



Defense Information Systems Agency

Department of Defense

High Frequency Test Facility (October 2005 to June 2006)

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HF Government POC
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Statement

The information provided in this briefing is for general information purposes only. It does not constitute a commitment on behalf of the United States Government to provide any of the capabilities, systems or equipment presented and in no way obligates the United States Government to enter into any future agreements with regard to the same. The information presented is for the purposes of briefing the High Frequency Industry Association participants.



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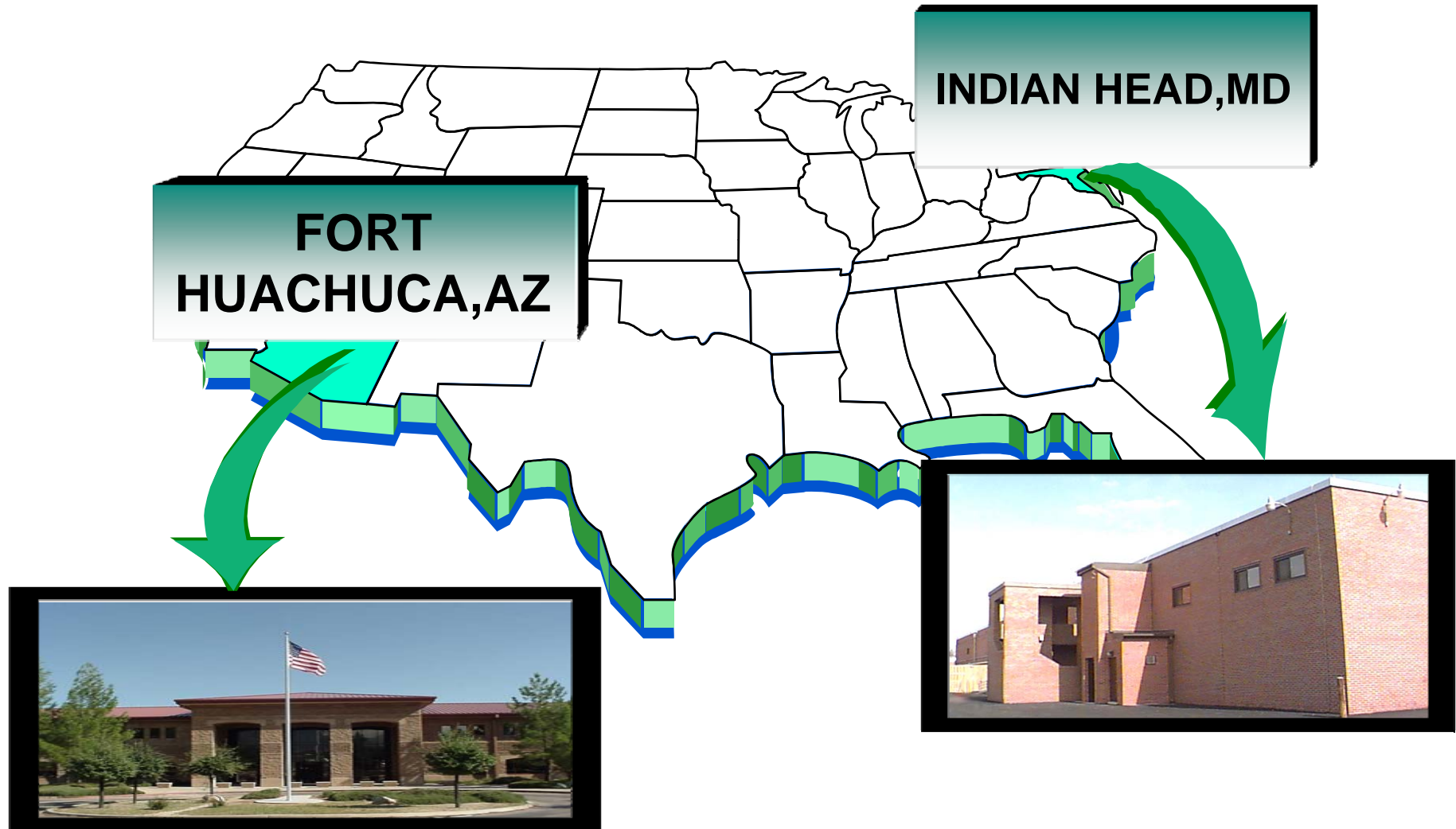


JITC Vision

JITC will be the preeminent information systems evaluator, reducing risk to the warfighter by providing value-added process and product evaluations, operational assessments, and technical assistance throughout the life cycle of DOD Systems.



JITC Facility Locations





High Frequency Test Facility (HFTF) Background

- The High Frequency Test Facility was established in 1989
- The HFTF provides both a testing laboratory and an operational facility, supporting Conformance and Interoperability Testing



Lab Operations - Information

- **Typical Lab Duty Cycle**
 - Lab working hours are 0700 to 1600
 - Most of the hours are spent on direct test execution and preparing for test
- **Equipment**
 - 50% equipment used in an emulated operational network environment
 - 50% is set up for conformance testing with very little idle time
 - Maintenance performed similar to operational network
- **Lab is contractor managed by personnel dual-hatted to conduct/oversee testing**



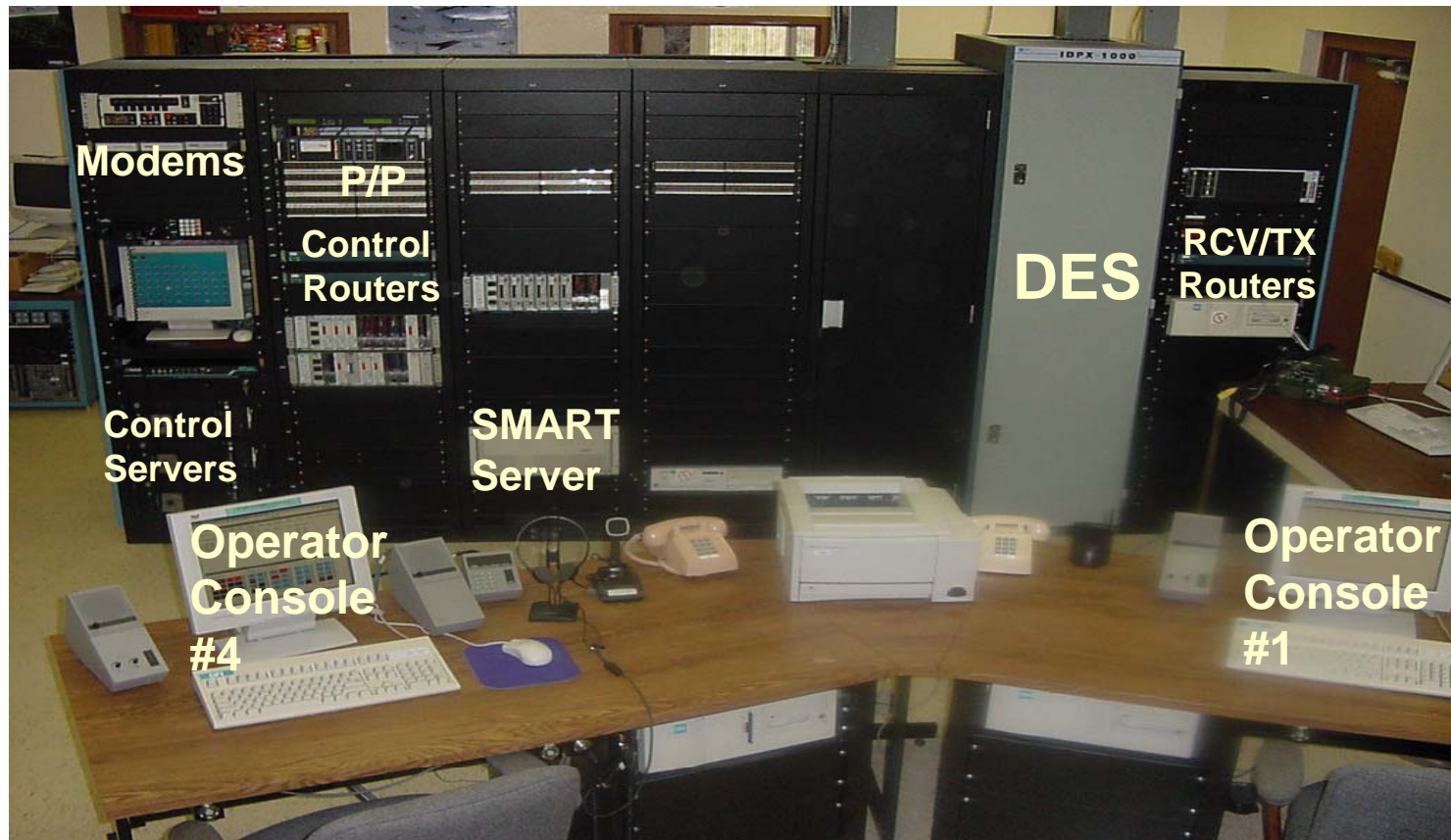
HFTF History

- **HF Test Support Began in 1989**
- **Historical HF Requirements**
 - MIL-STD 188-110A (30 Sep 1991)
 - MIL-STD 188-141A Notice 2 (10 Sep 1993)
- **Present Emphasis on HF Requirements**
 - MIL-STD 188-110B (29 Mar 1999)
 - MIL-STD 188-141B (01 Mar 1999)
 - STANAG 5066 (04 Jul 2000)



HFTF Facilities (continued)

SCOPE Command Control Site in Bldg 57439 (X-Node)





HFTF Facilities (continued)

Hardware Interface to Transmitter/Receiver Sites and HF E-mail Hardware





HFTF Facilities (continued)

- **Legends Test Network**
 - **14 Test Management Systems**
 - **Automated Testing**
 - **Central Data Management**
 - **Channel Simulation (HF and Audio)**
 - **Network Simulation**
 - **INTERNet**
 - **NIPRNet**
 - **SIPRNet**
 - **Computer Modeling and Analysis**
 - **Icepack**

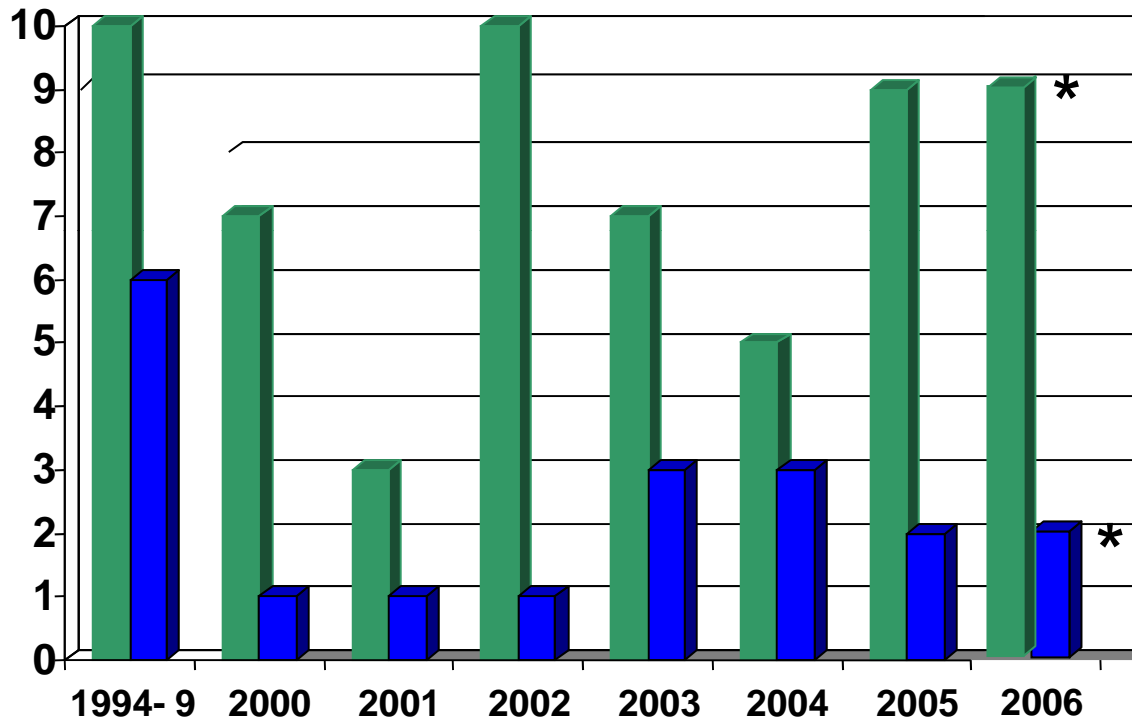


HFTF Standards and Test Capabilities

- **HF Test Plans (Existing or under Development)**
 - **MIL-STD 188-110B (Serial Mode, 39 Tone, and above 2400 bps)**
 - **MIL-STD 188-141B (Basic Radio, ALE, and Link Protection)**
 - **STANAG 4203 (HF Radio Conformance Test)**
 - **STANAG 5511 (HF Radio Conformance Link 11 Requirements)**
 - **STANAG 5066 (Data Protocol for E-mail over HF)**
 - **STANAG 4529 (Narrowband width Serial Mode Waveform)**
 - **STANAG 4285 (Serial Mode Waveform)**
 - **STANAG 4539 (Technical Standards for Non-Hop HF Communication Waves)**
 - **MIL-STD 188-203-1A (Interoperability and Performance Standards for TADIL-A)**



HFTF Certification History



- Standards Conformance (*4 pending remainder of FY06)
- Interoperability (*2 pending remainder of FY06)



HFTF Current Test Support

- **Current Test Support**
 - **SCOPE Command**
 - **Rockwell Collins HF-121C MIL-STD 188-141B Cert Test**



HFTF Planned Test Support

- **Planned FY 06 Test Support**
 - **Rockwell HF121C MIL-STD 188-141B (Appendix A and B) Certification Test**
 - **Rockwell HF121C MIL-STD 188-203-1A (Radio Only) Certification Test**
 - **Rockwell HF121C MIL-STD 188-141B Interoperability Assessment**
 - **Mobat Micom 3T (RM 500 and RM 1200) MIL-STD 188-141B**
- **Responsible Test Organization for SCOPE Command**
 - **Updating NetSim Model for use in Windows Environment**
 - **Test Plan Development**
 - **Acceptance Test Support**



Certifications Issued (Oct 05–June 06)

- **MIL-STD 188-110B**
 - None

- **MIL-STD 188-141B**
 - Rockwell Collins RT-2200-003

- **STANAG 5066**
 - Thales STANAG 5066 ARQ Server w/ HMTP Client
 - Thales STANAG 5066 ARQ Server w/ CFTP Client
 - Harris RF 6760 WMT w/ HMTP Client
 - Harris RF 6760 WMT w/ CFTP Client

DISA Tentative Conformance Tests FY06

- **MIL-STD 188-110B Tests**
 - None

- **MIL-STD 188-141B Tests**
 - Mobat Micom 3T (RM 500) (planned)
 - Mobat Micom 3T (RM 1200) (planned)
 - SPAWAR AN/URC-131 MIL-STD 188-141B Certification Test (planned)
 - Marconi SR-170 MIL-STD 188-141B Certification Test (no recent info)

- **MIL-STD 188-203-1A Tests**
 - Rockwell RT-2200-003 HF Transceiver w/ Amp (planned)
 - General Dynamics DMR Radio w/ Modem (no recent info)
 - Rockwell Collins HF-121C (planned)

DISA Tentative Assessment Tests FY06

- **STANAG 4285**
 - General Dynamics DMR Radio w/ Modem (no recent info)
- **STANAG 4529**
 - General Dynamics DMR Radio w/ Modem (no recent info)
- **STANAG 5066 Tests**
 - Republic of Turkey Ministry of National Defense (no recent info)
- **INTEROPERABILITY**
 - Thales/Mackay 8090 HF Transceiver with other Certified Radios
 - AN/URC-131 HFRG
 - Mobat Micom 3T (RM 500 and RM 1200) MIL-STD 188-141B



JITC

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GLOBAL ALE Network
Callsigns: JTF, JTA, and JTC

JITC's Homepage:
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