3. (C) CLEARANCE - NOT MAINTAINED - PILOT IN COMMAND

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

Factual Information

Pilot Information

Certificate:	Commercial	Age:	46, Male
Airplane Rating(s):	Single-engine land; Single-engine sea	Seat Occupied:	Left
Other Aircraft Rating(s):	Helicopter	Restraint Used:	
Instrument Rating(s):	Helicopter	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 2 Valid Medical--no waivers/lim.	Last FAA Medical Exam:	July 30, 1993
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:	2800 hours (Total, all aircraft), 2500 hours (Pilot In Command, all aircraft), 37 hours (Last 90 days, all aircraft), 27 hours (Last 30 days, all aircraft), 2 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	BELL	Registration:	N8480E
Model/Series:	47G-3B 47G-3B	Aircraft Category:	Helicopter
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	2651
Landing Gear Type:	Skid	Seats:	2
Date/Type of Last Inspection:	April 17, 1993 Annual	Certified Max Gross Wt.:	2860 lbs
Time Since Last Inspection:	37 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	1937 Hrs	Engine Manufacturer:	LYCOMING
ELT:	Not installed	Engine Model/Series:	VO-435-A1F
Registered Owner:	AMBROSE, WALTER J. JR.	Rated Power:	265 Horsepower
Operator:	AMBROSE, WALTER J. JR.	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:	Scattered / 5000 ft AGL	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	3 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	180°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:		Temperature/Dew Point:	24°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	(NONE)	Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	17:25 Local	Type of Airspace:	Class G

Airport Information

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

Wreckage and Impact Information

Crew Injuries:	1 Minor	Aircraft Damage:	Destroyed
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Minor	Latitude, Longitude:	40.730812,-95.030158(est)

Administrative Information

Investigator In Charge (IIC):	Reeves, Jodi
Additional Participating Persons:	EARNEST HOLDSCRAW; DES MOINES , IA
Original Publish Date:	November 19, 1993
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=15767

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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](#).