



Aviation Investigation Factual Report

Location:	CLEARWATER, Oregon	Accident Number:	SEA94LA047
Date & Time:	January 6, 1994, 14:45 Local	Registration:	N204PC
Aircraft:	MBB BO-105S	Aircraft Damage:	Destroyed
Defining Event:		Injuries:	3 Minor
Flight Conducted Under:	Part 91: General aviation - Aerial observation		

Factual Information

On January 6, 1994, approximately 1445 hours Pacific standard time (PST), a Messerschmitt-Boelkow-Blohm BO-105S, N204PC, registered to and operated by Pacificorp Trans, Inc., and being flown by Lawrence E. Cranford, an airline transport rated helicopter pilot, was destroyed during a collision with wires and subsequent ground impact approximately 5 miles east of Clearwater, Oregon. The pilot and two passengers sustained minor injuries. Visual meteorological conditions prevailed and a company VFR flight plan was in effect. The flight, which was being conducted for the purposes of aerial observation of wildlife, was to have been operated in accordance with the requirements set forth in 14CFR91.

The pilot reported that he was flying in a southwesterly direction while following a manmade canal at about 50 feet above ground. The canal emptied into an east/west oriented forebay (small pond) and as the helicopter continued following the forebay its flight path was adjusted to a westerly heading. The pilot reported that "as we turned to a westerly heading over the forebay, my forward visibility was restricted by the afternoon sun" and "at the last minute myself (sic) and the front seat passenger saw power lines across the forebay." The pilot reported that he attempted to turn and decelerate to avoid the wires but was unsuccessful. The main rotor blades contacted at least two of the three power lines and the helicopter then descended out of control, impacting near the shoreline of the lake in a near inverted attitude.

The elevation and azimuth of the sun at the time of the accident was approximately +16 degrees above the horizon and 216 degrees (true) respectively.

Pilot Information

Certificate:	Airline transport	Age:	44, 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; Helicopter	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 1 Valid Medical--w/ waivers/lim	Last FAA Medical Exam:	November 15, 1993
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	
Flight Time:	10001 hours (Total, all aircraft), 146 hours (Total, this make and model), 7223 hours (Pilot In Command, all aircraft), 192 hours (Last 90 days, all aircraft), 60 hours (Last 30 days, all aircraft), 5 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	MBB	Registration:	N204PC
Model/Series:	BO-105S BO-105S	Aircraft Category:	Helicopter
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	S783
Landing Gear Type:	Skid	Seats:	5
Date/Type of Last Inspection:	December 7, 1993 100 hour	Certified Max Gross Wt.:	5512 lbs
Time Since Last Inspection:	5 Hrs	Engines:	2 Turbo shaft
Airframe Total Time:	3035 Hrs	Engine Manufacturer:	ALLISON
ELT:	Installed, activated, did not aid in locating accident	Engine Model/Series:	250-C20B
Registered Owner:	PACIFICORP TRANS, INC.	Rated Power:	420 Horsepower
Operator:	PACIFICORP TRANS, INC.	Operating Certificate(s) Held:	
Operator Does Business As:		Operator Designator Code:	JSNL

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	RBG ,525 ft msl	Distance from Accident Site:	45 Nautical Miles
Observation Time:	14:51 Local	Direction from Accident Site:	250°
Lowest Cloud Condition:	Unknown	Visibility	20 miles
Lowest Ceiling:	Broken / 4000 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	5 knots / None	Turbulence Type Forecast/Actual:	/
Wind Direction:	200°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	11°C / 5°C
Precipitation and Obscuration:	N/A - None - Haze		
Departure Point:	ROSEBURG (RBG)	Type of Flight Plan Filed:	Company VFR
Destination:		Type of Clearance:	None
Departure Time:	12:50 Local	Type of Airspace:	Class G

Airport Information

Airport:		Runway Surface Type:	
Airport Elevation:		Runway Surface Condition:	
Runway Used:	0	IFR Approach:	
Runway Length/Width:		VFR Approach/Landing:	

Wreckage and Impact Information

Crew Injuries:	1 Minor	Aircraft Damage:	Destroyed
Passenger Injuries:	2 Minor	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	3 Minor	Latitude, Longitude:	43.160728,-122.210136(est)

Administrative Information

Investigator In Charge (IIC): McCreary, Steven

Additional Participating Persons: RON JOHNSON; HILLSBORO , OR

Report Date: June 16, 1994

Last Revision Date:

Investigation Class: [Class](#)

Note:

Investigation Docket: <https://data.nts.gov/Docket?ProjectID=41866>

The National Transportation Safety Board (NTSB) is an independent federal agency charged by Congress with investigating every civil aviation accident in the United States and significant events in other modes of transportation—railroad, transit, highway, marine, pipeline, and commercial space. We determine the probable causes of the accidents and events we investigate, and issue safety recommendations aimed at preventing future occurrences. In addition, we conduct transportation safety research studies and offer information and other assistance to family members and survivors for each accident or event we investigate. We also serve as the appellate authority for enforcement actions involving aviation and mariner certificates issued by the Federal Aviation Administration (FAA) and US Coast Guard, and we adjudicate appeals of civil penalty actions taken by the FAA.

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](#).