

AERIAL FIRE

ALL OF AERIAL FIREFIGHTING

SPRING 2019



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Fighting Wildfires
the Spanish-Way

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Protecting the
Rainbow Nation
from Wildfires

STRIKE FIRST



Ask Questions Later



By John Thomas

The art of war is simple enough. Find out where your enemy is. Get at him as soon as you can. Strike him as hard as you can and keep moving on. - An American General

Washington State's Department of Natural Resources (DNR) has fought wildfires with this same aggressive strategy since 2016 and, to date, it has been extremely successful. Michael Cuthbert, Washington's DNR Aviation Program Manager and George Geissler, Washington's State Forester, say their goal is to rapidly deploy, within minutes of a notification of a new fire start, a mini aerial strike force. This consists of an Air Attack platform, which is similar to a military forward air controller, an aircraft and aircrew designed to coordinate and direct aerial firefighting assets to support the ground firefighting effort. Also included in this aerial strike force are two Fire Boss water scooping Type III Single Engine Air Tankers (SEATs) and a single Type II helicopter complete with a helitack crew with an incident commander, all embarked to quickly smash fires and keep them under 10 acres in size.

The Combined Initial Attack Team, the program's unofficial name, was created in 2015 after Washington state experienced its worst fire season in its history. That year saw over one million acres burned between June and September and tragically, the loss of three wildland firefighters, Tom Zbyszewski, Andrew Zajac and Richard Wheeler.

Wildland firefighters identified the need for rapid launch initial attack aerial packages that would be strategically prepositioned throughout the state near high fire danger areas capable of providing a quick size up, accurate intelligence and immediate suppression. According to George Geissler, "This was particularly important in remote areas or areas containing high value structures and/or dense populations." Washington DNR leadership then directed its fire operations group to develop such a program.

Most times the four aircraft making up the Combined Initial Attack Teams are collocated at the same base and launch

together. However, rotor wing aircraft provide greater flexibility with their vertical takeoff and landing abilities so often forward deploy nearer vulnerable areas away from hard surface runways and fixed ground support infrastructure (tanker bases) to reduce response times during times of high fire danger. Sometimes, all the aircraft are launched from different bases or locations or may be diverted airborne from a different incident and simply rendezvous overhead at the fire. Point being, this flexible and agile program coordinates and prioritizes the assembly of these specific aerial assets and gets them to new starts!

The DNR operates eight UH-1H (B-205) helicopters. During the 2018 fire season, six Exclusive Use (EU) Fire Boss SEATs, two EU air air-attack

platforms and a mix of Call When Needed (CWN) helicopters and tankers were contracted. With all these assets, the DNR was able to field several Combined Initial Attack Teams.

What's the program's success rate thus far? A stunning 92% in 2018 were held to less than 10 acres because of the use of aviation combined with effective ground based suppression. DNR has determined, spending what appears to be a sizable amount of money upfront in immediate suppression initial attack costs, using both aviation and ground resources, saves the state exponentially more money by not having to fight extended attack major fires; an outstanding return on investment! Remember the old Fram oil filter commercial? You can pay me now, or you can pay me later.

The DNR is currently working to refine its metric for success by changing it from keeping the fires at ten acres or less in size to the complete containment of the fire within the first 24-hour operational period with no structures or lives





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lost. Defining success in this way means wildland firefighters can be quickly freed up for initial attack on new fires versus getting bogged down in extended attack missions. Every year since the program's inception, the DNR has seen a steady decrease in number of acres burned, a further testament to the program's success.

Although wheeled SEATs are not excluded from the Initial Attack Team, and have been and will continue to be used as needed and when available, the DNR prefers the use of amphibious SEATs a.k.a. Fire Bosses. The Fireboss' unique ability to scoop water from lakes, rivers and reservoirs and then return quickly to the fire multiple times when there is a water source nearby is much more beneficial to the suppression of the fire than one load of retardant per launch that a standard SEAT provides. These multiple water drops allow for greater cooling of the flames, slowing the fire's spread while providing precious time for ground personnel to arrive and contain the fire. It is a well-known fact that air assets alone do not put out or contain fires. It is by the able hands of ground wildland firefighters that fires are extinguished.

Washington state has ample water sources throughout many areas of the state. Using Fire Bosses makes sense...use the right tool for the job. Of course, DNR is not held to only using water, retardant still plays an important role when it is determined to be needed. In addition wheeled SEATs and larger air tankers are used

when needed, even during initial attack, if DNR operations determine that to be the most effective available resource.

Washington state DNR may not have been the first agency to develop a rapid launch initial attack coordinated aerial program, but it is the newest and is unique due to the vast amount of water in the state choosing water scooping aircraft and water carrying rotor-wing aircraft as the mainstay of its initial air tanker assault. Although the Combined Initial Attack Team program is still relatively new, its successes thus far are impressive and worthy of further study. The concept could provide a model for other state and federal agencies to follow, whereby they could develop their own integrated aerial task force to reduce costs and reduce the number of acres burned over a season through immediate suppression. On Washington state DNR protected land, the days of using the traditional methods of sending either ground personnel or an air attack to investigate the need for air support are over. It wastes valuable time when it is determined that air support is in fact needed. According to Geissler, "The quick launch of aviation in combination with ground resources to a fire detection is DNR's answer to working to prevent costly large complex fires."

John Thomas is an active SEAT pilot flying the AT-802 Fire Boss for Dauntless Air. He also is an active agricultural pilot flying in southern California.