

## Incident Summary Page for the 100 Fires Project

<b>Incident Name:</b> Iron 44 Helicopter Accident Iron Complex	<b>Incident Date &amp; Time:</b> 08/05/2008 @ 19:41
<b>Incident Location:</b> Shasta-Trinity National Forest, California	<b>Incident Size:</b> 72,000 acres
<b>Types of resources involved:</b> Grayback Forestry fire crew; U.S. Forest Service inspector pilot; and Carson Helicopters Inc. pilot and co-pilot	<b># of Fatalities/injuries:</b> 9 fatalities / 4 injuries
<b>Reason this fire was selected for the 100 Fires list:</b> <ul style="list-style-type: none"> <li>➤ Fire made a notable impact within the wildland fire service</li> </ul>	
<b>Conditions leading up to the event:</b>	
<p>On August 5, 2008, around 10:00, the Iron Complex Incident Meteorologist forecasted lightning for the coming night in the high mountain areas. The Incident Operations Section Chief opted to relocate the crews working in the area of helispots H-44 and H-61 as their locations were susceptible to such inclement weather. The handcrews and other fire personnel at these helispots were to be ferried to the lower H-36, which was about 13 miles away. The relocation mission from H-61 began in the late afternoon without incident.</p> <p>Helicopter N612AZ was the aircraft assigned to ferry the firefighters from H-44, which was 25 miles from the Helibase. Neither the pilots nor the helitack crewmembers had been to H-44 prior to the day of the accident.</p> <p>Helicopter N612AZ2 was a Sikorsky S-61N contracted from Carson Helicopter Services Inc. to the U.S. Forest Service to provide Call When Needed emergency fire support.</p>	
<b>Brief description of the event:</b>	
<p>There were a total of 46 people to ferry from H-44; two helitack crewmembers, 19 Ferguson crewmembers, 20 Grayback crewmembers, and five fire overhead personnel. Visual meteorological conditions prevailed at the time of the accident, and a company Visual Flight Rules flight plan had been filed. The helitack crewmembers, both contract pilots, and the U.S. Forest Service inspector pilot all agreed on the mission plan and coordinated to place helitack personnel at both helispots.</p> <p>The inspector pilot reviewed the contract pilot-in-charge's load calculations, primarily referencing the 6,000-foot pressure altitude at 90 degrees Fahrenheit as these were the conditions they expected to encounter. These calculations showed an allowable payload of 2,552 pounds (lbs). A helitack crewmember then informed the pilots the weight of the load being boarded was 2,355 lbs.</p> <p>After the pilots were notified of the manifested weight of the firefighters and cargo, the contract co-pilot stated the performance load calculation numbers indicated a maximum payload at 2,552 lbs. at 90 degrees Fahrenheit. He added that because the temperature was 12 to 13 degrees cooler and their payload was 200 lbs. less, the helicopter would be able to perform. Both pilots confirmed they were 200 lbs. lighter than the previously calculated maximum weight and the co-pilot affirmed that the helicopter was "good to go." At no time in the Cockpit Voice Recorder recording do the pilots discuss the fact that the helicopter's engine was maxed out on the previous two departures from H-44.</p> <p>Witnesses stated as the helicopter began to lift off, the ascent appeared very slow, and the helicopter moved as though it was labored. The helicopter began to move forward in a nose-low configuration, drifting to the right. The helicopters flight path continued forward then began losing altitude as it continued down slope. The helicopter then impacted trees and terrain directly below H-44 coming to rest on its left side.</p> <p>Seven Grayback Forestry firefighters, the Carson pilot-in-charge, and the U.S. Forest Service inspector pilot perished in the crash. The co-pilot and three firefighters escaped the burning wreckage and survived with serious injuries. Impact forces and a post-crash fire destroyed the helicopter.</p>	
<b>Fire behavior factors that were present during the event:</b>	
Not applicable	
<b>Operational lessons available for learning from this incident:</b>	
The National Transportation Safety Board Aircraft Accident Report under "Conclusions" states the leather work gloves worn by the firefighters decreased their dexterity, hampering the release of their restraints after the crash. The report recommended firefighters wear Nomex flight gloves, not leather work gloves during flights.	

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**Notable impact or historical significance for the wildland fire service from this incident:**

This incident led to Steven Metheny, 42, former Vice President of Carson Helicopter Services Inc. and Levi Phillips, 45, the former maintenance chief of the company, to face charges of conspiracy to defraud the United States for “intentional wrong-doing” by Carson Helicopter Services Inc. It was alleged they under-stated the weight of the Sikorsky S-61N helicopter and over-stated its performance in the documents they provided to the U.S. Forest Service when bidding on a \$20 million firefighting contract for seven helicopters. This led to Helicopter N612AZ2 being over its allowable weight even before the firefighters boarded the ship. These two individuals were found guilty; Metheny was sentenced to 12 years in federal prison and Phillips, who cooperated in the case, was sentenced to only two years in federal prison.

On February 18, 2009, the U.S. Forest Service canceled their contract with Carson Helicopter Services, Inc. based on inaccurate claimed weights of the helicopters. The company then surrendered their Federal Aviation Administration Certificate which is equivalent to an operating license within the United States.

**Links to more information on this incident:**

- <https://www.lessons.wildfire.gov/incident/iron-44-helicopter-crash-fatalities-2008>
- <https://wlfalwaysremember.net/2008/08/05/iron-44/>
- <https://wildfiretoday.com/tag/iron-44/>

**This summary page was proudly provided by:**  
Don Will, former Superintendent Mendocino Hotshot Crew

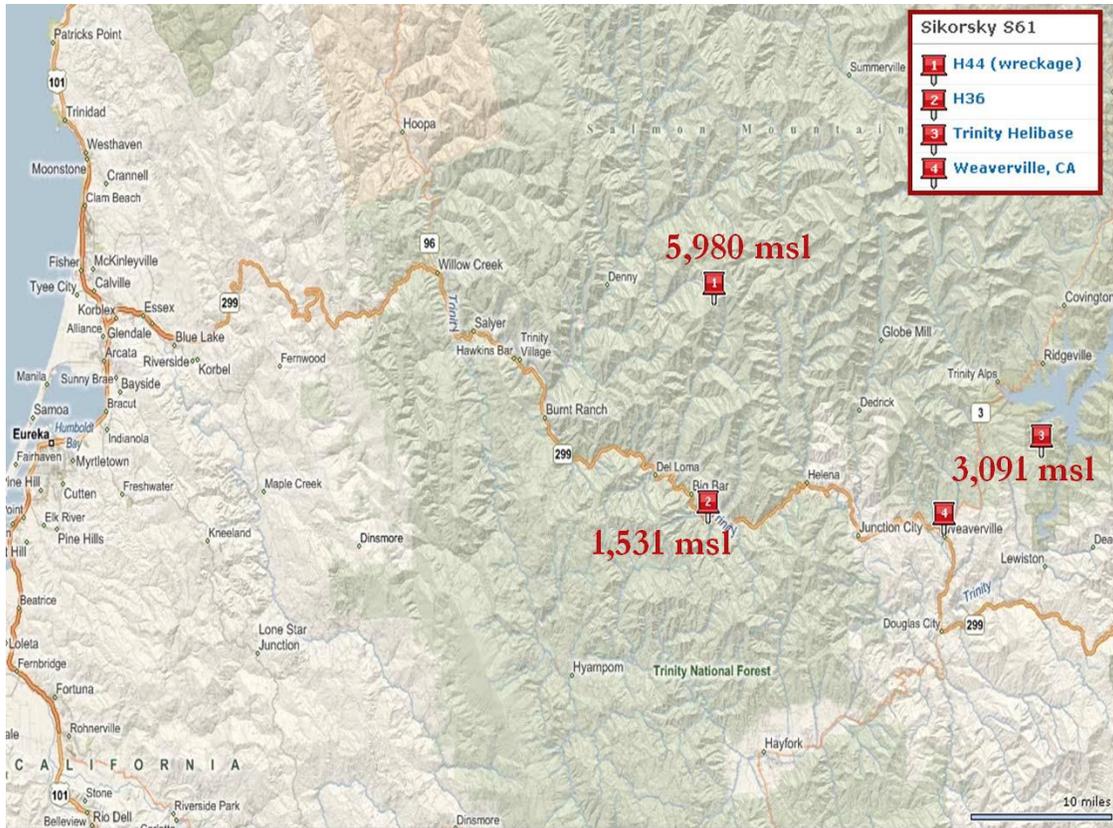
October 2024



**Iron 44 Memorial in Junction City, California**

Shawn Blazer, 30, Medford, Oregon Scott Charlson, 25, Phoenix, Oregon Edrik Gomez, 19, Ashland, Oregon Bryan Rich, 29, Medford, Oregon	David Steele, 19, Ashland, Oregon Steven "Caleb" Renno, 21, Cave Junction, Oregon Matthew Hammer, 23, Grants Pass, Oregon
Roark Schwanenberg, 54, Lostine, Oregon (Carson Pilot)	Jim Ramage, 63, Redding California (USFS Inspector Pilot)

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Location map of the incident

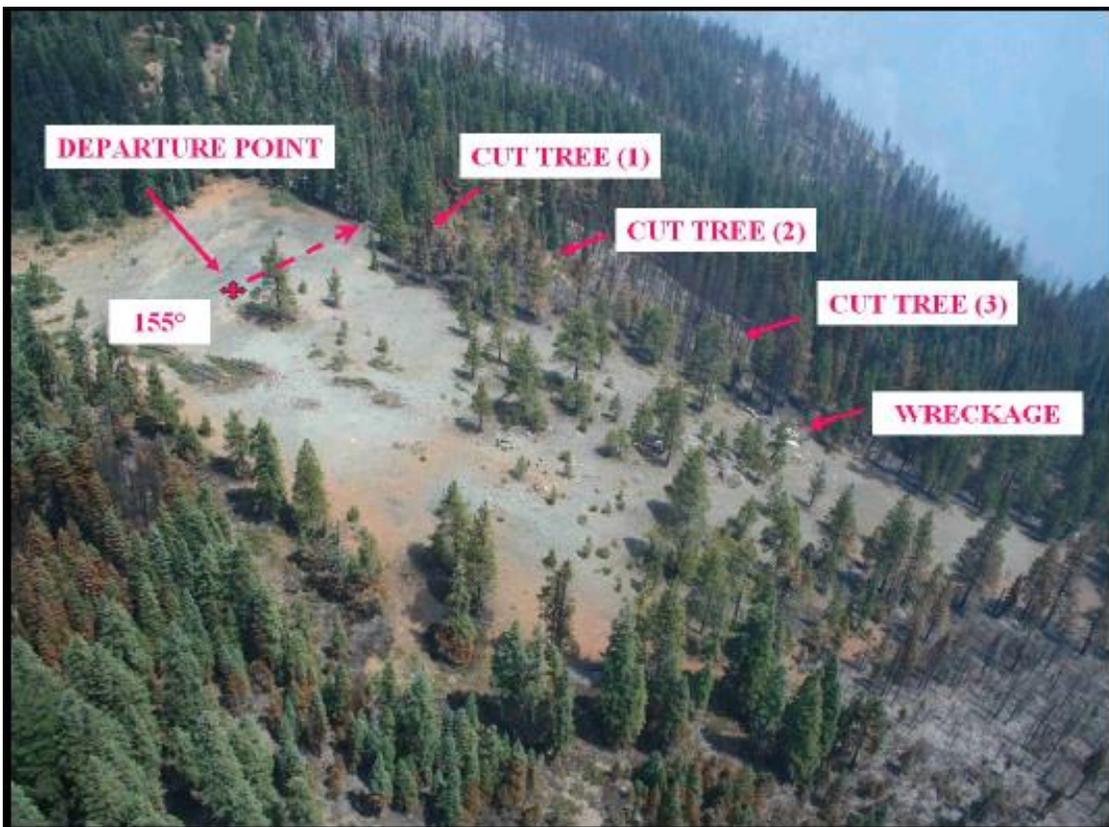
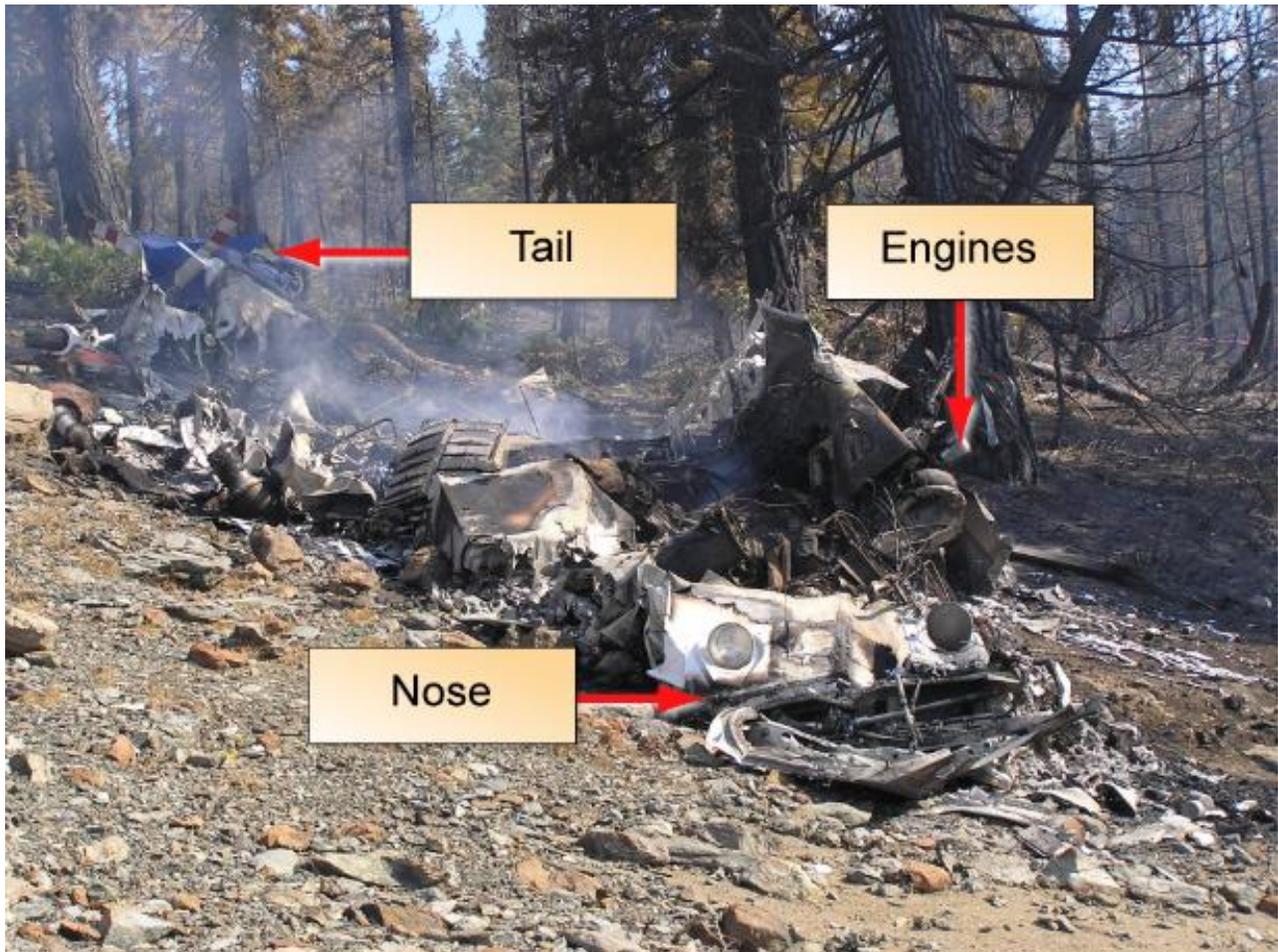


Figure 03: H-44 Wreckage in Relation to Approximate Departure Point

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**Carson Helicopter N612AZ prior to the accident**



**Main wreckage site**