



Aviation Investigation Factual Report

Location:	Warrenton, Oregon	Accident Number:	SEA06FA159
Date & Time:	August 13, 2006, 08:25 Local	Registration:	N168PT
Aircraft:	Robinson R44 II	Aircraft Damage:	Destroyed
Defining Event:		Injuries:	3 Fatal
Flight Conducted Under:	Part 91: General aviation - Positioning		

Factual Information

HISTORY OF FLIGHT

On August 13, 2006, about 0825 Pacific daylight time, a Robinson R44 II (Raven) helicopter, N168PT, impacted the ocean waters approximately 1 mile west of Camp Rilea, Warrenton, Oregon. The helicopter was destroyed and the three occupants, a private pilot seated in the front right seat (first pilot), a commercial pilot/flight instructor seated in the left front seat (second pilot) and passenger seated in the rear seat, were killed. Civic Helicopters of Carlsbad, California operated the helicopter, which was on a 14 CFR Part 91 positioning flight when the accident occurred. The flight departed Pearson Field Airport, Vancouver, Washington, about 0730 with an intended intermediate destination of Astoria, Oregon. Visual meteorological conditions prevailed at the departure airport and instrument meteorological conditions prevailed at the accident site. No flight plan was filed for the cross-country flight.

The accident helicopter was one in a flight of two that departed Vancouver. The second helicopter was a Bell 206B Jet Ranger (N2183Y). Both helicopters were participating in "Flight of Discovery" to film a local event commemorating the Lewis and Clark expedition. The pilots planned to land in Astoria, Oregon, for fuel and then continue to Long Beach, Washington.

In a written statement to the National Transportation Safety Board's Investigator-in-Charge, the pilot seated in the right seat of the Jet Ranger stated there was an overcast layer over Astoria when the two helicopters arrived, and they elected to continue the flight to the west, over water, in an effort to find a break in the overcast.

The passenger seated in the aft seat of the Jet Ranger reported that the first pilot in the R44 was a recently certificated private pilot. The first pilot hired the second pilot to provide instruction during the flight as needed.

The Jet Ranger flight crew consisted of two pilots, a private pilot seated in the right front seat, and a commercial pilot/certified flight instructor seated in the left front seat. The Jet Ranger passenger reported that the pilot in the right seat was manipulating the controls of the Jet Ranger when they departed Vancouver. However, later in the flight when the weather deteriorated, the pilot in the left seat assumed control of the helicopter.

The Jet Ranger passenger also reported that the pilots of both helicopters were in continuous contact with one another during the flight and that as the weather conditions deteriorated, the second pilot in the accident helicopter queried the left seat pilot in the Jet Ranger as to what they should do with respect to the weather. The witness reported that the second pilot in the accident helicopter repeated the request a second time before receiving a response. The witness reported the left seat pilot in the Jet Ranger "took the controls" and stated "I'm going

to go through it" followed by "stay right behind me." The second pilot in the accident helicopter agreed. The witness reported that when the Jet Ranger entered the fog, the accident helicopter was "behind and above us." The witness stated the second pilot in the accident helicopter radioed the left seat pilot asking, "How fast are you descending?" The Jet Ranger instructor pilot stated "very slow." The witness reported that approximately 30 seconds later; the instructor pilot of the Jet Ranger stated, "Go back up... it's too low. It's much lower than we thought. Go back up right now."

The witness stated that as the Jet Ranger ascended, the left seat pilot attempted to contact the accident helicopter, however the attempts were unsuccessful and the Jet Ranger departed the area and landed in Astoria.

After landing in Astoria, the instructor pilot in the Jet Ranger contacted emergency personnel via 911 and reported he had lost communications with the accident helicopter and believed that it had crashed.

A search for the helicopter was initiated and about 0845 two orange "life vests" and miscellaneous debris were located floating in the water at N 46:07.499 and W 123:58.906. The bodies of both pilots and passenger were recovered in the general area later that day. Numerous smaller pieces of helicopter wreckage were recovered from the water, however a majority of the wreckage was not located.

PERSONNEL INFORMATION

Robinson R44 (Accident Helicopter)

The pilot seated in the left seat of the R44 held a commercial pilot certificate with rotorcraft-helicopter and instrument ratings. The pilot also held a flight instructor certificate with helicopter and instrument helicopter privileges. The pilot seated in the right seat held a private pilot certificate with a rotorcraft-helicopter rating. The certificate was issued on May 10, 2006. Both pilots held current FAA medical certificates.

Bell Jet Ranger

The pilot seated in the right seat of the Jet Ranger held a private pilot certificate with a rotorcraft-helicopter rating. The pilot in the left seat held, among other certificates and ratings, a commercial pilot certificate with rotorcraft-helicopter and instrument ratings. The pilot also held a flight instructor certificate with helicopter and instrument helicopter privileges. Both pilots held current FAA medical certificates.

AIRCRAFT INFORMATION

The 2005 model R44 II helicopter, S/N 10775, was powered by a 245-horsepower Lycoming IO-540 engine, which drove a two bladed main rotor system and a two bladed tail rotor. An

instrument flight training avionics package, that included a Gamin GNS 430 global positioning system, was installed in the helicopter. The helicopter was not certified for flight in instrument meteorological conditions.

The helicopter's last 100-hour inspection was completed on July 18, 2006. The aircraft had accrued approximately 40 hours between the inspection completion date and the time of the crash. The operator reported no open maintenance discrepancies with the helicopter at the time of the accident.

METEOROLOGICAL INFORMATION

The 0755 hourly METAR observation at Astoria was, in part, visibility 5 statute miles and mist, overcast clouds at 400 feet, temperature 13 degrees C; dew point 12 degrees C.

At 0905 Coast Guard search and rescue (SAR) personnel reported the weather one mile west of Camp Rilea was, in part, visibility 1 mile; overcast ceiling at 100 feet and winds from the northwest at 10 knots.

MEDICAL AND PATHOLOGICAL INFORMATION

A postmortem examination of both pilots was conducted on August 14, 2006. According to the postmortem reports, the cause of death for both pilots was attributed to multiple blunt force injuries. The manner of death, in both cases, was listed as accidental.

Toxicology testing on both pilots was conducted by the FAA's Forensic Toxicology Research Team, Oklahoma City, Oklahoma. Both pilots tested negative for carbon monoxide, cyanide, ethanol and a wide range of drugs, including drugs of abuse.

The final forensic toxicology report, which includes specific test parameters and results, is contained in the public docket for this case.

ADDITIONAL INFORMATION

Based on the available evidence, it could not be determined whether the first or second pilot was flying the helicopter at the time of the accident.

The recovered wreckage was released to a representative of the owner on February 21, 2007.

Pilot Information

Certificate:	Private	Age:	56,Male
Airplane Rating(s):	None	Seat Occupied:	Right
Other Aircraft Rating(s):	Helicopter	Restraint Used:	
Instrument Rating(s):	None	Second Pilot Present:	Yes
Instructor Rating(s):	None	Toxicology Performed:	Yes
Medical Certification:	Class 3 With waivers/limitations	Last FAA Medical Exam:	February 1, 2006
Occupational Pilot:	No	Last Flight Review or Equivalent:	May 1, 2006
Flight Time:	114 hours (Total, all aircraft), 11 hours (Pilot In Command, all aircraft)		

Flight instructor Information

Certificate:	Commercial; Flight instructor; Private	Age:	46,Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	Helicopter	Restraint Used:	
Instrument Rating(s):	Airplane; Helicopter	Second Pilot Present:	Yes
Instructor Rating(s):	Helicopter; Instrument helicopter	Toxicology Performed:	Yes
Medical Certification:	Class 2 Without waivers/limitations	Last FAA Medical Exam:	February 1, 2006
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	May 1, 2006
Flight Time:			

Aircraft and Owner/Operator Information

Aircraft Make:	Robinson	Registration:	N168PT
Model/Series:	R44 II	Aircraft Category:	Helicopter
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	10775
Landing Gear Type:	Skid	Seats:	4
Date/Type of Last Inspection:	July 1, 2006 100 hour	Certified Max Gross Wt.:	2400 lbs
Time Since Last Inspection:	40 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	840 Hrs at time of accident	Engine Manufacturer:	Lycoming
ELT:	Installed, not activated	Engine Model/Series:	IO-540
Registered Owner:	Civic Helicopters, Inc	Rated Power:	245 Horsepower
Operator:		Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Instrument (IMC)	Condition of Light:	Day
Observation Facility, Elevation:	KAST, 15 ft msl	Distance from Accident Site:	4 Nautical Miles
Observation Time:	07:55 Local	Direction from Accident Site:	45°
Lowest Cloud Condition:		Visibility	5 miles
Lowest Ceiling:	Overcast / 400 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	/ None	Turbulence Type Forecast/Actual:	/
Wind Direction:		Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30.06 inches Hg	Temperature/Dew Point:	13°C / 12°C
Precipitation and Obscuration:	Moderate - None - Mist		
Departure Point:	VANCOUVER, WA (60S)	Type of Flight Plan Filed:	None
Destination:	ASTORIA, OR (AST)	Type of Clearance:	None
Departure Time:	07:30 Local	Type of Airspace:	

Wreckage and Impact Information

Crew Injuries:	2 Fatal	Aircraft Damage:	Destroyed
Passenger Injuries:	1 Fatal	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	3 Fatal	Latitude, Longitude:	46.10889,-123.985275

Administrative Information

Investigator In Charge (IIC):	Hogenson, Dennis
Additional Participating Persons:	Ross Demmel; FAA Portland, Oregon, FSDO; Hillsboro, OR
Report Date:	March 18, 2007
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=64315

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](#).