Sikorsky And CAL FIRE Join Forces To Enhance Autonomous Aerial Firefighting Technologies

Five-year initiative will bolster wildfire suppression capabilities and explore autonomous capabilities for the FIREHAWK® helicopter



A Black Hawk® helicopter with Sikorsky's MATRIX™ autonomy drops water onto a staged burn in Southern California, Apr. 2025. A FIREHAWK® helicopter responds to the devastating Los Angeles-area wildfires, Jan. 2025. Photo courtesy: Rain and Greg Doyle.

SACRAMENTO, Calif., Sept. 3, 2025 — In a significant step forward in the fight against wildfires, Sikorsky, a Lockheed Martin company (NYSE: LMT), and the California Department of Forestry and Fire Protection (CAL FIRE) have announced a new initiative to expand the research, innovation, and operational capabilities of aviation resources.

This effort aims to strengthen the response to the growing threat of wildfires, reducing the dangerous impacts on communities, residents, infrastructure, natural resources, and the economy. The five-year collaboration will focus on developing and integrating cutting-edge technologies, and enhancing the safety and efficacy of CAL FIRE operations to create a more efficient and effective approach to all-hazard emergency response. Autonomy-enabled aircraft will reduce pilot workload, improve situational awareness, and give first responders the flexibility to perform complex missions in dangerous and deteriorating conditions, day or night.

“The CAL FIRE Aviation Program prioritizes safety of air operations and ensures our flight crews have the proper training, equipment, and advanced technologies for maximum effectiveness on all-risk missions,” said Steve Robinson, Assistant Deputy Director, Aviation and Mobile Equipment, CAL FIRE. “CAL FIRE is excited to collaborate with Sikorsky and determine how their advanced technologies could benefit our Helicopter and Uncrewed Aerial System Programs.”

By virtue of this collaboration, CAL FIRE and Sikorsky will be positioned to explore the development of an autonomous Sikorsky S-70i FIREHAWK helicopter, a proven and versatile aerial firefighting aircraft that has become a central component of CAL FIRE's wildfire response. CAL FIRE operates a fleet of 16 FIREHAWK helicopters as its primary rotary wing firefighting asset, including two aircraft that were recently delivered in the summer of 2025. The aircraft's unique capabilities, including its ability to fly at speeds up to 155 knots, operate in high winds, and navigate altitudes up to 10,000 feet, make it an invaluable asset in the fight against wildfires.

"The development of autonomous wildfire suppression capabilities will be a game-changer in our efforts to protect communities from the growing threat of wildfires,” said Rich Benton, Sikorsky vice president and general manager. “By leveraging cutting-edge technologies and enhancing the safety and efficacy of operations, this collaboration has the potential to revolutionize the way we respond to wildfires, protecting citizens for generations to come.”

In April 2025, the company conducted exercises in Southern California, showcasing the potential of autonomy to help crewed and uncrewed firefighting helicopters find and suppress early-stage wildfires. These efforts, which utilized Sikorsky's autonomous Black Hawk helicopter, familiarized firefighters with the capabilities of autonomous systems in aerial firefighting. Pilots from CAL FIRE, Los Angeles County Fire Department and Orange County Fire Authority also experienced the optionally piloted aircraft at Sikorsky’s facility in Stratford, Conn., and provided feedback to tailor these new capabilities for firefighting operations.

The collaboration marks a continuation of Sikorsky’s decades-long support for California’s firefighting efforts, which began in the 1990s when leaders from the state’s firefighting community approached the company to develop a specialized aerial firefighting helicopter. The resulting FIREHAWK helicopter -- with its 1,000-gallon water tank, retractable snorkel, twin turbine engine, and night vision capability -- was designed to fit California’s rigorous firefighting needs and has been proven by firefighters there for 25 years.

Sikorsky’s initiative is part of Lockheed Martin's broader focus on accelerating the development and integration of digital technology to support faster decision-making capabilities for wildfire management, known as 21st Century Firefighting. This includes a range of solutions, such as firefighting fixed-wing aircraft, including the C-130 Hercules, and firefighting intelligence, which leverages AI-enabled technology to provide near real-time intelligence to first responders. Lockheed Martin has also funded a two-year pilot program with the Colorado Division of Fire Prevention and Control to demonstrate the effectiveness of these solutions.

About Lockheed Martin
Lockheed Martin is a global defense technology company driving innovation and advancing scientific discovery. Our all-domain mission solutions and 21st Century Security vision accelerate the delivery of transformative technologies to ensure those we serve always stay ahead of ready. More information at Lockheedmartin.com.

About CAL FIRE Aviation Program
The CAL FIRE Aviation Program is a key component of California’s all-hazards emergency response system, operating the world's largest aerial firefighting fleet with over 70 fixed-wing and rotor aircraft. With a mission-critical focus on safety, efficiency and technological innovation, our program is a cornerstone of our mission to protect the lives, property, and natural resources of California. More information at Fire.ca.gov.

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