



**“A LEGACY OF INNOVATION IN SPACE OPERATIONS”**

United States Air Force Reserve  
by Lieutenant Colonel Warren F. Neary, 2018



## “A LEGACY OF AIRMEN INNOVATION IN SPACE OPERATIONS”

BY LIEUTENANT COLONEL WARREN F. NEARY, 2018

Air Force space capabilities and the Airmen who operate them provide the foundation to our nation’s ability to deter aggression and effect global impact across the entire range of civil and military operations, from humanitarian and disaster relief through major combat.

Highlighted in this painting are a few of today’s pioneers in military space operations to include General Bernard Schriever, the architect of the Air Force’s military space program. Major General Frank Casserino, the father of the Air Force Reserve organization in support of the Air Force space program. Finally, NASA astronaut and Air Force Colonel Eileen Collins, served as the first female space shuttle pilot and later shuttle commander; she was also selected as the second female Air Force test pilot.

Air Force Reserve Citizen Airmen have provided a strong presence in Air Force space operations for decades. Today, Airmen of the Command’s 310th Space Wing continue this legacy. Originally established as the 310th Space Group on September 1, 1997, the unit received re-designation as the 310th Space Wing on Mar 7, 2008 with all of the command’s space operations assets under one organizational structure. Air Force Reserve Command’s space operations include space operations training, satellite operations, including the Defense Meteorological Satellite Program, the Global Positioning System constellation, and the Space Based Infrared System (SBIRS) system. Reserve Airmen also support the Joint Space Operations Center, and conduct testing and assessment of space systems. Finally, they perform command and control and strategic and tactical warning of missile and space launches, and support operations to monitor satellite communications (SATCOM) links to intercept and geo-locate SATCOM jammers, sources of electromagnetic jammers, sources of electromagnetic interference, or other signals of interest for prosecution as targets or other higher authority action.

On the left in this painting, today’s Airmen from the 8th and 2nd Space Warning Squadrons operate the SBIRS mission that includes providing a seamless operational transition from the Defense Support Program to the nation’s next-generation overhead persistent Infrared sensors. This mission supports missile early warning, missile defense, battlespace awareness, and technical intelligence. On the bottom left, Airmen with the 26th and 527th Space Aggressor Squadrons conduct space operations in GPS ramp jamming to train Airmen in defensive space operations. On the lower right, Airmen from the 16th and 380th Space Control Squadrons de-conflict friendly electromagnetic interference and identify adversaries. Once identified, platforms such as an MQ-9 Reaper are used to eliminate the threat.

Innovation is an integral part of our future, and it comes from the diverse experiences our Citizen Airmen bring to the mission from various communities and industries across the nation.

## 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 firefighting, 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 cost-efficient 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.

