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## Feds say firefighter helicopter that crashed was pushing weight limit

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By [The Oregonian](#)



Courtesy of NTSBFlames rise from the wreckage of the helicopter that crashed in Northern California on Aug. 5, 2008. The accident killed nine men.

### **Iron 44 Incident**

• [Previous coverage of The](#)

An Oregon-based firefighting helicopter that crashed last year and killed nine men was 2,000 pounds heavier than U.S. Forest Service guidelines recommend, documents from the National Transportation Safety Board show.

That put it near its maximum weight for a safe, vertical takeoff under the weather conditions, according to documents released by the agency Wednesday. That means the helicopter, laden with fuel, firefighters and equipment, required nearly

[Iron 44 incident](#)

- [The NTSB report on the incident](#)

the maximum power the engines could provide.

Instead of climbing up, the helicopter went forward, clipping the tops of trees and crashing back to the ground, the report found. 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 worst firefighting air crashes in U.S. history.

The NTSB report suggests that the aircraft's operator, Carson Helicopters of Grants Pass, understated the weight of the helicopter and of others in its fleet -- a critical component for pilots as they assess how many people and how much fuel an aircraft can safely carry.

They also suggest that the company, which held a U.S. Forest Service contract at the time of the crash, kept spotty maintenance records and relied on inconsistent weight calculations for its aircraft and parts.

The underreported weights and other issues concerned the Forest Service so much that it terminated Carson's contract in November, according to the NTSB.

**What's next?**

The NTSB will likely release factual reports on both accidents in a few months. After that, the agency's board will hold public meetings and vote on a draft report. Finally, a month or two later, a final approved report will be issued and posted on the agency's Web site.



**August 5, 2008:** On its third trip ferrying helitack crews on the Iron 44 Complex from a mountaintop to a lower helibase, the Sikorsky S-61N took off and immediately ran into trouble. It lost altitude as its crew struggled to keep it aloft. It struck at least three and maybe four treetops, before tipping on its left side and crashing. Four men scrambled or were pulled to safety. Nine others perished.

**Sikorsky S-61N**  
Length: 59 ft.  
Height: 17 ft 6 in  
Capacity: Up to 30 passengers  
Speed: 166 mph



[Click to enlarge](#)

The NTSB reports do not offer analysis or a conclusion about what caused the fatal crash, and Carson would not comment Wednesday on the developments. But the NTSB documents lay out Carson's objections to some of the agency's findings.

Carson accuses the agency's investigators of "neglecting several critical facts in a rush to judgment."

Among other criticisms, Carson said the NTSB was using bad data in calculating the weather's effect on the helicopter's performance. (A helicopter needs more horsepower to lift a given weight in higher temperatures).



Stephanie Yao Long/The Oregonian/2008 Firefighters stand at attention while waiting for a helicopter to return the remains of some of those who died in the Iron 44 Incident.

NTSB, Carson said, extrapolated the temperature to be 23 degrees Celsius (73 degrees Fahrenheit) at the takeoff site. But voice recordings from the co-pilot suggest the correct reading was 20 degrees Celsius (68 degrees).

The company says the agency is trying to support a "preconceived conclusion" by using the higher temperature in its calculations.

The company also said the NTSB's estimated weight for the helicopter -- 19,008 pounds including people, fuel and equipment -- is several hundred pounds too high.

Carson also criticizes the NTSB for not looking harder at the possibility that malfunctioning fuel control units were at the root of the crash and for not investigating its claims that another company that services those units may have tampered with the units recovered from the wreckage.

Killed were pilot Roark Schwanenberg, 54, of Lostine; 63-year-old Jim Ramage, a forest service employee from Redding; 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.

Robert Hopkins, a Portland attorney involved in wrongful death lawsuits filed against Carson Helicopters, Sikorsky and other parts makers for the aircraft, said it was too early for "anyone to jump to any conclusions" based on the reports.

### **From 'You're clear' to 'Oh, God'**

The voice recorder on the Sikorsky was recovered and much of it revealed a casual back-and-forth between pilot Roark Schwanenberg and co-pilot William Coultas. Also included was some conversation

"It's all important information, but we'll have to separate out what's useful," he said.

The documents released Wednesday "include investigative group factual reports, exhibits, interview transcripts, photographs, and other documents from the investigation," according to NTSB officials.

Bridget Serchak, an NTSB spokeswoman, said a factual report will follow in a few months. Then, after public meetings and a draft report, a final report will eventually be approved.

This much is known: On Aug. 5, a Sikorsky S-61N helicopter lifted off from a remote clearing deep in the Shasta-Trinity National Forest near Weaverville, Calif. As it rose, the bright blue, white and red machine -- loaded with 13 men -- lifted off "slower than normal" before striking trees with its nose and rotor.

Witnesses to the air disaster on the front lines of an 83,000-acre wildfire 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, the helicopter quickly filled with dense, thick black smoke. Four men managed to escape before the helicopter was consumed by fire.

Terrence Meredith, a squadron leader with Ferguson management, told investigators the helicopter's main rotors often made sounds during previous takeoffs, but the sound he heard shortly before the crash "was not the sound of rotors," according to a interviews contained in the reports.

Meredith "described the sound as one of a snapping/ grinding. He described it as a high-pitched 'schhhhhh' sound akin to a high pitch grinding. He opined that something was wrong with something that was spinning."

The circumstances are similar to four other crashes that killed or seriously injured West Coast logging pilots flying Sikorsky S-61 helicopters in recent years.

In all those cases, the helicopters crashed as they were lifting off after a failure of a clutch mechanism that

with officials on the ground.

At 7:40 p.m. and 45 seconds, the following conversation took place between Schwanenberg and Coultas as the aircraft began to lift off. The numbers to which Coultas refers to are the main rotor RPMs:

**Coultas:** Here we go.

**Coultas:** You're clear on the right.

**Schwanenberg:** Pullin' pitch.

**Coultas:** OK, just nice and smooth here.

**Schwanenberg:** Yup.

**Coultas:** OK, there's 75 -- there's 80.

**Coultas:** There's 85.

**Coultas:** There's 90 showin' ah 103 percent.

**Coultas:** Nope, hundred percent, Roark.

**Coultas:** No, ah droopin', Roark.

**Schwanenberg:** Oh, God.

**Coultas:** Oh, (expletive)

**Coultas:** Fly, darlin'.

**Coultas:** Fly, darlin'.

**Coultas:** Fly, darlin'.

connects engines to the helicopter's five main rotors, attorneys for the pilots and their families argued in courts in Oregon, Tennessee and British Columbia.

Co-pilot Coultas, who suffered severe burns in the Iron 44 crash, told investigators there appeared to be no malfunction of the engines before the crash and that the helicopter was "running great."

"I mean we had two strong motors. ... We knew we had the power to do this. ... There was no reason to muscle this aircraft. You know, we had plenty of power. ... Everything was nice and smooth."

But as the helicopter began to descend toward the trees -- eventually striking at least three -- Coultas said, "I could feel the rotor -- hear the rotor RPM decrease some more."

As debris and parts of the trees swirled around the outside of the aircraft, Coultas said, he "knew at that point there, that we were gonna crash."

"Uh, there was no suitable landing area for a large helicopter. The only suitable landing area was the one that we just took off from, and it's behind us now."

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**Coultas:** Fly, darlin'.

The next few words are expletives from both Schwanenberg and Coultas and the recording cuts off at 7:41 p.m. and 38.7 seconds.