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NTSB lambasts Carson Helicopters of Grants Pass in 2008 crash that killed 9 firefighters

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By The Oregonian

WASHINGTON – The 2008 crash of an Oregon-based helicopter that killed nine firefighters resulted from a cascade of "failures and missed opportunities" by virtually everyone involved in assuring a safe flight, the National Transportation Safety Board said Tuesday.

But in ranking causes, the NTSB board said unanimously, chief was "the intentional understatement of the helicopter's empty weight," by its owner, Carson Helicopter Services, Inc., of Grant Pass.

The board, in presenting its findings, also faulted Carson for altering a crucial chart of the helicopter's "lift capability" that falsely indicated it had the ability to carry more than was the case. And after the hearing, the board's chairwoman said the possibility of criminal wrongdoing by Carson should be investigated.

At the same time, the board admonished the U.S. Forest Service and the Federal Aviation Administration for failing to aggressively monitor safety and recognize obvious warnings in Carson's operations.

"Carson's actions were so egregious – so egregious – that they have to go first," said NTSB member Robert Sumwalt, pointing to the "falsification of weight documents" by the company. Miscalculating the weight of the helicopter made it dangerous to fly, the board found.

The investigation found the helicopter's pilots compounded the risk by failing "to account for the helicopter operating at the limit of its performance," NTSB Chairwoman Deborah A.P. Hersman said at the start of a daylong hearing that exposed serious -- possibly criminal -- shortcomings in meeting safety standards.

Iron 44

The Oregonian's continuing coverage of the fatal Iron 44 crash and the investigation of its causes.

Hersman said after the hearing that some of Carson's actions were so distressing that the NTSB has alerted the Department of Transportation's inspector general to investigate in more detail, looking for possible criminal wrongdoing.

The Forest Service, which hired Carson to help fight a wild fire in California, and the FAA also failed to adequately review and monitor Carson and ensure safe operation.

"The tragedy of this accident is that this firefighting crew never expected that the place where they would experience the greatest danger was not the mountain battling the flames but in a helicopter during takeoff on a flight back to base," Hersman said.

"Firefighters are emergency responders. They are trained to work in extremely dangerous situations, and they must be able to trust the system that supports them" she said. "This accident represents a failure of that system."

NTSB investigators focused on Carson for providing "inaccurate and altered documents" that made the helicopter heavier than safety standards require. An overweight helicopter can't always lift-off vertically.

By day's end, the FAA announced that Carson has turned in "certificates" that allow it to, among other things, fly aircraft for hire, carry containers on helicopters and do chemical spraying. A Carson spokeswoman said it has been "inactive" in those areas for "the past several months" and "has concentrated more and more on its refurbishment and rebuilding of aircraft."

But Carson also disputed some of the NTSB's conclusions. In a statement, it said improper weight reports "were the actions of one manager who acted without the knowledge or consent of Carson senior management and is not reflective of Carson's 50 years of dedicated flight operations."

Moreover, the company criticized the NTSB, saying it ignored evidence the crash was caused by a mechanical problem that limited fuel to one engine. "It is Carson's firm contention that the facts clearly show that the primary cause of this accident was a loss of power to the No. 2 engine of the aircraft," the company.

"NTSB has chosen to ignore the physical evidence and flight parameters that indicate a possible blockage in the (fuel control unit)," the company said. "They repeatedly refused to participate in independent flight testing, and they have not given proper consideration to the copilot's direct testimony of conditions and available power just prior to the crash.

Whatever the truth, the result was disastrous.

As the Sikorsky S-61N tried to take off at 7:41 p.m. on Aug. 5, it weighed 19,008 pounds -- 3,168 more than recommended for safe flight and 563 heavier than the maximum allowable weight. It was also 1,647 pounds heavier than the pilot thought, which affected his decision to take off as well as how to fly, NTSB officials said Tuesday.

Instead of climbing up from its launch site near Weaverville, Calif., the helicopter went forward, clipped the tops of trees and crashed. Seven firefighters from Oregon, the pilot, also from Oregon, and a Forest Service inspector pilot from California were killed. Four other Oregonians were injured in one of the nation's worst firefighting air crashes.

Witnesses to the air disaster on the front lines of an 83,000-acre wildfire in the Shasta-Trinity National Forest told NTSB investigators that the aircraft rose only 40 to 50 feet before going down.

After crashing about 150 yards from a helipad on the 5,945-foot mountain, it filled with thick black smoke. The four survivors managed to escape before fire consumed the craft.

The weight problem was worsened by the pilot, who calculated the craft's weight before take-off using unapproved methods based on inaccurate baseline data supplied by Carson. Hersman also said the U.S. Forest Service and the Federal Aviation Administration failed "to sufficiently oversee the operator and detect fatal errors and discrepancies that should have been identified, and corrected, before the accident."

The result was a helicopter that was "low, slow and sluggish" on two earlier take-offs that day before crashing, NTSB investigators testified.

Despite that worrisome sign, investigators said the pilots did not follow protocol and land to investigate why the craft wasn't performing.

Is that cutting a corner, Hersman asked?

"A big corner," said Ron Price, a helicopter specialist for the NTSB.

Investigators also faulted Forest Service officials for not identifying the shortcuts Carson was taking. Ironically, the fatal flight was even more overweight because a Forest Service safety official was onboard to evaluate the pilots as part of routine oversight. That official, 63-year-old Jim

Ramage, weighed 210 pounds.

Killed along with Ramage were pilot Roark Schwanenberg, 54, of Lostine; Shawn Blazer, 30, of Medford; Scott Charlson, 25, of Phoenix, Ore.; Matthew Hammer, 23, of Grants Pass; Edrik Gomez, 19, of Ashland; Bryan Rich, 29, of Medford; David Steele, 19, of Ashland; and Steven "Caleb" Renno, 21, of Cave Junction.

Injured were William Coultas, now 45, of Cave Junction; Richard Schroeder Jr., 44, of Medford; Jonathan Frohreich of Medford, 19, and Michael Brown, 22, of Rogue River.

The bureaucratic problems continued after the crash. Jim Struhsaker, NTSB's investigator in charge said that letters from two pilots with "intimate knowledge" of operations were sent to the FAA two months after the crash. The letters provided specific and detailed information about how weight was calculated and suggestions that officials knew the process they used yielded improper numbers.

Those letters, however, were not forwarded to NTSB for more than a year despite requests to FAA for all relevant information on Carson and its operations, NTSB investigator Zoe Keliher said.

The hearing was the final chapter in NTSB's long investigation into the crash that provided the agency's consensus for why the crash occurred. The daylong session touched on everything from the helicopter's performance and operations, safety oversight, seats and restraints inside the helicopter and how well – or not – fuel was filtered as it flowed to the engines.

It was heavy on technical terms and specific government regulations, also examined "human factors" such as the safety culture of Carson and regulations and rules that pilots follow before, during and after a flight. Those factors often expose why a pilot made a certain choice and importantly in this case, why clear warning signs were not recognized.

Much of the focus of the day's hearing was on aspects of the case that have been made public before. But the detail and the extent of shortfall surprised some of the family members of victims who traveled to Washington to witness the proceeding.

"I am relieved to see how thorough the investigation has been. That brings me a lot of comfort and hopefully there will some good recommendations that will be followed through on that will close up some of these holes so this will never happen again," said Nina Charlson of Eugene. Her son Scott Charlson died in the crash.

Yet even Charlson was surprised by the scale of the failure.

"It's all over the board. It just makes me sick to think my son was caught in the middle of that. It just makes me sick," she said.

"It's very disturbing. You know, initially when the accident happened, I actually thought, 'accidents happen,'" she said, adding that families of the victims had heard random examples of the failure to ensure safe operation.

"We've been kind of held at arms length but we've heard things," she said. "Now to hear the authorities speaking and what we've been hearing is truth and even worse than we've heard."

She hopes that a strongly-worded report and exposure will prevent similar accidents in the future. The NTSB is a world authority on finding the causes of aviation accidents, but it can only recommend changes in policy and procedures to fix the problems the board verifies.

"I don't ever want to sit in a room with other parents for the same reason we're sitting here today; the holes that weren't sewed up so that safety would be the prime concern," she said.

-- Charles Pope and Stuart Tomlinson