646 RADAR SQUADRON (SAGE)



MISSION

LINEAGE

646 Aircraft Control and Warning Squadron activated, 1948 Redesignated 646 Radar Squadron (SAGE)

STATIONS Highlands AFS, NJ

ASSIGNMENTS

COMMANDERS Maj Weston F. Griffith

HONORS Service Streamers

Campaign Streamers

Armed Forces Expeditionary Streamers

Decorations

EMBLEM

ΜΟΤΤΟ

NICKNAME

OPERATIONS

Many years ago, in 1746 to be exact, a beacon was established at the Highlands of Navesink, New Jersey, to be used as a signal to New York City in the event enemy ships approached. The same as then, today a modern and far more efficient warning device stands guard at those same Highlands hills ready for immediate action if an aggressor should attempt to attack this country. A compact installation armed with the best aids that science has invented, protects the approach to the world's greatest city.

The 646 Radar Squadron was activated in 1948, but operating as one unit for the past four years, the "646th" has carved out a prominent and highly respected position in the ranks of the Air Defense Command. The spirit of cooperation, efficiency and "Team Work" is the endeavor and goal of every officer and airman of the "646th" to keep it — "The Best Station in the U. S. A."

The mission of the 646 Radar Squadron is to provide the Sector Commander with surveillance data including height determination, flight size, and Mark X 1FF/SIF of enemy unknown, and friendly air traffic within the assigned sector of responsibility and adjacent subsectors as required for Air Situation evaluation. To accomplish radar mapping prior to transmittal of such data to New York Air Defense Sector Direction Center. To provide the 26th Air Division Combat Alert Center (Manual) and New York Air Defense Sector Commander, in the event SAGE Direction Center becomes disabled, by electronic and/or visual means (Manual Systems) with the complete Air Picture. To equip, administer, and train assigned or attached personnel and provide a force in a maximum state of readiness for use in Air Defense. To conduct and participate in all phases of Air Defense training which will insure fulfillment of the overall mission of the unit.

Highlands Air Force Station, initiated and activated as part of the Air Defense Radar Network in 1948, fell heir to a site that has for centuries been used by the United States Government as an alert outpost. As early as 1746 the highlands of Navesink, New Jersey, were equipped with a beacon, warning New York City, a few miles away, of the approach of hostile ships. Another beacon situated near the present site of the 646th Squadron was the guiding light for ships bound for New York Harbor. In 1942 the site was chosen for the installation of an Army Anti-Aircraft Battery, later named Battery Lewis. The Battery bunkers are still used for storage by the 646th for supplies and equipment.

Here, where once Hendrick Hudson stepped from his ship the "Half Moon" onto Jersey soil, ground that had heretofore never been touched by white men, the inventor Marconi made his first demonstration of Wireless Telegraphy. Little did he know that his efforts, combined with the later electronic discoveries would play an important part in the Air Defense of the Eastern Seaboard.

For the past eight years the 646th AC&W Squadron has been engaged in providing early warning of approaching aircraft. The Officers and Airmen of the 646th are proud to perform an important function in an early warning network protecting their country and their people, and also preventing another day "That will live in infamy."

Texas Tower No.4 (Unnamed Shoal)

646; 4604 Texas Tower No.4 (Unnamed Shoal) FPS-20A; FPS-6A (2) Apr-59 15-Jan-61 Operational as a SAGE unit in Apr 1960. Parent station was Highlands AFS, NJ (P-9). Tower collapsed in storm; 28 people died. 185-foot depth, 84 miles southeast of New York City.

646th Radar Sq (SAGE): assigned 1 Jan 51 at Navesink, NJ, assigned to the 503rd AC&W Gp; transferred to the 26th AD 6 Feb 52; transferred to the 4709th Def Wg 16 Feb 53; site redesignated to Highlands AFS, NJ 1 Dec 53; transferred to 4621st AD Wg 18 Oct 56; transferred to NY ADS 8 Jan 57; redesignated the 646th Radar Sq (SAGE) 1 Oct 58; transferred to the 21st AD 1 Apr 66; discontinued 1 Jul 66.

646th Aircraft Control and Warning Squadron Stationed: 30 Apr 48 - 8 Dec 49 Roslyn Air National Guard Station This unit was manned by one officer and two airmen at the Roslyn Location

Radar types: AN/CPS-6B, AN/TPS-1, AN/CPS-4 Subordinate Units: 646 Aircraft Control and Warning Squadron, Highlands, New Jersey

NEW JERSEY

L-12/LP-9/P-9/Z-9 - Twin Lights/Navesink/Highlands

In 1948 the 646th AC&W Squadron activated a pair of AN/CPS-6 radars at this coastal site to feed into a primitive control center established at Roslyn, New York. During an exercise in mid-1949, the capability of this site was judged as "zero." These radars were incorporated into the Lashup system and the follow-on permanent network. In 1955 the site received an AN/FPS-8 radar. This radar was converted into a AN/GPS-3 that would remain until 1960. In 1958 an AN/FPS-6 height-finder radar became operational. Also that year the Navesink complex began providing a feed into the SAGE blockhouse located at McGuire AFB. In September 1959 this site became the first to deploy an AN/FPS-7 radar. In 1960 the Air Force installed an AN/FPS-6B height-finder radar. By 1963 the AN/FPS-6 and 6B height-finder radars had been replaced by AN/FPS-26A and AN/FPS-90 sets. The site was removed from service on April 1, 1966.

646th Aircraft Control & Warning Squadron Roslyn ANG, New York 30 April 1948 - 8 December 1949

Air Force Lineage and Honors Created: 16 Jun 2020 Updated:

Sources Air Force Historical Research Agency. U.S. Air Force. Maxwell AFB, AL. Unit yearbook. *New York Air Defense Sector. 1960.* Unit yearbook. *26 Air Division, Defense. 1956.*