

PUSHING THE PERFORMANCE ENVELOPE

THE OFFICIAL NEWSLETTER OF CARSON HELICOPTERS INC.

NEW THIS MONTH:

Power of the Fire King PAGE 2

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RECOGNIZING THE FIRE KING

In 2004, Carson Helicopters took the design behind the S-61 and developed cutting-edge modifications, enhancing its abilities during flight. Configuring the "Fire King", our team built an ideal firefighting machine. However, its 1,000-gallon tank for water drop is not the only unique characteristic behind its design. With a variety of advancements, the helicopter is equipped to complete a multitude of mission operations.

PUSHING THE PERFORMANCE ENVELOPE

ADVANCMENTS WITH THE UH-60

Expanding the flight envelope for aircraft is one of our missions at Carson. In order to do this, our team has worked to create a number of modifications for helicopters, and the UH-60 is no exception. Our team

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FIRE KING PROVIDES RANGE OF ABILITIES FOR THE TOUGHEST CONDITIONS

Over the last decade, an average of 64,100 wildfires occurred annually, as reported by the National Interagency Fire Center (NIFC). In the beginning of August, a total of 37,803 were reported across the United States. On August 26th, this number increased to 41,768. The rise of wildfires over the past month has contributed to the 4.8 million acres of land that has burned across the country. Currently, 26,884 personnel are deployed on 88 large, active fires across the US, 86 of which are uncontained.

Looking for solutions to devastations like the wildfire problem in the US and other countries, Carson's Fire King looks to provide a solution for catastrophes on a global level. Offering a diverse range of functions for disaster relief, the Fire King can aid in firefighting, search and rescue, and medivac.



Upgrades to the standard S-61 include several aircraft advancements. From its 11,000 lb. cargo hook attachment to its 1,000-gallon fixed belly tank, the aircraft is also equipped with Carson Composite Blades, increasing speed and range. In addition, the Fire King provides a series of other improvements:

- 22,000 lbs. Max Gross Weight
- 131 Knot Cruise Speed
- Goodrich Hoist (600 lb.)
- Rope Assisted Deployment Anchor
- 900 Gallon Variable Flow Water Bucket
- Electronic Garmin 530 Moving Map
- Automated Flight Following
- Traffic Collision Avoidance Detection
- Radar Altimeter
- Cabin ICS with Transmit Capability

These advancements make the Fire King a logical choice during times of crisis.

Outlook on the wildfire problems in the US and in countries world-wide provides a better understanding of the need to prepare for action. With the Fire King's range, safety, and payload, it provides performance equal to modern helicopters while maximizing cost savings.

Carson's goal is to use leading-edge technology to increase the safety and performance of legacy aircraft. Through our approach in aviation design, we hope to partner with operators worldwide, assisting unforeseen emergencies.



BRINGING BACK FOLDING ROTOR HEADS

Dating back to 1961, the SH-3 "Sea King" made its debut as an American twin-engine and anti-submarine warfare (ASW) helicopter. Sikorsky's design of the SH-3 presented several advancements from its counterpart, the traditional H-3, which substantially increased its mission capabilities. In part, this is due to its folding rotor head and water resistance.

The adoption of an amphibious hull allowed the Sea King to conduct water landings. But, more impressive, was the ability of the rotor head to fold during transport or while in storage with limited space accommodations.

Ultimately, the design of the rotor head is carried out by using linear actuators,

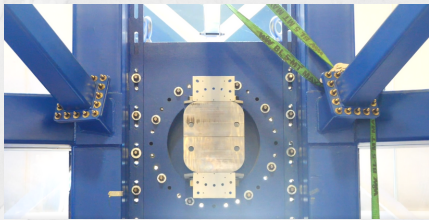
allowing the aircraft's hub to collapse. Control of the rotor head is carried out in the cockpit with the use of the aircraft's hydraulic system.

Currently, our team is working on a unique project that converts the H-3 design into its Naval variant, the SH-3. To carry out the conversion, our team will replace the aircraft's fixed landing gear with sponsons, and change the traditional driveshaft on the H-3, converting it to a folding pylon configuration.

Carson's transformation of the H-3 into SH-3 formation presents the aircraft with a broader range of operational use. Through our team's strategized approach to conversion, Carson can further enhance the H-3's to perform a wide range of missions under a variety of tough conditions.



TEST RIG



INDUSTRY NEWS

INNOVATIVE AND IMPACTFUL LANDMARKS IN AVIATION



THE ROLE OF ROTORCRAFT DURING WILDFIRES

BY STEPHEN/H

Helicopters have proved to be one of the most versatile, operative vehicles. Stephen/H highlights the role helicopters play during the event of wildfires.



THE RISK AND REWARD OF WILDFIRE RESCUE

BY ALEX DAVIES

Wildfires have a long history of causing devastation all over the world. One of the main tactics used to fight these fires is the use of aerial firefighting. Deemed as one of the most effective methods, it has a combination of complicating factors that require a high level of expertise.



HOW DOES AIR SUPPORT DRIVE ADVANCEMENTS?

BY WOODY MCCLENDON

Aircraft Support Patrol is a vital counterpart of any police department. The LAPD utilizes a comprehensive and ongoing training program to ensure safety and technology advancements are adapted adequately.



EXPLORING MODERN ROTORCRAFT CONCEPTS

BY REXNORD AEROSPACE

Rexnord Aerospace displayed some of the newest and most advanced designs in rotorcraft technology. Three of the biggest upcoming trends were Single Engine Operative Systems, Untraditional Tail Rotors, and the Civil Tilt Rotor Concept.



COMPANY HIRES



JOE WALLOVER

MACHINIST IN
WAREHOUSE



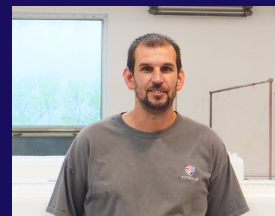
AARON MASSEY

MECHANIC IN
TRANSMISSIONS



MATTHEW WILLIAMS

AVIONICS SPECIALIST



DAVE LATTANZE

PAINT SHOP
SPECIALIST



BEN WOYCHOWSKY

IT SPECIALIST