

Global High Frequency Network

Proficiency Code: A

The *Global High Frequency Network* is commonly referred to as High Frequency-Global Communications System (HF-GCS). The system is an Air Force program supporting Global, Defense Communication System (DCS) HF Entry, Mystic Star, and System of Inter-American Telecommunications for the Air Forces (SITFAA) missions. The HF-GCS system is broken down into three areas: Americas, European, and Pacific with stations located at Andrews, Offutt, McClellan, South Atlantic, Salinas, Keflavik, Croughton, Lajes, Ascension, Sigonella, Yokota, Guam, Elmendorf, Hawaii, and Diego Garcia.

The HF-GCS mission is to provide reliable, rapid, two-way communications between air-, land-, and sea-based users. The system supports DOD authorized users on a message priority basis. The system also supports United States federal and allied military users, through written agreements, on a noninterference basis. System management is located at Headquarters Air Force Communications Agency, located at Scott AFB, Illinois. Let us look at how HF-GCS supports the Global HF system, Mystic Star, SITFAA, and DCS missions.

The Global HF system provides rapid, reliable, non-dedicated communications support between the National Command Authority (NCA), DOD, aircraft, and ships of the United States government during peacetime, contingency situations, and war. It provides for command and control of strategic reconnaissance and special mission platforms to include flight following, advisory support, and recall/diversion alerts. Additionally, the HF-GCS provides support to tactical units and non-United States aircraft in accordance with international agreements. The HF-GCS mission supports a wide range of customers by providing air-ground-air, ship-to-shore, broadcasts, and automatic link establishment (ALE) capability to various DOD customers. The HF-GCS has 15 stations strategically located around the world; however, the South Atlantic station is not remotely controlled from the Centralized Network Control Station (CNCS). The South Atlantic station only provides dedicated ALE support for AMC aircraft.

The Mystic Star mission provides high-quality voice/data high frequency (HF) and UHF SATCOM to the president, vice president, cabinet members, and other senior government and military officials while aboard special airlift mission (SAM) aircraft. The Mystic Star net control station (NCS), located at Andrews AFB, Maryland, is responsible for establishing and monitoring these communications by accessing and remotely controlling HF assets at 14 locations and remotely controlling UHF assets at three locations (Brandywine, Maryland; Aviano, Italy; and Wahiawa, Hawaii) over dedicated circuits around the world.

System of Inter-American Telecommunications for the Air Forces

The SITFAA system is an Inter-American organization, voluntary in character, which serves to strengthen the bonds of friendship and attain mutual support among 18 different Air Forces in North, Central, and South America. The SITFAA is a high frequency-single side band (HF-SSB) voice radio network. SITFAA's mission is to coordinate cooperation efforts among the Air Forces of the Americas through Telecommunications and Information Systems for hemispheric

defense and integration. SITFAA's objective is to achieve greater solidarity and increase their communications capabilities. SITFAA provides continuous and reliable two-way communications to all Air Force Chiefs of Staff, liaison officers, and aircraft of member Air Forces.

The primary language spoken in the system is Spanish; English is secondary, with Portuguese tertiary. Radio operators who work this system must be bilingual. The only CONUS based SITFAA station is located at Andrews AFB, Maryland. They have access to and control of HF assets at the Andrews AFB and Puerto Rico stations. Andrews SITFAA is the NCS of the system. The NCS is responsible for:

- Directing and monitoring net traffic flow.
- Managing frequency use.
- Providing operational guidance.
- Scheduling and conducting contingency exercises.
- Supporting Latin American air attachés and embassies in the Washington D.C. area.

Andrews is also the focal point of communications for all Latin American Air Forces and their aircraft while transiting the CONUS.

Defense Communication System high frequency (DCS HF) entry provides non-secure voice and secure/non-secure data connectivity to commanders and tactical units operating in areas of the world where DCS connectivity is unavailable or insufficient. Each link can provide direct access to AUTODIN MODE 1, operator-assisted access to DSN, or voice frequency carrier telegraph (VFCT) support for multiple teletype refile circuits to the base communications center. This mission activates as required for contingency, wartime, exercise, or training use.