

# Air Guard's airborne wildfire fighting role evolves

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Air National Guard History

Like Hurricane Katrina in 2005, the horrendous wildfires that engulfed Southern California during October 2007 illustrated the valuable but often unnoticed role that the Air National Guard (ANG) has played for decades in supporting civil authorities. That role, during the fall of 2007, featured four C-130 Hercules from the North Carolina and Wyoming ANG equipped with the Modular Airborne Firefighting System (MAFFS).

MAFFS are owned by the U.S. Forest Service and flown on ANG and Air Force Reserve (AFRES) C-130 aircraft whose crews have been specially trained to dispense the fire retardant the equipment carries.

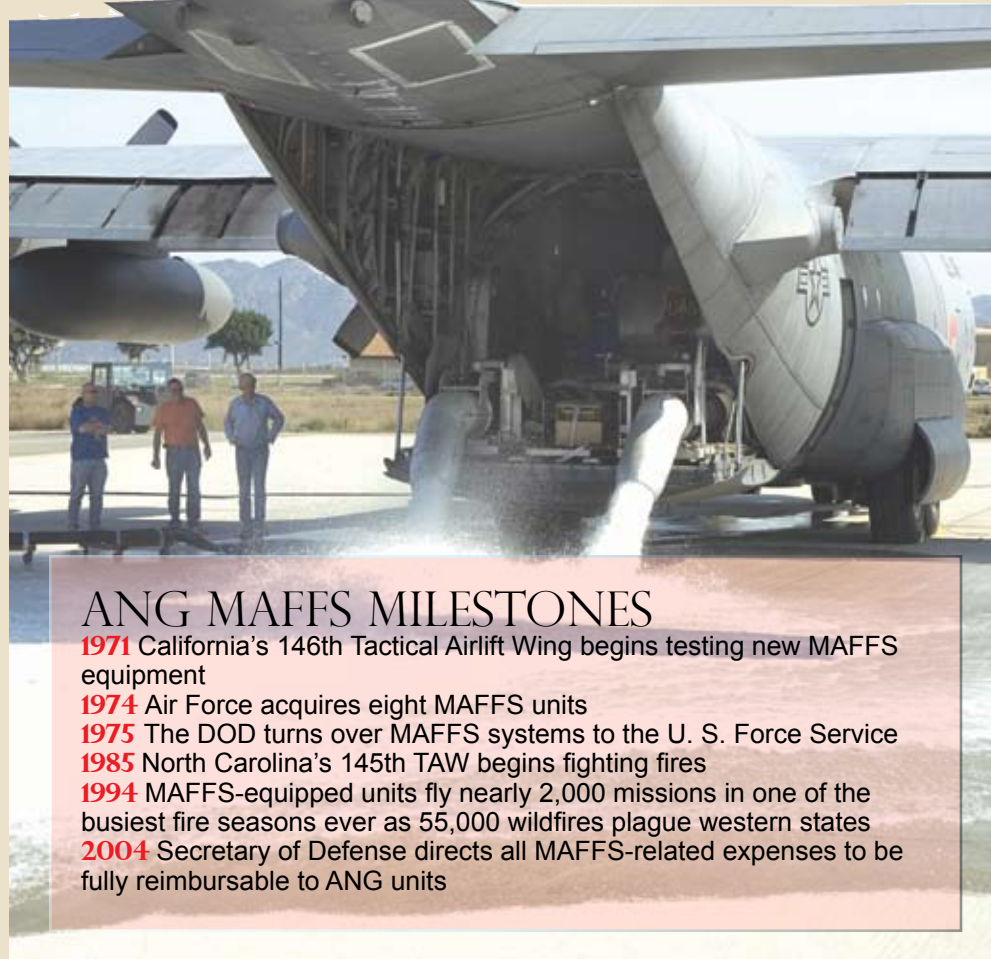
The Air Guard has a long history of fighting wildfires with MAFFS and had played a key role in developing the system's initial prototype. During the fall of 1970, bombs dropped by military aircraft on training ranges in remote locations had started wildfires that caused enormous damage to military reservations and adjacent private property. Those and other wildfires in Southern California had damaged or destroyed over 500 homes and caused major soil erosion problems on burned-over grasslands.

Wildfires also threatened Air Force early warning radar sites in Alaska and several national forests. In response, members of Congress pressured the Air Force to assist the Forest Service in fighting such conflagrations to protect federal military installations and serve as a backup to private contractors if the latter were unable to respond to all calls for help from civil authorities. The secretary of the Air Force authorized the development of airborne fire fighting systems for use in C-130 aircraft.

In September 1971, the California ANG's 146th Tactical Airlift Wing (TAW) began testing the new MAFFS equipment that had been developed by the Air Force Weapons Laboratory at Kirtland Air Force Base in New Mexico and a private contractor. The following month, California Air Guardsmen employed the system against the Romero fire in the Los Padres National Forest.

After completing the system's operational tests and evaluation phase, the Air Force acquired eight MAFFS units in 1974 and deployed two of them to hotspots in the United States. Wyoming's 153rd TAW was selected for MAFFS that year and North Carolina's 145th TAW began fighting fires in 1985. AFRES' 302nd Airlift Wing at Peterson AFB, Col., assumed firefighting responsibilities in 1992.

Each MAFFS kit could disperse up to 27,000 pounds of commercial fire retardants or an equivalent amount of water. MAFFS was originally purchased to suppress fires on federal military reservations. The ANG employed it under that



## ANG MAFFS MILESTONES

- 1971** California's 146th Tactical Airlift Wing begins testing new MAFFS equipment
- 1974** Air Force acquires eight MAFFS units
- 1975** The DOD turns over MAFFS systems to the U. S. Force Service
- 1985** North Carolina's 145th TAW begins fighting fires
- 1994** MAFFS-equipped units fly nearly 2,000 missions in one of the busiest fire seasons ever as 55,000 wildfires plague western states
- 2004** Secretary of Defense directs all MAFFS-related expenses to be fully reimbursable to ANG units

concept until 1975. That year, the Department of Defense turned over the MAFFS systems to the U. S. Force Service. The latter is the primary agency for all federal firefighting operations in the country. Bowing to pressure from commercial air tanker firefighting firms and pilots, DoD agreed with the departments of Interior and Agriculture in 1975 that the military would only employ the MAFFS when suitable civilian resources were not available.

That policy was consistent with provisions of federal law which prohibited the military from providing services that

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competed with those available from private firms. Those provisions could be waived in the event of presidential declarations of an emergency or natural disaster. However, there has never been such a declaration for wildfires in the history of the MAFFS program.

The 1994 fire fighting season was one of the busiest ever for MAFFS-equipped units. That year, over 55,000 wildfires plagued the western states. Consequently, the four C-130 fire fighting units flew nearly 2,000 missions, dropping some 51 million pounds of fire retardant. Prior to that, the MAFFS-equipped units had not requested reimburse-

ment for their firefighting operations. That changed in 1994 because of the long duration and intensity of those operations. The Forest Service agreed to reimburse flying hour costs for the Guard and Reserve units plus overtime pay for AFRES Title 5 personnel. In 2000, the Forest Service published an expanded list of reimbursable expenses. In 2004, the secretary of defense directed that all MAFFS-related expenses would be fully reimbursed. There were concerns within the ANG MAFFS community that this policy might price it out of the wildfire fighting mission.

In addition to duty within the states, Air Guardsmen and their MAFFS-equipped aircraft have been sent overseas to help suppress major fires. In October 1997, the Wyoming ANG volunteered to assist the Indonesian government in fighting massive fires in that nation's tropical rain forests. Within 66 hours of notification, the Air Guard deployed 47 personnel and three C-130H aircraft, including two equipped with MAFFS, a half a world away. They flew 250 sorties while logging 316.5 flying hours in Indonesia.

During 2000, wildfires burned over 5.6 million acres in the United States, the most

## It happened in December

Events that made Guard history

**December 4, 1864:** Knoxville, Tenn. — Confederates, under the command of Gen. James Longstreet, lift their siege of Union forces in defensive positions around Knoxville. The siege started on Nov. 16 following the Battle of Campbell's Station, a Confederate victory that compelled Union Gen. Ambrose Burnside to retreat into the defenses of the city.

**December 16, 1944:** Ardennes Forest, Luxemburg — The German Army launches its last great offensive in the West in what has become known as the "Battle of the Bulge." Among the first units attacked is the 28th Infantry Division (PA) which, while giving ground, put up a stiff resistance to buy time for other Allied units to move to block the enemy assault. Other Guard outfits involved in the month-long battle included the 26th (MA) and the 30th (NC, SC, TN) and 35th (KS, MO, NE) infantry divisions.

**December 22, 1916:** Boise Barracks, Idaho — The 2nd Infantry Regiment, Idaho National Guard, arrives home from its deployment to Camp Little in Nogales, Ariz., during the Mexican Border crisis.

destructive season in 50 years. Air Guardsmen flew nearly 890 hours of MAFFS missions, dispensing 2.3 million gallons of fire retardant over 19 states during that fire season. That same year, Congress began appropriating money for the development of a more advanced airborne firefighting system that was dubbed the "Military Airborne Firefighting System II" (MAFFS II) by the Air Mobility Command. Responding to a DoD requirement, the new system would also be able to decontaminate areas that have been polluted by foul agents or oil spills. Currently, MAFFS II is not configured to be employed by C-130Js, but money has been set aside to modify it for use in those aircraft.

Droughts in the American west in 2005 and extending into 2006 produced busy wildfire seasons. During the first year, MAFFS was employed to combat fires in Utah, Idaho, Oregon, Nevada, and Washington state. The 145th AW and the 153rd AW flew 318 MAFFS sorties making 329 drops totaling 845,535 gallons of fire retardant while accumulating 356.1 flight hours. Two North Carolina planes and crews were deployed to Pensacola, Fla., in September 2005 by U.S. Northern Command to fight fires in New Orleans after Hurricane Katrina but did not fly any operational missions. In 2006, MAFFS assisted in fighting fires in Arizona, Oregon, California, Nevada, Utah and Idaho. All four MAFFS-equipped units flew 543.5 hours, making drops of 1,431,000 gallons of fire retardant weighing 4,459,449 pounds.