



FACT SHEET

UNITED STATES AIR FORCE

910TH Airlift Wing (AFRC)

Office of Public Affairs
Youngstown Air Reserve Station
3976 King Graves Rd., Unit 12
Vienna, Ohio 44473-5912

AERIAL SPRAY MISSION

MISSION

The Department of Defense (DoD) tasks the 910th Airlift Wing of the U.S. Air Force Reserve to maintain an aerial spray capability. The 910th is home to the DoD's only fixed-wing aerial spray unit.

UNITS AND AIRCRAFT

The 757th Airlift Squadron of the 910th Airlift Wing at Youngstown Air Reserve Station, Vienna Ohio, conducts aerial spray missions. Four C-130H aircraft, equipped with the Modular Aerial Spray System (MASS), are used for aerial spray operations.

PERSONNEL

Brigadier General Michael F. Gjede is commander of the 910th Airlift Wing. Pilots, navigators, flight engineers, spray operators/loadmasters, entomologists, and maintenance support personnel are assigned to the spray mission.

COMMAND RELATIONSHIP

The 910th Airlift Wing is part of the U.S. Air Force Reserve. When activated, the unit is gained by Air Mobility Command, headquartered at Scott Air Force Base, Illinois.

HISTORY

The aerial spray mission was transferred to Air Force Reserve Command (AFRC) from the 4500th Aerial Spray Flight, Langley Air Force Base Va. on April 1, 1973. The 355th Tactical Airlift Squadron (AFRC) gained the mission using UC-123K spray aircraft and an active-duty Air Force entomologist. The unit's first spray mission took place at Langley Air Force Base on May 22, 1973 to control mosquitoes.

During the first year, two research missions were conducted in conjunction with the U.S. Army at Camp Drum, N.Y. to test the efficacy of black fly control by aerial spray.

The Panamanian government requested assistance from the United States in July 1973 to combat an outbreak of Eastern Equine Encephalitis in the Canal Zone. Later that month the unit sprayed the Canal Zone for control of the migratory salt-marsh and adult freshwater mosquitoes with excellent results.

In mid-May 1975, aerial spray UC-123K's went to the Pacific Island of Guam to spray for mosquito control at a large Southeast Asian refugee camp. Four applications were sprayed covering more than 160,000 acres. A feared outbreak of dengue fever never materialized. The Governor of Guam recognized the work of the crews by presenting the unit a flag of Guam.

During 1977 and 1978, the unit conducted five missions for Japanese beetle control at Lajes Air Force Base, Azores. These beetles are an internationally quarantined pest that was firmly established in the Lajes local area.

In 1981, the spray planes flew missions for gypsy moth control at West Point N.Y. and Fort Dix/McGuire Air Force Base N.J. They also flew additional missions at various locations for Japanese beetle and mosquito control.

In 1982, the Air Force scheduled its C-123K's for deactivation except for four which were retained at Rickenbacker Air National Guard Base, Ohio to support the aerial spray mission. With the deactivation of the 355th TAS the aerial spray mission transferred to the 907th TAG Headquarters.

In April 1983 at Parris Island, S.C., the unit pioneered the use of aerial sprays to control biting midges, reductions of greater than 95% were seen following sprays.. Later that year, a successful vegetation control program was developed at the Utah Test and Training Range. This program saves the U.S. Government \$1.5 million, annually, over previously used techniques.

In 1983, AFRC planes sprayed 217 communities and 525,024 acres in Minnesota in response to a public health emergency for Western Equine Encephalitis.

In June and July 1985, the 907th TAG aerial spray unit assisted the Department of Agriculture in their emergency control efforts for a major grasshopper infestation in Idaho. Three UC-123K aircraft as well as support personnel spent 30 days in Pocatello and Boise Idaho, spraying more than 700,000 acres at the request of Idaho's governor.

The 907th TAG aerial spray mission converted to C-130A aircraft in the spring of 1986, with operational control of the spray mission assigned to the 356th Tactical Airlift Squadron. In April 1987, a joint test of the effectiveness of the new C-130A interim aerial spraying system was accomplished with the U.S. Department of Agriculture at Avon Park Air Force Range Fla.

In March 1988, the aerial spray mission converted to the C-130E aircraft and utilized the new Modular Aerial Spray System. This system was specifically built for C-130E and H aircraft models and is functional in a variety of configurations.

In October 1989, the aerial spray mission deployed to South Carolina at the request of the Federal Emergency Management Agency (FEMA) to control vector mosquitoes in the wake of Hurricane Hugo. During that operation, which spanned 5 weeks, more than 855,000 acres were sprayed.

The aerial spray mission was transferred in January 1992 from the 907th TAG at Rickenbacker ANGB near Columbus, Ohio to the 910th Airlift Wing at Youngstown Air Reserve Station, located at Vienna Ohio. The mission converted from C-130E to C-130H aircraft as part of the functional transfer. The combination of the MASS with the newer, more capable H-model aircraft further enhanced the capabilities of the aerial spray mission.

Aerial spray operations were conducted in south Florida throughout September and into October of 1992 following Hurricane Andrew, again at the request of FEMA. The devastation had damaged or destroyed hundreds of homes and left thousands of people without shelter. In total, more than 288,000 acres were covered during the first four missions.

From November 1992 through most of 1994, air and ground crews of the 910th AW conducted extensive testing in cooperation with an international contingent of oil dispersant experts to determine the feasibility of modifying the MASS for applying dispersing materials to oil slicks. Testing was initiated by a U.S. Coast Guard request to develop a Memorandum of Agreement (MOA) with the USAF for using Air Force Reserve personnel and equipment to apply dispersant during catastrophic oil spills. Testing has been completed which showed that the aerial spray operations can effectively apply oil dispersants. The MOA was approved and officially signed by the USCG and USAF in 1995 and is currently being revised.

The 910th AW is host to one of only four EPA-approved Training Centers for DoD Pesticide Applicator Certification. Recently, the course has been taught in Italy and Germany to serve the overseas DoD pest management community, too.

The Unit added Geographical Information System (GIS) technology in 1996 and Differential Global Positioning System receivers to the spray aircraft in 1997.

Beginning in 1996 to the present, the noxious weed, Musk Thistle, has been controlled at Smoky Hill ANGR in Salina, Kan. using aerial spray applications.

In October 1999, the Aerial Spray Unit deployed, at the request of FEMA, in response to the mosquito infestation generated in North Carolina and Virginia in the aftermath of Hurricane Floyd. Severe mosquito biting rates, as high as 50 plus bites a minute, were recorded. Approximately 1.7 million acres were sprayed over Virginia and North Carolina significantly lowering the number of nuisance and vector mosquitoes that had been hampering clean-up efforts.

October 2000 saw the 757th Airlift Squadron's primary mission change from Airlift/Airdrop to specifically training for aerial spray. The aerial spray program was further broadened in the year 2000 after successful testing of larvicides (control of mosquito larvae) showed that these materials could be added to the arsenal of mosquito control alternatives.

During 2001 a new control program was developed at Grand Forks Air Force Base, N.D. Using a target specific larvicide to interrupt the development of immature mosquitoes while continuing to treat for the flying adult mosquitoes, the squadron is able to reduce populations reaching both life-stages at the same time.

(Current as of August 2003)