

## 964 AIRBORNE AIR CONTROL SQUADRON



### MISSION

The 964 Airborne Air Control Squadron provides command and control support for all U.S. and allied aircraft that need it within their area of operation. Aircrews comprised of more than 18 members operate the E-3 Sentry to monitor the skies with its 30-foot rotating radar to relay important information.

The Sentry is comprised of four sections. Together, they run the airborne warning and control system. The four sections are made up of flight deck members, technicians, controllers and the surveillance team. Members of the flight deck are responsible for the overall conduct of flight operations and placement of the aircraft. A team of technicians operate the aircraft mission systems and stand ready to repair any equipment that malfunctions during the flight. A surveillance team is constantly tracking everything on the radar and passes the most useful information to the controller team. Controllers are constantly communicating with other aircraft in order to make sure air traffic doesn't conflict with each other. They also provide guidance to fighter pilots and ensure tactical dominance is maintained.

### LINEAGE

362 Bombardment Squadron [Heavy] constituted, 28 Jan 1942

Activated on 15 Jul 1942

Redesignated 18 Antisubmarine Squadron [Heavy], 29 Nov 1942

Redesignated 4 Sea-Search Attack Squadron [Heavy], 23 Oct 1943

Redesignated 4 Search Attack Squadron [Heavy], 22 Nov 1943

Disbanded, 10 Apr 1944

164 Liaison Squadron (Commando) constituted, 9 Aug 1944

Activated, 3 Sep 1944  
Inactivated on 3 Nov 1945

964 Airborne Early Warning and Control Squadron constituted, 8 Dec 1954  
Activated, 8 Mar 1955  
Inactivated, 30 Jun 1974  
Redesignated 964 Airborne Warning and Control Squadron, 7 Feb 1977  
Activated, 1 Jul 1977

4 Search Attack Squadron [Heavy], reconstituted and consolidated with 164 Liaison Squadron (Commando) and Airborne Warning and Control Squadron consolidated, 19 Sep 1985.  
Consolidated squadron retains Airborne Warning and Control Squadron designation

Redesignated 964 Airborne Air Control Squadron, 1 Jul 1994

### **STATIONS**

Salt Lake City AAB, UT, 15 Jul 1942  
Geiger Field, WA, 15 Sep 1942  
Ephrata, WA, 1 Oct 1942  
Langley Field, VA, 29 Oct 1942–10 Apr 1944  
Asansol, India, 3 Sep 1944  
Inbaung, Burma, 19 Dec 1944  
Kan, Burma, 15 Jan 1945  
Asansol, India, 31 Jan 1945  
Shwebo, Burma, 20 Feb 1945  
Ondaw, Burma, 12 Mar 1945  
Asansol, India, 31 Mar 1945  
Sinthe, Burma, 20 Apr 1945  
Magwe, Burma, 4 May 1945  
Asansol, India, 10 May–6 Oct 1945  
Camp Kilmer, NJ, 1–3 Nov 1945  
McClellan AFB, CA, 8 Mar 1955–30 Jun 1974  
Tinker AFB, OK, 1 Jul 1977

### **ASSIGNMENTS**

304 Bombardment Group, 15 Jul 1942  
25 Antisubmarine Wing, 30 Dec 1942  
I Bomber Command, 24 Aug 1943  
1 Sea-Search Attack Unit (later, 1 Search Attack Group), 23 Oct 1943–10 Apr 1944  
1 Air Commando Group, 3 Sep 1944–3 Nov 1945  
8 Air Division, 8 Mar 1955  
552 Airborne Early Warning and Control Wing, 8 Jul 1955–30 Jun 1974  
552 Airborne Warning and Control Wing (later, 552 Airborne Warning and Control Division;  
552 Airborne Warning and Control Wing, 552 Air Control Wing), 1 Jul 1977

552 Operations Group, 29 May 1992

## **ATTACHMENTS**

1 Sea-Search Attack Unit, 30 Sep–22 Oct 1943

## **WEAPON SYSTEMS**

B–18, 1942–1943

A–20, 1942–1943

B–24, 1942–1943

B–34, 1942–1943

B–17, 1942–1944

C–64, 1944–1945

L–5, 1944–1945

RC–121, 1955–1963

EC–121, 1963–1974

E–3, 1977

## **COMMANDERS**

LTC James A. Provan, #1957

LTC Regina S. Giles

LTC Andrew M. Mueller, 9 Aug 2000

LTC Kevin M. Mulvihill, 24 Jun 2002

## **HONORS**

### **Service Streamers**

### **Campaign Streamers**

World War II

Antisubmarine, American Theater

India-Burma, Central Burma

Southwest Asia

Defense of Saudi Arabia

Liberation and Defense of Kuwait

### **Armed Forces Expeditionary Streamers**

None

### **Decorations**

Air Force Outstanding Unit Awards with Combat "V" Device

1 Jul 1969–30 Jun 1970

1 Jul 1971–31 Dec 1972

Air Force Outstanding Unit Awards

1 Jul 1961–30 Jun 1963

15 Apr 1965–1 Jul 1966

2 Jul 1966–1 Jul 1968

1 Jul 1970–30 Jun 1971

1 Jul 1977–30 Jun 1978

1 Jul 1978–30 Jun 1980

1 Jul 1982–30 Jun 1984

1 May 1985 –30 Apr 1987

1 May 1987–30 Apr 1989

1 Dec 1989–1 Dec 1991

Republic of Vietnam Gallantry Cross with Palm

1 Apr 1966–28 Jan 1973

**EMBLEM**



4 Sea Search Attack Squadron emblem: On a light blue disc, within a border red, piped white, a pile gold, point to dexter base, surmounted by a black submarine periscope, issuing from the waves of the sea proper in base, and pierced by a silver sword, hilt red, in the direction of the pile. (Approved, 10 Apr 1943)



964 Airborne Early Warning and Control Squadron emblem approved, 23 Aug 1957



On a Blue disc edged with a narrow Yellow border a stylized Phoenix ascending, head and neck Red, body and wings Gray garnished Black, eyed Yellow emitting two Yellow lightning bolts

upward and a Yellow trail to the bottom of the disc. (Approved, 1978)

## **MOTTO**

## **OPERATIONS**

Operational training unit for 25th Antisubmarine Wing, Nov 1942–Oct 1943. Trained B–17 replacement crews, Nov 1943–Apr 1944. Visual reconnaissance, medical evacuation and light transport services for ground forces in Burma, 19 Dec 1944–3 May 1945. Long range surveillance, late 1950s. Rotated aircrews to Southeast Asia, 4 Apr 1965–17 May 1974. Combat support in Southwest Asia, 17 Jan–6 Mar 1991.

Operational training unit for 25 Antisubmarine Wing, Nov 1942-Oct 1943, then trained replacement crews for radar-guided search and attack missions.

Upon departure of the 3 Observation Squadron in April 1942, the 2 Bombardment Group and 65 Observation Squadron formed the nucleus of the antisubmarine units. The primary mission constituted patrol of the Chesapeake Bay and significant portions of the Atlantic seaboard to search for and attack enemy shipping and submarines.<sup>25</sup> The B-17s patrolled to a distance of approximately 600 miles, the B-18s and B-25s conducted short range missions. The squadrons maintained a log and photographs of all shipping sighted. A secondary mission during the first year was assisting the Navy in protecting of allied merchant shipping. By July 1942 patrol planes began using the British-developed air-surface vessel (ASV) radar in connection with the American-developed magnetic anomaly detector (MAD). Both were used together since the former was best for detecting surface vessels at long distances, while the latter, though of shorter range, could detect submerged submarines.

In November the 304th Bombardment Group was inactivated and its squadrons assigned to the 25th Antisubmarine Wing. The 361st became the 1st Antisubmarine Squadron in November and departed Langley in January 1943. The 362 and 363 became the 18th and 19th Antisubmarine Squadrons, respectively. The latter departed Langley in April 1943, but the former became the 4th Sea Search Attack Squadron in November. It departed in April 1944.<sup>26</sup> The departure of the 2d Bombardment Group in October 1942, like the departure of the 19th Airship Squadron in 1935, ended an era at Langley Field. Its tenure on the field for twenty years from June 1922 to October 1942 represented the longest period of residence by any unit up to that time.

The activation of the 1st Sea Search Attack Group at Langley Field on June 8, 1942 grew out of special testing of the MAD system in hunting submarines. The group had a three-fold mission: to develop tactics and techniques for the employment of known destructive devices, to develop new experimental apparatus, and to train combat crews and technicians in the use of these instruments.<sup>27</sup> Therefore, the primary mission of the Sea Search Attack Group was not, as in the antisubmarine units, patrol work and attack, but rather the development of special detector equipment used in antisubmarine warfare.

The 1st Sea Search Attack Group, under command of Lt. Colonel W. C. Dolan, included the 2nd

and 3rd Sea Search Attack Squadrons, which flew B-18s and B-24Ds and the 4th Sea Search Attack Squadron, which joined the group in November 1943 and flew B-17 aircraft.<sup>28</sup> The group played a vital role in the sinking of an enemy submarine off the Florida coast in August 1942, a probable sinking in September off the Virginia Capes, and in the possible confirmation of two sinkings near Trinidad in October.

The group worked on more than sixty projects between June 1942 and July 1943. Among these were the sonobuoy and three improved versions of MAD, the Mark IV-B2 MAD, the Mark VI, and the Mark X. After sighting the enemy submarine the crew dropped the sonobuoy into the sea to pick up underwater sounds and relay them to nearby aircraft.<sup>31</sup> With the Mark IV-B2 MAD mounted in a tail "stinger," a B-18 aircraft could search a 16.6 square mile area in an hour.<sup>32</sup> The Mark VI was mounted in a B-24 which had detectors on the tip of each wing.<sup>33</sup> The Mark X MAD, a "bird" towed beneath a B-18B aircraft, was developed in early 1943.

Nearly all major units were involved in some aspect of antisubmarine warfare. These included the 1st Sea Search Attack Group with the 2nd and 3rd Sea Search Attack Squadrons, and three antisubmarine squadrons: the 12th and 18th Antisubmarine Squadrons (Medium) at Langley and the 22nd Antisubmarine Squadron (Heavy) located on Langley's sub-base at Bluethenthal Field, North Carolina. The 51st Sub-Depot provided invaluable supply support.

Originally activated March 8, 1955, as the Airborne Early Warning and Control Squadron, the unit flew EC-121 aircraft for early warning and control missions. The unit deployed to remote parts of the Pacific to track ballistic missiles and help recovery aircraft pinpoint impact sites. Later, unit crews and aircraft supported the Discovery and Mercury series programs in space operations by guiding the aircraft used to recover the space modules.

1962 October —552 participates in space project "Mercury" aircrew assists in recovery of project "Mercury" space capsule.

1963 Sq assists in recovery of "Faith 7" space capsule piloted by astronaut Gordon Cooper.

May 1963 -- The 964 AEW&CS participated in the recovery of astronaut pilot Gordon Cooper's Faith 7 the space capsule.

Between April 1965 and June 1974 the Airborne Early Warning and Control Squadron rotated aircraft and crew to Southeast Asia as an integral part of Big Eye (later College Eye) Task Force. Crews and aircraft also deployed frequently to East Coast of the United States, to Iceland, and other countries. The unit was inactivated June 30, 1974, when the Southeast Asia commitment ended.

Since the activation of the unit at Tinker AFB July 7, 1977, its crew have trained to fly the E-3 in support of the 552 Air Control Wing. The unit has more than 350 crew members and support personnel assigned.

While Tinker AFB remains the home base for squadron operations, crews regularly rotate to overseas operating bases and forward locations supporting worldwide missions. In September 1978, crews initially deployed to the 552 ACW's unit at Keflavik Naval Air Station, Iceland.

Sep 1978 -- The 964 AWACS deployed personnel and equipment to Keflavik NAS, Iceland.

Mar-Apr 1979 -- A 552 AWACW E-3 completed an around-the-world mission, with the 964 AWACS as lead squadron for the mission. During the flight, the E-3 touched down at the following locations: Alaska, Hawaii, Japan, Korea, Philippines, Saudi Arabia, and the Azores.

Oct 1979 -- Rising tensions caused in the North Yemen - South Yemen Civil War resulting in the Air Force to send two E-3s to Riyadh, Saudi Arabia.

In March-April 1979 the undertook the E-3's first real-world operational deployment to Riyadh, Saudi Arabia. During the operation, the squadron crews flew the first E-3's to circumnavigate the globe. They visited Alaska, Hawaii, Japan, Korea, the Philippines, Saudi Arabia and the Azores.

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At home the trains with North American Aerospace Defense Command and Tactical Air Command units throughout the United States and Canada. Operating from Tinker AFB, crews participate in TAC sponsored exercises including Red Flag, Copper Flag, Green Flag, Blue Flag, Maple Flag, Amalgam Chief, Gallant Eagle, Bold Eagle and Brave Shield, as well as playing an increasing role with the Navy in such large-scale exercises as Readix, Readex, and Fleetex. In January 1979, crews began NORAD alert in support of U.S. air defense requirements.

In December 1979 the was the "lead squadron" to deploy to the Mediterranean area, participating in joint training exercises with air and sea units from the United States, as well as other nations in the area. This deployment concluded in May 1980.

In September 1980, crews again deployed on short-notice to Riyadh, Saudi Arabia. The purpose of this, the largest E-3 overseas deployment in history to date, was to enhance the air defense capability of Saudi Arabia. Approximately 200 aircrew members and other support people and four E-3s provided around-the-clock radar coverage, working closely with other U.S. forces, as well as elements of the Royal Saudi Air Force.

In October 1981, Airborne Warning and Control Squadron crews deployed to Egypt after the assassination of Egyptian President Anwar Sadat. While there, they provided air surveillance of



the region and worked closely with Egyptian pilots and ground defense sites in maintaining peace.

In October and November 1983, crews, working out of Puerto Rico, supported the Urgent Fury joint military operation in Grenada, providing air surveillance of the Caribbean Basin during all phases of the operation.

In November 1983 the deployed to Kadena Air Base, Japan, in support of salvage operations following the Soviet downing of Korean Airline Flight 007. The unit provided air surveillance, as well as command and control for the highly visible search and rescue efforts following the incident.

In August 1983 the deployed to Khartoum, Sudan, in support of the Joint Chiefs of Staff-directed operation called Arid Farmer. The unit provided around-the-clock air surveillance of the volatile border region between Libya and Sudan.

Also, in August 1983, on very short-notice due to tensions in the region, the deployed to Egypt for a Joint Chiefs of Staff directed operation called Early Call. Crews were divided with half going to Sudan for operation Arid Farmer and the other half participating in Bright Star, a Central Air Force deployment to Egypt.

The squadron participated in the first 552 ACW-sponsored exercise, Coronet Sentry, held in October 1986. It combined Air Force and Marine fighter assets and provided eight days of surveillance and weapons training.

During 1987, the deployed to numerous overseas and stateside exercises. The squadron deployed to Normad Thrust, an exercise practicing the ability to survive and operate in a chemical warfare environment.

In May 1987, the squadron was deployed to Riyadh, Saudi Arabia, when the USS Stark was attacked in the Persian Gulf. Crew members assisted with the search and rescue of the Stark's crew.

In 1988, the squadron continued to support real-world commitments in Iceland and Saudi Arabia. The squadron also deployed to exercises at Geilenkirchen, West Germany, and the Naval Air Station Roosevelt Roads, Puerto Rico.

In the spring of 1989, Saudi Elf-One Operations ended with the termination of hostilities in the Iran/Iraq war. In addition, the started special operations known as Agate Path (later changed to Enhanced Ops) in support of the war on drugs.

In December 1989, Operation Just Cause, the largest military night operation since World War II

was launched against the forces of Panamanian dictator Manuel Noriega. The was a key participant in these activities, which ceased shortly after Noriega's capture. U.S. losses during the operation were minimal.

In August 1990, the Persian Gulf once again became a region of increased tension, with the invasion of Kuwait by hostile Iraqi forces under Saddam Hussein. personnel quickly deployed to Riyadh, Saudi Arabia, in support of the operation known as Desert Shield. This operation, formed to protect the Saudi Kingdom, was a multinational effort that continued into January of 1991.

In January, the United Nations Security Council gave Iraq until January 15 to withdraw from Kuwait. Saddam Hussein's non-compliance with the mandate resulted in the coalition nations launching Operation Desert Storm two days later. It would be known as the largest air assault in history, and the most successful air-land campaign to date. Aircrews of the were directly involved in all operations, including the Composite Wing forces in Turkey, known as Operation Proven Force. The Iraqi army was defeated after only 42 days of combat, the last 100 hours was Desert Sabre, the ground assault.

Following the campaign, on March 22, a task force was formed to monitor remaining Iraqi forces and guarantee no further hostile actions. Personnel from the participated in these operations to maintain the peace. Also beginning in April, crews from the squadron deployed to Turkey for Operation Provide Comfort, assisting the plight of Kurdish refugees fleeing from Iraq. Valuable supplies were air dropped to these people, the aircraft controlled and monitored by support E-3s.

When the President's "war on drugs" moved up on the priority list, the spearheaded the deployment to Panama in November 1992. Meanwhile halfway around the globe on January 17, 1993 the squadron assisted in the shutdown of an Iraqi MiG-29 for violating the no-fly zone.

Overseas was not the only area the was active. In April 1993, the coordinated a search and rescue mission for a downed F-16 over Texas.

In May 1995 the was selected as the lead AWACS squadron to team with the 366 Wing at Mountain Home AFB, Idaho, for the largest Operational Readiness Inspection in Air Force history.

The continued to meet many new mission assignments in 1996, in addition to continuing commitments in Operation Southern Watch in Saudi Arabia and Operation Provide Comfort in Turkey, counterdrug operations and Standoff IV and VI. In addition to Red, Green, Blue, and Maple Flag exercises, the squadron participated in such international exercises as Baltops at Geilenkirchen Air Base, Germany and Matador 96 at Zaragoza Air Base, Spain. This year's 4th annual Multinational Airborne Early Warning Commander's Conference was held at Avord Air

Base, France. The represented the wing at the conference and supported a mission with the French Air Force.

24 Feb 1996 -- The 964 AACS supported Atlantic Command in conjunction with the shoot down of two civilian Cessna aircraft by the Cuban Air Force over international waters. The “Brothers to the Rescue” (a Cuban protest organization) planned to protest Cuban policies and organized a peaceful flotilla against Cuba in the Florida Straits.

6 May 2005 – Three aircraft from the 964 EAACS along with 122 support personnel deployed to Bourges, Bulgaria in support of the POTUS visit to Tbilisi, Georgia. The squadron began flying operational sorties over the region the same day. On 11 May, all 552 ACW personnel redeployed back to Tinker.

18-21 Jul 2007 – Members of the 964 AACS flew to Elmendorf AFB, AK and stood alert (real world) flying 3 sorties and logging over 23 hours.

4 Jan - 21 Apr 2008 – The 964 AACS deployed two E-3s to Curacao, Nether Antilis, to fly supporting drug interdiction sorties in support of AFSOUTH taskings. The 964 AACS flew 102 sorties for a total of 935.1 hours.

6 Jan - 7 May 2008 – The 964 AACS deployed to ADAB in support of OEF & OIF. The 964 AACS flew a total of 169 sorties for a total of 1,784.8 flying hours.

8 May-- 8 Sep 2009 – The 964 AACS and members of the 552 MXG deployed to the Al Dhafra AB, UAE, and Curacao in support of AEF taskings.

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DEPARTMENT OF THE AIR FORCE UNIT HISTORIES

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#### Sources

Air Force Historical Research Agency. U.S. Air Force. Maxwell AFB, AL.

The Institute of Heraldry. U.S. Army. Fort Belvoir, VA.

Air Force News. Air Force Public Affairs Agency.

Unit yearbook. *552 Airborne Early Warning and Control Wing. 1957.*