TACTICAL SYSTEMS

The Joint Interoperability Test Command (JITC) has two tactical HF communications systems, the AN/TSC-122 and the AN/TSC-60(V)7. These systems are used in conjunction with fixed assets to provide the facility with a number of strategic and tactical interface options. Both systems can be remotely controlled from the control site or deployed to remote locations for testing under operational conditions.

ADDITIONAL INFORMATION

To obtain more information about the JITC High Frequency Test Facility, its capabilities and functions, please contact the following JITC representative:

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Increasing Combat Effectiveness
Through Interoperability

HIGH FREQUENCY (HF) TEST FACILITY

Joint Interoperability Test Command

GENERAL INFORMATION

The High Frequency Test Facility (HFTF) functions as both a testing laboratory and a classic HF radio facility. The laboratory and test areas are located within the Joint Test Facility (JTF). In addition, two sites external to the JTF provide space for the Receiver Site and Transmitter Site facilities.

The JITC is responsible for certifying all Command, Control, Communications, Computer, and Intelligence (C^4I) systems as interoperable for joint use. To meet these requirements, the HFTF provides interoperability and Military Standard (MIL-STD) compliance testing and certification for Services, Agencies, and industry customers.

TEST CAPABILITIES

The HFTF provides a broad range of test capabilities, to include bench-top standards conformance and performance testing, laboratory testing under simulated channnel conditions, and over-the-air testing utilizing actual ionospheric propagation conditions.

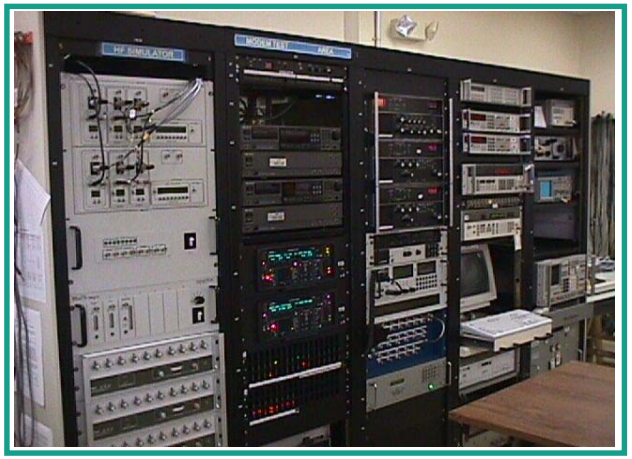
Government and industry-coordinated Test Manuals are used to determine conformance to the following Military Standards:

- MIL-STD-188-141B, Interoperability and Performance Standards for Medium and High Frequency Radio Systems
- MIL-STD-188-110B, Interoperability and Performance Standards for Data Modems
- (S) MIL-STD-188-148A, Interoperability Standard for Anti-Jam Communication, High Frequency Band (2-30 MHz) (U)

Test procedures are also available to address the performance and conformance requirements found in various other HF, Very High Frequency (VHF) and Ultrahigh Frequency (UHF) Military Standards and NATO Standardization Agreements (STANAGs).

Simulated HF channel conditions are provided by a Signatron S-250B Channel Simulator (both at radio frequency and baseband) and a personal computer based digital signal processing (DSP) card baseband-only simulator implementation.

A variety of Rockwell Collins, Harris RF Communications, and ITT Mackay legacy fixed station HF assets are available for the performance of interoperability testing. These fixed assets are augmented by AN/TSC-122 and AN/TSC-60 transportable HF systems.



THE TEST LAB

The test lab provides space for four independent test activities. The test lab and much of the integral test equipment is computer-controlled and interconnected by means of the lab's test automation network, known as the "Legends" network.

This network provides the tester with test management, data acquisition, and data analysis

UPGRADE 2000

The HFTF has been upgraded to increase its test capabilities. The addition of System Capable of Planned Expansion (SCOPE) Command station equipment will provide complete computer control of the radio and modem assets.

THE RADIO FACILITY

The HFTF radio facility is configured as a classic HF radio facility with transmitter and receiver sites that are separated spatially. Linked by fiber optic cable and microwave radio systems, these two remote sites house the facility's nine receive and four transmit antennas and support componenets. The addition of the SCOPE Command equipment will provide an enhanced test capability for emerging technologies and standards, by utilizing state-of-the-art HF equipment mandated by ADS/C3I as the future Joint high power, fixed station HF system.