69 CYBERSPACE SQUADRON

MISION

LINEAGE
50 Communications Squadron constituted, 15 Nov 1952
Activated, 1 Jan 1953
Discontinued and inactivated, 1 Jul 1962
Activated, 1 Mar 1991
Inactivated, 30 Sep 1991
Redesignated 50 Satellite Communications Squadron, 1 Jan 1992
Activated, 30 Jan 1992
Redesignated 50 Space Communications Squadron, 1 Jul 1992
Redesignated 50 Communications Squadron, 1 Dec 1997
Redesignated 50 Space Communications Squadron, 1 Oct 2002
Redesignated 50 Communications Squadron, 24 Jul 2020
Changed status from a unit of United States Air Force to a unit of United States Space Force, 15 Jul 2021
Redesignated 69 Cyberspace Squadron, 15 Oct 2022

STATIONS
Clovis AFB, NM, 1 Jan–23 Jul 1953
Hahn AB, Germany, 10 Aug 1953
Toul-Rosieres AB, France, 10 Jul 1956
Hahn AB, Germany, 1 Sep 1959–1 Jul 1962
Hahn AB, Germany, 1 May–30 Sep 1991
Falcon AFB (later, Schriever AFB, SFB), CO, 30 Jan 1992

ASSIGNMENTS
50 Air Base (later 50 Combat Support) Group, 1 Jan 1953–1 Jul 1962
50 Tactical Fighter Wing, 1 May–30 Sep 1991
50 Operations Group, 30 Jan 1992
50 Communications Group, 1 Dec 1997
50 Maintenance Group, 1 Oct 2002
50 Communications Group, 1 Jun 2003-9 Mar 2004
50 Network Operations Group, 10 Mar 2004
50 Communications (later, Network Operations) Group, 1 Jun 2003;
50 Mission Support Group, 24 Jul 2020
Space Delta 1, 23 May 2022
Space Delta 6, 15 Oct 2022

COMMANDERS
Lt Col Jody D. Acres, 30 Jan 1992
Maj Robert M. Flowers, 13 Jul 1994
Lt Col Charles H. Ayala, 5 Aug 1996
Lt Col Michael J. Kelley, 23 Jul 1998
Lt Col Thomas T. Shields, 23 Mar 2000
Lt Col Mark L. Hinchman, 3 Nov 2000
Lt Col Mona Lisa D. Tucker, 18 Dec 2000
Lt Col Michael J. Clark, 26 Jun 2002
Lt Col Mark G. Langenderfer, 7 Jul 2004
Lt Col Donovan L. Routsis, 10 Jul 2006
Lt Col Donald Fielden, 19 Aug 2008
Lt Col Fred H. Taylor, 4 Feb 2010
Lt Col Lynn Plunkett, 7 Aug 2012
Lt Col David A. Case, 9 Jul 2014
Lt Col Mark G. Langenderfer
Lt Col Donovan L. Routsis, 10 Jul 2006
Lt Col Donald J. Fielden, 19 Aug 2008

HONORS
Service Streamers
Global War on Terrorism – Service (GWOT-S)

Campaign Streamers

Armed Forces Expeditionary Streamers

Decorations
Air Force Outstanding Unit Award
1 Jul 1990-5 Aug 1991
1 Oct 1998-30 Sep 2000

1 Oct 2000-1 Oct 2001
1 Oct 2001-1 Oct 2002
1 Oct 2002-1 Oct 2003
1 Oct 2007-30 Sep 2009
1 Jan 2015-31 Dec 2016

EMBLEM

50th Space Communications Squadron emblem: Azure gridlined as a globe Argent, a gauntlet issuant from sinister base bendwise Silver Gray issuing a lightning flash between two arcing lightning flashes bendwise Or, all within a diminished border Sable. Attached above the disc, a Silver Gray scroll edged with a narrow Black border and inscribed "INFORMATION FOR THE WARFIGHTER" in Black letters. Attached below the disc, a Silver Gray scroll edged with a narrow Black border and inscribed "50TH SPACE COMMUINCATIONS SQ" in Black 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 earth. The gauntlet denotes power and the flexibility of space communications. The lightning bolts symbolize communications through teamwork and unity which result in swift and accurate striking power. (Approved on 3 Jan 1996; latest rendering 30 Jan 2013)

MOTTO

OPERATIONS

The squadron's mission is to provide, operate and maintain Schriever Air Force Base communications in support of the Air Force Satellite Communications Network for 50th Space Wing units located worldwide; to configure eleven weapons systems for real-time, global communications between the 50th Space Wing on-orbit assets and the space operators. The 50th Space Communications Squadron operates and maintains two Defense Satellite Communications System earth terminals and one Milstar earth terminal which provides

Integrated Tactical Warning/Attack Assessment data to NORAD and United States Space Command.

The unit provides diverse base telecommunications services to include administrative telephones, local area and wide area computer networks, small computers and secure voice and data systems for 50th Space Wing units on Schriever Air Force Base. This includes a "one stop" customer service center that supports the telecommunications and small computer needs of 50th Space Wing and Schriever AFB customers.

The squadron operates and maintains base communications systems including inside and outside cable plant, base telephone switches and systems, Defense Red Switch Network switch, Defense Information Systems Agency multifunction switch, security control systems, video teleconferencing systems, NIPRNet (Non-secure Internet Protocol Router Network), SIPRNet (Secure Internet Protocol Router Network) and land mobile radios delivering command, control, computers, communications and information services to more than 8,000 base personnel. It also provides logistics sustainment support to 13 geographically separated units at nine sites around the world.

The unit also maintains the Security Control System that provides access, control and intrusion detection and annunciation for Schriever Air Force Base. The 50th Space Communications Squadron plays a critical role in maintaining cryptographic equipment, wideband multiplexers and modems, weather support equipment and base cabling for all units on Schriever Air Force Base.

Finally, 50th SCS provides Schriever AFB and the 50th SW information assurance, knowledge operations, postal services, records management, freedom of information act oversight, spectrum management, configuration management, and multimedia services.

4/11/2012 - SCHRIEVER AIR FORCE BASE, Colo. -- Its three-letter acronym sounds like it might represent a television network, or perhaps a mispronunciation of GPS, the Global Positioning System well known around the world. Lt. Col. Fred Taylor, 50th Space Communications Squadron commander, contends that even though the Global Broadcast Service may be less renowned, it provides a vital service to joint warfighters downrange who depend on its information to make decisions of utmost importance. "GBS is another mission system at Schriever with 'global' impacts," Taylor said. "It provides tremendous bang for the buck in terms of bandwidth and capability." The 50 SCS has been operating and maintaining GBS since February 2009 and plays multiple roles in its everyday activity, which will increase dramatically during the next few years as the service transitions to a completely new system architecture located here. So what is GBS? "It's a communication broadcast service deployed to meet the ever-growing warfighter demand for large-volume data throughput capabilities for deployed users," said Maj. Alycia Vrosh, 50 SCS individual mobilization augmentee. "GBS disseminates large data and video products as well as source-encrypted video streams." For example, remote piloted aircraft typically fly around pivotal areas taking photos and video. Those RPAs send video data to GBS satellite broadcast managers who then disseminate it to warfighters on the ground or to nearby ships so they can see what the RPA sees, thereby improving their situational awareness.

"Our joint warfighters love the capability," Taylor said. "Full motion video feeds provide intelligence, surveillance and reconnaissance for tactical operations." As effective and vital as it

has proven to be during the past decade, GBS is an aging system, so much so that the U.S. Joint Chiefs of Staff have mandated that the Air Force upgrade GBS to a more modern architecture. "The hardware is getting old," said Wardell Adams, 50 SCS plans and resources flight chief. "We're talking end-of-life and sustainability aspects of the system." During the next few years, 50 SCS will transition GBS from the legacy architecture now in use to an architecture known as the Defense Enterprise Computing Center. During this process the squadron will also stand up a GBS operations center here as a means of centralizing and streamlining operations, which are currently spread out among SBMs in Hawaii, Virginia and Italy. Of course, the squadron must also integrate the legacy system into the new DECC architecture. "The integration will be tough," Vrosh said. "No doubt about it, a disruption in service can't happen. We'll need to integrate everything seamlessly. But, once the GBSOC stands up we'll be able to perform operations and management tasks with the same or better quality of service than is currently provided by the satellite broadcast managers."

Following the cutover to DECC, the GBS system architecture will no longer require the existing SBMs to coordinate data. Vrosh explained that sources will directly interface with the DECC for broadcast processing. Though specific dates and times for the GBSOC stand up have yet to be determined, 50 SCS has already started planning the system integration and transition. Much still needs to happen before the GBSOC can stand up, including developmental testing, which should begin this August, operational testing by the 17th and 46th Test Squadrons and operational acceptance before 50 SCS can assume the GBSOC reins. "When the GBS transitions from the legacy architecture to the enterprise architecture with daily operations consolidated at Schriever in the GBSOC, it will culminate nearly five years of planning to include site bed downs, service level agreements, contractural negotiations, developmental and operations testing, life cycle-sustainment planning, communications re-engineering, security accreditations, software development and training for users," Taylor said. "Part of the 50 SCS's charter is normalizing GBS operations the way we would any other major weapon system." The GBSOC was originally planned to stand up at Schriever during 2010, but was pushed back to 2013 and could occur at an even later date. Timing for the standup depends on funding and remains fluid. Until then, the 50 SCS will continue to manage the service in its current form while it works toward the new DECC architecture.

5/15/2012 - SCHRIEVER AIR FORCE BASE, Colo. -- Consider the enormous job of tracking down information of all equipment, weapon systems, cargo, Airmen's deployment readiness and more. A general from the olden days may have used the archaic system of quill and paper, but present-day commanders have a system that gives them full situational awareness and a big-picture idea of what's happening. Global Command and Control System is a computerized system of record for strategic command and control functions. It has the capability to display and track data, intelligence data, maps, imagery, overlays, sites, air tasking orders, chemical, biological and radiological data, weather and much more.

Ensuring Air Force Space Command GCCS hardware and software remain viable and are constantly kept current and up to standard falls to the 50th Space Communications Squadron GCCS office. "We provide hardware maintenance, level one and level two technical, software and help desk support, build systems and support training for Air Force Space Command GCCS users," said Rebecca Goldsmith, 50 SCS GCCS project lead. Within the space command, the

GCCS constellation consists of 13 sites of which five are server sites. Though it's a command function, the office, which consists of contractors and a civilian, manages the whole AFSPC system. "If a requirement comes in where we have a new user who needs access to the system, we provide them the equipment," said Susan Browning, 50 SCS AFSPC program manager. "Whenever a new software and hardware upgrades come out for the clients and the servers, the support team travels to the sites and performs the upgrade and required training." Providing system administrator training is also one of the team's missions. Though they don't perform any type of operations with the software, the unit maintains the information gathered in the system and forwards it to U.S. Strategic Command.

Recently, the office upgraded 75 percent of the clients to new software. "The machines are no longer supportable," Browning said. "The warranties ran out on them so we provided the new hardware to keep them running as well as the upgrades." The technology refresh also provided the system beefier processing units, Goldsmith said. The clients get the better technology and those units run well. In the future, the unit will help facilitate the transformation of the AFSPC's GCCS to a common access card-enabled system, as well as managing the upgrade to standard desktop configuration. GCCS, as a whole, is important to provide situational awareness and visibility to commanders of an area of responsibility, Goldsmith said. "We are the sole provider of [AFSPC] data into the mission system," she said. "Without our feed, data would not be available to the forward deployed units that require access to that information." The system includes Deliberate and Crisis Action Planning and Execution Segment, Status of Resources and Training System and Common Operational Picture. The command and control system tracks the AFSPC's readiness, force projection and situational awareness.

As a deployment processing tool, DCAPES is used to track logistics, Airmen's deployment time, location and equipment. Meanwhile, SORTS looks at a unit's status, training and tasks. It shows how many people are in a unit, as well as each individual's Air Force Specialty Code, deployment readiness and more. The COP is designed to give commanders and staffs a graphical picture of their battle space, which includes friendly, enemy and neutral assets. The integration of all this data into one area enables improved sound mission planning, battle damage assessment and visual display of an air, space, maritime and ground picture. Browning said teamwork is a huge factor in assuring the continued performance of the many elements and components at multiple geographic locations within the AFSPC GCCS enterprise network. "Their diligence and close working relationships with the support personnel at the sites are key in keeping AFSPC GCCS resources available," she said. "Without that teamwork effort, it would be hard pressed to manage the program."

6/6/2012 - SCHRIEVER AIR FORCE BASE, Colo. (AFNS) -- Ballistic missile warning sensors at sites around the world provide information vital to U.S. national security. When the link connecting those sensors to decision makers at the North American Aerospace Defense Command was in jeopardy of failing, the Air Force called on the 50th Space Communications Squadron to help remedy the situation. Six years and $6 million later, contractor crews working for the 50th SCS stand ready to flip the switch on a final upgrade that should safeguard the vital link for years to come, officials said. The Air Force Space Command Digital Integrated Network, known as SDIN, has been around for decades. That means the actual communication equipment used to create

the network has also been around for decades. When the manufacturer of the 1980s-era equipment stopped building new machines, Air Force leaders knew they needed to create a plan for maintaining the legacy hardware, while at the same time developing, testing and implementing modern replacements. "All of the legacy equipment, known as Timeplex, was growing beyond its end of life, so we've been under pressure to complete the upgrades," said Mike Hamilton, the SDIN program manager. "Since the Timeplex manufacturer couldn't support the aging equipment, we had to stockpile spare parts." Essentially, crews were in a race to replace the legacy equipment with upgraded machines before the 50th SCS ran out of spares, all of which was much easier said than done, officials said. The modern equipment, referred to as Juniper, needed to be installed, painstakingly tested and then approved before it could replace the older communication equipment at sensor sites around the world. All the work was performed onsite at each SDIN sensor site, some of which exist in remote locations. Adding to the complexity of the project was the fact that the upgrade needed to occur without a disruption in service. Since more than seven worldwide entities -- including Russia, China, North Korea and Iran -- possess the capability to launch a ballistic missile, according to the National Intelligence Council, the system's importance is immeasurable. "The SDIN network's primary function is 100 percent reliability," Hamilton said. "It has a lot of redundancy in both equipment and routing built into the network as well as alternative routing in case of failure. It's an extremely robust network because it has to be." Hamilton indicated that missile warning or integrated tactical warning and attack assessment isn't the only mission SDIN supports. It also provides a data link for missions such as Milstar, controlled by the 4th Space Operations Squadron here, and the space-based infrared system. Timeplex served its nation and military well and was an extremely reliable system, but the Juniper equipment is truly an upgrade, Hamilton said. Juniper supports all of the legacy protocols as well as newer bandwidths and newer protocols. Plus, it is still in production so the manufacturer can support and warrant all of the products involved. The 50th SCS will wrap up the project soon. Squadron leaders said they expect the final SDIN equipment upgrade to tentatively occur at a sensor site somewhere around the world this September. "The SDIN network is a unique and key enabler of the AFSPC, integrated tactical warning and attack assessment, and space command and control missions," said Ward Adams, the 50th SCS Plans and Resources Flight chief. "SDIN allows decision makers to get the right information on time." 2012

DEPARTMENT OF THE AIR FORCE ORGANIZATIONAL HISTORIES
Created: 19 Feb 2025
Updated:

Sources
Air Force Historical Research Agency, U.S. Air Force, Maxwell AFB, Alabama.
The Institute of Heraldry. U.S. Army. Fort Belvoir, Virginia.
Air Force News. Air Force Public Affairs Agency.