

# 4500 AERIAL SPRAY FLIGHT

## MISSION

## LINEAGE

4500 Aerial Spray Flight  
*Inactivated, 1 Apr 1973*

## STATIONS

Langley AFB, VA

## ASSIGNMENTS

## WEAPON SYSTEMS

## COMMANDERS

## HONORS

Service Streamers

Campaign Streamers

Armed Forces Expeditionary Streamers

Decorations

## EMBLEM

## MOTTO

## OPERATIONS

The Special Aerial Spray Flight was a section of the 4500th Air Base Wing. Its purpose was to perform aerial spray missions. The responsibilities included development of aerial insecticide

dispersal techniques in cooperation with other government agencies, training aircrews for the performance of spray missions, and maintaining a repository of special flying and technical skills for expansion, disaster relief, and tactical operations. The spray flight also maintained, published and distributed to interested agencies biological and operational information concerning the aerial spray program.

The special aerial spray flight continued operations providing aerial insecticide dispersal services for agencies of the Department of Defense and for other agencies as directed by Hq TAC. The flight continued development of aerial insecticide dispersal techniques in cooperation with interested government agencies; it trained aircrews; it maintained records of special flying and technical skills needed for expansion, disaster relief, and tactical operations; and it maintained, published, and distributed to interested agencies biological and operational information.

The flight was supervised by Capt. Carl W. Marshall and had a complement of 17 pilots, 10 flight engineers, one clerk typist, and one entomologist, Dr. (Capt.) Claude T. Adams.

Of the seven assigned C-123 spray aircraft, three were in Viet Nam conducting defoliation missions, one aircraft completed modifications to the granular system and underwent calibration testing at Macon Municipal Airport, GA., and spent the remainder of the period conducting spray operations against fire ants at Liberty Field, G. The flight also performed granular dispersal missions conducted against fire ants. In addition the flight performed a special insecticide control mission against bombay locusts in Bangkok, Thailand. No serious problems were encountered; due to the rotation system of personnel to the Viet Nam area, aircraft manning of crews suffered occasionally due to lag time between crews returning and replacement crews rotating.

Seven aircraft were assigned to the flight. Three of these were committed to Viet Nam, one was undergoing modification to a granular spray system, one was undergoing calibration tests for a new and larger spray system at Eglin AFB, FL , and two were available for spraying in the United States. Headquarters TAC approved 21 government reservations for spraying. By the end of the period, only seven of these areas had been sprayed because of the unusually low temperatures experienced this spring.

In addition to the spraying of government reservations, the flight was engaged in three other activities. The first was a calibration test conducted at Lackland AFB, Tex. in January. The 6570th EPI Laboratory at Lackland was to evaluate the dispersal techniques and procedures used by the spray flight. Even though the 6570th EPI Laboratory had the responsibility to set up the test program, their personnel were not familiar with the present day modern dispersal techniques. As a result, the evaluation program was of little value.

A second activity took place at Eglin AFB, Fla. A program began in May to test a larger spraying system. The test program was still underway at the end of the period and the final results may be available in July or August. The last of the three activities took place in Viet Nam. Three crew and aircraft were committed to this operation during the entire period. The average length of tour for each

crew averaged approximately four months, with the tours being rotated among the spray flight personnel. This rotation of crew personnel to Viet Nam caused an occasional temporary shortage of qualified spray flight crews in the United States. The mission in Viet Nam concerned defoliation activities.

Base Special Aerial Spray flight began operations in Dallas TX to combat encephalitis epidemic. 1966

Deployed to Mississippi as a result of Hurricane Camille, 1969

4500 ABW C-123K provided support for 4500 ABW participation in Combat Vee Operation of Jul and Aug 71. (Combat Vee Operation involved special aerial spray flight to combat Venezuelan equine encephalomyelitis in vicinity of Brownsville TX.), 1971

Training pilots to qualify as both C-123 pilots and spray pilots was a primary problem. Pilots were either qualified in one phase or the other during the entire period and at the close of the reporting period no pilot assigned to the flight was a qualified spray pilot in the C-123. Crews were being trained and plans indicated crews qualified in both phases would be available soon. Shortage of personnel in administrative and aircrew positions together with absence of personnel on TDY.

Since January 1948, Langley AFB had hosted aerial spray operations. During the summer months, the 4500th Special Aerial Spray Flight waged war against mosquitoes in the vicinity of Langley AFB. The pilots of the 4500th sprayed the area around Langley 12 to 15 times each summer. As the only such unit in the military, Langley's spray flight also responded to approved requests from military installations in the continental United States, Alaska, Puerto Rico, and the Virgin Islands. During the summer of 1966, the area around Dallas, Texas, suffered an outbreak of St. Louis Encephalitis, commonly known as "sleeping sickness," carried by mosquitoes. At the request of Dallas officials, Langley's 4500th Special Aerial Spray Flight sent three UC-123 spray aircraft, and for eight days the aircraft sprayed 475,000 acres around the city with Malathion, ending the threat. After over 25 years of anti-mosquito operations, Langley AFB turned over the aerial spray mission to the Air Force Reserve's 302d Tactical Airlift Wing, Lockbourne AFB, Ohio, on 1 April 1973.

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USAF Unit Histories  
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Sources  
Air Force Historical Research Agency. U.S. Air Force. Maxwell AFB, AL.