# **3 SPACE OPERATIONS SQUADRON**



## MISSION

The mission of the 3 SOPS is to ensure reliable space-borne communications to the President, the Secretary of Defense and U.S./Allied Forces. The mission is accomplished by conducting launch and on-orbit operations for the Defense Satellite Communications System Phase III satellites. It also operates AFSPC's newest satellite system, the Wideband Global SATCOM system which brings a 10-fold increase to worldwide communications capability.

# LINEAGE

3 Photographic Squadron constituted, 15 May 1941
Activated, 10 Jun 1941
Redesignated 3 Mapping Squadron, 13 Jan 1942
Redesignated 3 Photographic Mapping Squadron, 9 Jun 1942
Redesignated 3 Photographic Reconnaissance Squadron, Very Heavy, 19 May 1944
Redesignated 3 Reconnaissance Squadron, Very Long Range (Photographic-RCM), 19 Sep 1945
Redesignated 3 Reconnaissance Squadron, Very Long Range, Photographic, 15 Jan 1946
Inactivated, 15 Mar 1947

3 Satellite Control Squadron constituted, 9 Jan 1990 Activated, 2 Feb 1990 Redesignated 3 Space Operations Squadron, 30 Jan 1992

3 Reconnaissance Squadron, Very Long Range, Photographic and 3 Space Operations Squadron consolidated, 13 Oct 1994. Consolidated designated 3 Space Operations Squadron. Inactivated, 13 Jun 2017 Activated, 19 Jun 2020 Changed status from a unit of United States Air Force to a unit of United States Space Force 21 Oct 2020.

## **STATIONS**

Maxwell Field, AL, 10 Jun 1941 MacDill Field, FL, 22 Dec 1941 Smoky Hill AAFId, KS, 16 Apr-3 Aug 1944 Saipan, 18 Sep 1944 Guam, 11 Jan 1945-15 Mar 1947 Falcon (later, Schriever) AFB, CO, 2 Feb 1990-13 Jun 2017 Shriever AFB (later SFB), CO, 19 Jun 2020

#### ASSIGNMENTS

Photographic (later, 1 Mapping; 1 Photographic Charting) Group, 10 Jun 1941
 Photographic Group, 1 Dec 1943
 Photographic (later, 311 Reconnaissance) Wing, 5 Mar 1944
 Twentieth Air Force, 3 Feb-15 Mar 1947
 Space Wing, 2 Feb 1990
 Operations Group, 30 Jan 1992-13 Jun 2017
 Operations Group (later, Space Delta 9), 19 Jun 2020

## ATTACHMENTS

Twentieth Air Force, 1 Nov-13 Dec 1944 XXI Bomber Command, 14 Dec 1944-15 Jul 1945 Twentieth Air Force, 16 Jul 1945-2 Feb 1947

#### WEAPON SYSTEMS

F-2, 1942 F-2B B-25/F-10, 1942-1944 B-24, 1943-1945 B-17/F-9B, 1944, 1946-1947 B-29/F-13A, 1944-1947 Satellites, 1990

#### COMMANDERS

Capt H. C. Houston, 10 Jun 1941 1<sup>st</sup> Lt R. H. Payne, 16 Apr 1942 Maj Carl C. Hughes, 7 May 1942 Capt Robert S. Dodson, 10 Aug 1942 Lt Col Patrick B. McCarthy, 23 Jul 1943 Maj Robert C. Hutton, Jun 1945-unkn Lt Col Victor P. Budura Jr., 2 Feb 1990 Lt Col Bruce M. Roang, 21 Aug 1990 Lt Col Stephen R. Gast, 27 Jul 1992 Lt Col Mark H. Owen, 17 Feb 1995 Lt Col Susan P. Asher, 24 Jun 1996 Lt Col Thomas W. Billick, 29 Sep 1998 Lt Col Michael R. Dickey, 10 Jul 2000 Lt Col David M. Tobin, 2 Jul 2002 Lt Col Anthony K. Hinson, 2 Jul 2003 Lt Col William Bishop Jr., 20 Jun 2005 Lt Col P. Brent McArthur, 28 Jun 2007 Lt Col Jean Eisenhut, 23 Jun 2009 Lt Col Kevin Mortensen, 3 Aug 2011 Lt Col Chadwick Igl, Mar 2012 Lt Col Michael Todd, 24 Jun 2014 Lt Col Joshua Brooks, 20 Jun 2016 – 13 June 2017 Lt Col Bryony L. Slaughter, 19 Jun 2020 Lt Col Joshua M. Faustman, 14 Jun 2022

### HONORS

Service Streamers World War II

American Theater

## **Campaign Streamers**

World War II Western Pacific Air Offensive, Japan

#### **Armed Forces Expeditionary Streamers**

### Decorations

Air Force Outstanding Unit Award 1 Sep 1990-31 Aug 1991 1 Oct 2000-1 Oct 2001 1 Oct 2001-1 Oct 2002 2 Oct 2002-2 Oct 2003 1 Oct 2007-30 Sep 2009 1 Jan 2015-31 Dec 2016

EMBLEM



3 Photo Mapping Squadron emblem: Over and through a light turquoise blue disc, border light blue-violet, piped white, a caricatured figure attired in brown flight suit, tan helmet and parachute pack, kneeling on a yellow magic carpet in flight, trimmed orange, fringed yellow-orange, peering over the edge, sighting black triple mapping cameras, and pressing release button with right forefinger, camera at front piercing magic carpet, all in front of a white cloud formation, and emitting white speed lines toward rear; in sinister chief a small black bird. (Approved, 24 Jul 1943)



3 Photographic Mapping Squadron



3 Space Operations Squadron emblem: On a disc Sable, between two polestars, one in dexter chief and one in sinister base Argent, a delta point to chief Or, charged with a globe Celeste, gridlined Azure, and two lightning bolts, one in dexter and one in sinister, of the first, environed by an orbital surmounted by three polestars, one in chief, one in dexter and one in sinister of the third, highlighted Silver Gray, all within a narrow border Blue. Attached below the disc, a Brittany Blue scroll edged with a narrow Yellow border and inscribed "3D SPACE OPERATIONS SQ" in Yellow letters. **SIGNIFICANCE:** Ultramarine blue and Air Force yellow are the Air Force colors. Blue alludes to the sky, the primary theater of Air Force operations. Yellow refers to the sun and the excellence required of Air Force personnel. The globe represents the unit's functions in global satellite operations. The three four-pointed stars in a concentric orbit around the globe reflect the Clarke principle of worldwide satellite coverage. The star in chief represents the sun, the center of the solar system and the source of power for the satellites. The star in base denotes the moon used by satellite operators as a point of reference for altitude control. The lightning bolts signify communications between the Squadron and satellite payloads. (Approved, 5 May 1992)

Space Force emblem approved, 2 Mar 2022.

## ΜΟΤΤΟ

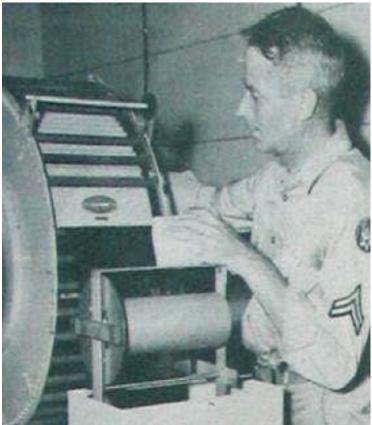
FIRST IN SPACE COMMUNICATIONS

# **OPERATIONS**

The squadron was first activated on June 10, 1941, as the 3 Photographic Squadron. The squadron started with charting the Western Hemisphere from the air. The squadron's laboratories are housed in five large buildings. The squadron was capable of turning out more than 25,000 finished prints a day. Since activation the squadron was able to expose film to turning out the finished product. One of the largest contributing factors in the success of the work being done by the squadron, is the fact that every man and women in the laboratory is a highly skilled technician specializing in one phase of photography. Film development and processing, aerial photography, printing, finishing, plotting, charting and map interpretation are but a few of the jobs being done by the technicians of this remarkable squadron. A big addition

was made to the laboratory when a full company of WAACs the 653 WAAC Laboratory Company, Aerial arrived at MacDill. Their mission was to be fully training laboratory technicians.

During the first half of World War II, the squadron conducted airborne mapping operations of the United States, the West Indies, South America, Canada, and the China-Burma-India theater. On May 19, 1944, the unit was redesignated the 3 Photographic Reconnaissance Squadron (PRS) and began training for aerial reconnaissance operations using highly modified B-29.



After photographs are taken, skilled technicians develop and dry the long rolls of exposed aerial film.



Printing and developing is the second step in the process. Due to shortage of fatigue clothes, these WAACs are wearing make shift work uniforms.



After printing, the pictures are thoroughly washed and dried. Finally, inspectors check and pack the finished prints. All this work from beginning to end is carried in a production line manner.



Frequently, mosaic maps and charts are condensed by means of the copy camera.



The camera repair section is charged with maintaining hundreds of aerial cameras with which the third Mapping is equipped.

On Oct. 31, 1944, a 3 PRS F-13 became the first American aircraft over Tokyo since the Doolittle

Raid in 1942.

In 1945, the 3 PRS also operated a limited number of B-24J and F-7 Liberators, serving as radar reconnaissance, planes to map the location of Japanese radar equipment.

By the end of the war, the 3 PRS had flown 460 combat missions mainly over Japan.

In 1985, the initial cadre of Air Force NATO III and DSCS II satellite operators received training at Sunnyvale Air Force Station (AFS), Calif. These personnel relocated to Falcon AFB in 1987 and became Operating Location-AB, Consolidated Space Test Center. On Aug. 2, 1988, OL-AB began 24-hour operations at Falcon AFS. By May 1989, OL-AB was conducting station-keeping maneuvers on NATO III and DSCS II satellites. On Feb. 2, 1990, OL-AB was deactivated with the personnel and mission transferring to the newly activated 3 Satellite Control Squadron.

In November 1990, the 3 SCS was directed to relocate a DSCS II from over the Pacific to a position over the Indian Ocean in support of Operation Desert Shield. The series of relocation maneuvers were completed in December 1990 and the satellite was then configured for operational use. Crews saved a failing FLTSATCOM spacecraft just as Operation Desert Storm commenced, ensuring the U.S. Navy's two carrier groups had command and control of their aircraft.

On July 11, 1991, in a formal operations turnover ceremony, the squadron accepted complete operational mission transfer of all assigned satellite programs. This transfer officially established operational control of the assigned DoD communications satellites to Air Force Space Command.

On March 25, 1993, the first Ultra High Frequency Follow-On satellite was launched. Unfortunately due to an Atlas II rocket booster malfunction, the satellite was placed in the wrong orbit. Over the next several weeks, 3 personnel planned and executed a series of 25 maneuvers to move the satellite to a super-synchronous orbit.

In June 1996, as part of an Air Force and Navy agreement, operations of the FLTSAT constellation were turned over to the Naval Satellite Operations Center at Pt. Mugu, Calif. In December 1996, 3 SOPS transferred control of the Milstar constellation to 4th SOPS. On Dec. 18, 1996, 3 SOPS gained control of five operating locations located in Nebraska, Virginia, Guam, Italy, and Hawaii. The OLs were responsible for running the Air Force's Satellite Management Centers, which monitored and controlled user access to UHF communications satellites. As part of the same agreement that transferred FLTSAT, the SMC's mission was also transferred to the Navy.

On July 2, 1999, as part of the same agreement that transferred FLTSAT to the Navy, operational control of UHF F/O Flights 2-9 transferred to Naval Satellite Operations Center.

January 1, 2000 Operating Location B (OL-B) of the 3d Space Operations Squadron inactivated at Wahiawa, Hawaii. The squadron turned over the facility, one of five Ultra-High Frequency Follow-On (UFO) satellite communications centers, to the 614th Space Operations Squadron, a Fourteenth Air Force unit based at Vandenberg Air Force Base, California.

February 10, 2000 3d Space Operations Squadron crewmembers performed the last support of an Ultra High Frequency Follow-On satellite, Flight 10. The U.S. Navy assumed satellite control authority for the constellation the next day, ending a two-year transfer of responsibility for the system from the 3d Space Operations Squadron at Schriever to the Naval Satellite Operations Center at Point Mugu, Calif. The inactivation of Operating Location C, 3d Space Operations Squadron on April 1, 2000 marked the end of the wing's involvement with the ultra-high frequency satellite system.

September 3, 2004 1st Lt. Jen Phifer, satellite vehicle operator, and Airman First Class Jose Bernal, satellite system operator, conducted the last support of the NATO IV communications satellite, marking the 3d Space Operations Squadron's end to "hot back-up" support of NATO IV and Skynet systems. "Hawk is out for the final time," commanded Lt. Col. Keith Hinson, 3d Space Operations Squadron commander.

In 2005, 3 SOPS assumed satellite control authority of one of the DoD's newest and most robust communications satellites, the Wideband Gapfiller System.

April 11, 2008 The 3 Space Operations Squadron accepted operational turnover of the first Wideband Global SATCOM vehicle, WGS-1, from its Boeing contractors. The satellite launched aboard an Atlas V booster on 10 October 2007. Contractors positioned the vehicle in its proper orbit and conducted tests and evaluations prior to handing the vehicle over to 3 SOPS crews.

September 30, 2008 The 3d Space Operations Squadron assumed mission planning and AFSCN scheduling responsibilities for the British SKYNET 4 constellation. SKYNET was the United Kingdom's equivalent of the Defense Satellite Communication System (DSCS), providing the British government with military and diplomatic communications.

2009 Airmen of the 3 Space Operations Squadron were part of a historic transfer made at 10 a.m. Aug. 18 when they took command and control of the second Wideband Global SATCOM satellite system from Air Force Space and Systems Center at Los Angeles AFB, Calif. Lt. Col. Jean Eisenhut, 3 SOPS commander, along with Col. Kenneth Allison, 50th Space Wing vice commander, and Col. Stanford Kekauoha, 50th Operations Group commander, accepted the transfer of responsibility approved by Col. Lee-Volker Cox, 14th Air Force, via a teleconference that also included Brig. Gen. Samuel Greaves, Military Satellite Communications Systems Wing commander. The WGS-2 mission is the second installment of the WGS system. WGS satellites are important elements of a new high-capacity satellite communications system providing enhanced communications capabilities to America's troops around the world for the next decade and beyond. WGS enables more robust and flexible execution of command and control,

communications computers, intelligence, surveillance and reconnaissance as well as battle management and combat support information functions. WGS-2 augments the existing service of the WGS-1 satellite and the Defense Satellite Communications System constellation by providing additional information broadcast capabilities. WGS-2 was successfully launched into orbit April 3, 2009, from Cape Canaveral Air Force Station, Fla. The satellite is positioned to provide support to U.S. Central Command in Afghanistan, Iraq and others parts of Southwest Asia. Throughout the next few years, the number of WGS satellites will increase to six, with the Air Force looking at putting a total of 11 in orbit in the future.

DEPARTMENT OF THE AIR FORCE UNIT HISTORIES Created: 30 Oct 2011 Updated: 24 Nov 2023

Sources Air Force Historical Research Agency. U.S. Air Force. Maxwell AFB, AL. The Institute of Heraldry. U.S. Army. Fort Belvoir, VA.