

## THE TIME HAS COME FOR WILDFIRES TO BE FOUGHT FROM THE AIR AT NIGHT

WRN (a non-profit public safety and education organization dedicated to facilitating local, state and national wildfire suppression capability) has been quietly focusing national attention on the considerable improvements that can be made to the nation's aerial wildfire fighting capability with the use of third generation night vision technology. Now available commercially, as a spin-off from Night Vision Goggle (NVG) systems developed and used very successfully for the military, this technology can be used as a powerful tool in the nation's aerial firefighting arsenal.

Currently the aerial wildfire fighting assets in this country, with few exceptions, do not fight wildfires at night. This is unfortunate because many fires are more manageable due to lower temperatures, moderation of wind speeds, and shifting of wind directions that occur as day transitions to night in a local area.

Many wildfires, including the October 2003 Cedar and Paradise fires in Southern California (responsible for 25 deaths and 2420 homes destroyed) started after nightfall (5:37 PM and 1:30 AM respectively) and were raging out of control for several hours before aerial assets could be deployed to stall their advance toward the homes. During the October 2007 Southern California wildfire siege, nine of the 20 most significant fires began between dusk and dawn! Erickson Helicopters has equipped and certified at least one of their large helicopters for night operations.

With expensive and capable aerial assets grounded and unusable for almost 50% of the time that wildfires are burning, there is an unnecessary loss of critical firefighting capability. Equipping a helicopter or fixed wing air tanker with NVG capability can now be achieved at a fraction of the cost of buying another tanker of the same type. By adding NVG capability, aerial firefighting fleets could increase their availability by almost 100% for an increased investment of less than 2% of the initial purchase price – including the cost of equipment, cockpit modifications, and the required initial pilot training.

Aviation Specialties Unlimited, an aviation service company based in Boise, Idaho, is already modifying cockpits and conducting FAA certified pilot training programs to provide 3<sup>rd</sup> generation capability for helicopter and fixed wing operators. There are over 600 helicopter pilots currently trained and FAA certified to use 3<sup>rd</sup> generation NVG for use in night operations in the United States. The cost of night vision goggles, NVG cockpit modification for a helicopter or fixed wing aircraft, and pilot training is approximately 4% to 5% of the cost of a single \$1.5 million home (\$60,000 to \$75,000).

Adding NVG capability to the nation's aerial wildfire fighting fleets is an idea whose time has come. San Diego Fire and Rescue and the Los Angeles County Fire Department helicopter operations, with the only fully capable night firefighting operations in the country, are pioneering the way. Others now have two successful operational models to follow. The Kern County Fire Dept. also has an active Generation III NVG EMS helicopter program. PJ Helicopters in Butte County, CA has been using Generation III NVGs in their operations for over seven years for a wide scope of commercial and government contract helicopter support services.

### WILDFIRE RESEARCH NETWORK



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## AIRTANKER DAILY AVAILABILITY (Critical California Conditions)

