

**"EARTH, BLOOD AND FIRE"** United States Air Force Reserve by Senior Master Sergeant Darby Perrin, 2017

# "EARTH, BLOOD AND FIRE" **BY SMSGT DARBY PERRIN, 2017**

A wildland fire racing down a forested ridgeline towards a small town is a terrifying force of nature. The United States averages more than 73, 000 fires each year that burn 7 million acres. Fire seasons are growing longer and more destructive. Fires are both bigger and demonstrate more extreme fire behavior as they burn more acreage each year. Each fire season, the US Forest Service sends ground and aerial firefighters to protect lives and property. When civilian capability to fight the fires is exhausted, the National Interagency Fire Center in Boise, Idaho calls the US Air Force for help. That help arrives in the form of large, noisy, four-engine Air Force C-130 "Hercules" aircraft with big florescent orange numbers on them. Each of the aircraft are equipped with second generation Modular Airborne Fire Fighting Systems (MAFFS) capable of dropping nearly 30,000 pounds of water or bright red fire retardant in about five seconds to cover an area a quarter-mile long and 60 feet wide. Each drop reduces the fire's intensity and slows the growth of wildfires so that firefighters on the ground can build containment lines.

The aerial firefighting mission is dangerous and the fires are unpredictable. It is often described as the most challenging flying done in the C-130 with low altitudes, low speeds, high-density altitude, and high temperatures. The aircraft drops fire retardant from 150-200 feet above ground level, at 120 knots--just slightly above stall speed, and often through smoke in mountainous terrain. Pilots are max performing the aircraft every time and there is very little room for error. Only the most experienced aircrews are selected for the firefighting mission and they train with the US Forestry Service and are recertified before each year's fire season.

In the summer of 2000, MAFFS-5, flown by Reserve Citizen Airmen from the 731st Airlift Squadron, 302d Airlift Wing, based at Peterson Air Force Base, Colorado, faced challenging conditions as they followed a Forest Service lead plane to its drop on an area where fire and smoke were blowing up in a valley. As they entered the final turn for their run-in to the drop at 120 knots a mere 150 feet above the valley floor, the wind shifted. Large trees erupted into flaming torches shooting fire and thick black smoke into the sky. Unable to maneuver in the valley, the aircraft plunged into a furnace of black smoke. Two engines quit. The crew immediately dumped their fire retardant load and, struggling to keep the aircraft stable, successfully re-started one of the two engines. The added power enabled the aircraft to clear the ridgeline before safely returning to the Channel Islands Air National Guard Base, California.

### **AIR FORCE RESERVE**

The Air Force Reserve is a combat-ready force, composed of more than 70,000 Reserve Citizen Airmen, stationed locally at over 60 locations throughout the United States and serving globally for every Combatant Command in air, space and cyberspace.

We are a cost efficient and mission-effective force, providing the nation with operational capability, strategic depth and surge capacity, both overseas and here at home. The Air Force Reserve's wide-ranging operational capability serves the diverse needs of every Combatant Commander, whose requirements are as varied as the geographic and functional areas they support.

Air Force Reserve Command directly supports the homeland with capabilities, including aerial fire fighting, aerial spray, and weather reconnaissance, better known as the "Hurricane Hunters." Our relationship with other federal agencies, including the National Weather Service and US Forest Service, demonstrates how federal, military and civilian organizations can work together to support the entire nation.

The majority of our Reservists serve alongside our active duty counterparts in association constructs. Approximately two-thirds of the Air Force's associations are with the Air Force Reserve. Integrating through associations delivers significant taxpayer value, both in cost savings and improved mission effectiveness, by sharing aircraft, equipment and facilities with the active duty.

Value is also gained from "Airmen for Life" as the Air Force Reserve retains the experience and training cost of a member's active duty service. As over 75 percent of our Reserve Citizen Airmen serve part-time, this combat-tested experience stays in a highly costefficient force, available whenever the nation calls. Further, the nation benefits from the intrinsic value gained by a member's civilian experience in a variety of career fields, from pilots and nurses to space and cyberspace professionals.

## **AIR FORCE RESERVE MISSION**

Provide Combat-Ready Forces to Fly, Fight and Win.

#### **MISSION SETS**

The Air Force Reserve currently performs about 20 percent of the work of the Air Force, including traditional flying missions and other more specialized missions, such as Weather Reconnaissance, Aerial Fire Fighting, Aerial Spray and Personnel Recovery.

#### WHERE AIR FORCE RESERVISTS **ARE CURRENTLY SERVING OR DEPLOYED**

Afghanistan, Bahrain, Djibouti (Horn of Africa), El Salvador, Ethiopia, Germany, Guam, Guantanamo Bay, Honduras, Iraq, Italy, Japan, Niger, Pakistan, Peru, Qatar, Saudi Arabia, South Korea, South Sudan, Spain, Thailand, Turkey and Uganda.



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