NorCal 2
Type II Interagency Incident Management Team
Salt Creek Fire
Shasta Lake, California

Fire Information Office:
530-378-4856 or
530-242-5546
Staffed 8:00 am to 6:00 pm

For Immediate Release: August 5, 2012

FLYING THE PURPLE SHIP

U.S. FOREST SERVICE
HELICOPTER 506 FLY CREW BRINGS VERSATILITY AND EXPERTISE TO WILDLAND FIREFIGHTING

SHASTA LAKE, Calif.—When a fire breaks out on the Shasta-Trinity National Forest and the Redding Area, the purple helicopter of 506 (H-506) Fly Crew brings help from above.

Above: H-506 crewmember Jesse Penland, left, shows how a water bucket opens during a helibase tour at the Salt Creek Fire. Crewmember Jobe Pratt stands in the doorway of H-506, assisting with the briefing.

"We're a twenty-person fire crew supporting a Type 2 helicopter," explained crewmember Jesse Penland during a helibase tour at the recent Salt Creek Fire on the Shasta Lake Ranger District. "The helicopter can carry eight crewmembers in the back in addition to the pilot and a helicopter manager in front. We also bring a water bucket."

H-506 Fly Crew uses a wide range of tactics for attacking wildfires. Their distinctive purple helicopter, owned by aviation contractor WorldWind Helicopters Inc. out of Washington State, can rapidly deliver firefighters to steep, remote locations. After the hand crew is unloaded to begin cutting trees and brush and building fireline, the bucket can be attached for water drops. The helicopter can also be used to ferry supplies to firefighters working far from roads, as well as "back hauling" used equipment from the fireline.

The firefighters of H-506 must master a wide range of skills to do their job. In addition to the ability to build fireline safely in steep, difficult terrain using chainsaws and hand tools, they must also know the correct procedures for boarding and exiting a running helicopter, connecting sling loads and water dropping buckets with cable releases, arranging balanced loads in cargo nets, and making a wide variety of critical load calculations. Because a helicopter's lifting capacity changes

with air temperature and altitude, the crew must calculate the aircraft's potential load each day, depending on the elevation of the fire area and the current weather.

Managing a helicopter on the ground takes coordination between contractors for WorldWind Helicopters and H-506 crewmembers. WorldWind provides the helicopter and pilot, fuel truck and driver, and mechanic.

H-506 also provides a ground support vehicle called the "helitender," which carries radios and other equipment required to coordinate a landing zone or helibase from which the helicopter can refuel.

In addition to managing their own helicopter, H-506 Fly Crew also provides oversight for additional contract helicopters brought in for larger fires. During the recent Salt Creek Fire, for example, H-506 crew captain Matt Lingenfelter served as heavy helicopter manager for a Type 1 helicopter operated by Croman Aviation out of White City, Oregon.

Above: Croman Aviation co-pilot Keith Patterson describes the capabilities of a Sikorski S-61 helicopter for a member of the public. H-506 crew captain and heavy helicopter manager Matt Lingenfelter (red t-shirt) and crewmember Jesse Penland (right) assist. Before its conversion for wildland firefighting use, the S-61, known to the Navy as the "Sea King," was used during the 1960s and 1970s to hunt enemy submarines using a sonar unit suspended on a cable under the helicopter.

The steep geography and frequent fire occurrence of the Shasta-Trinity National Forest present serious challenges in wildland firefighting. With their extensive and versatile skill set, the firefighters of H-506 Fly Crew provide a local resource with capabilities equal to the challenge, and are a critical component of the Forest Service Public Safety Mission.

Special thanks to Glenn Dietz, Superintendent for H-506, for facilitating this article.