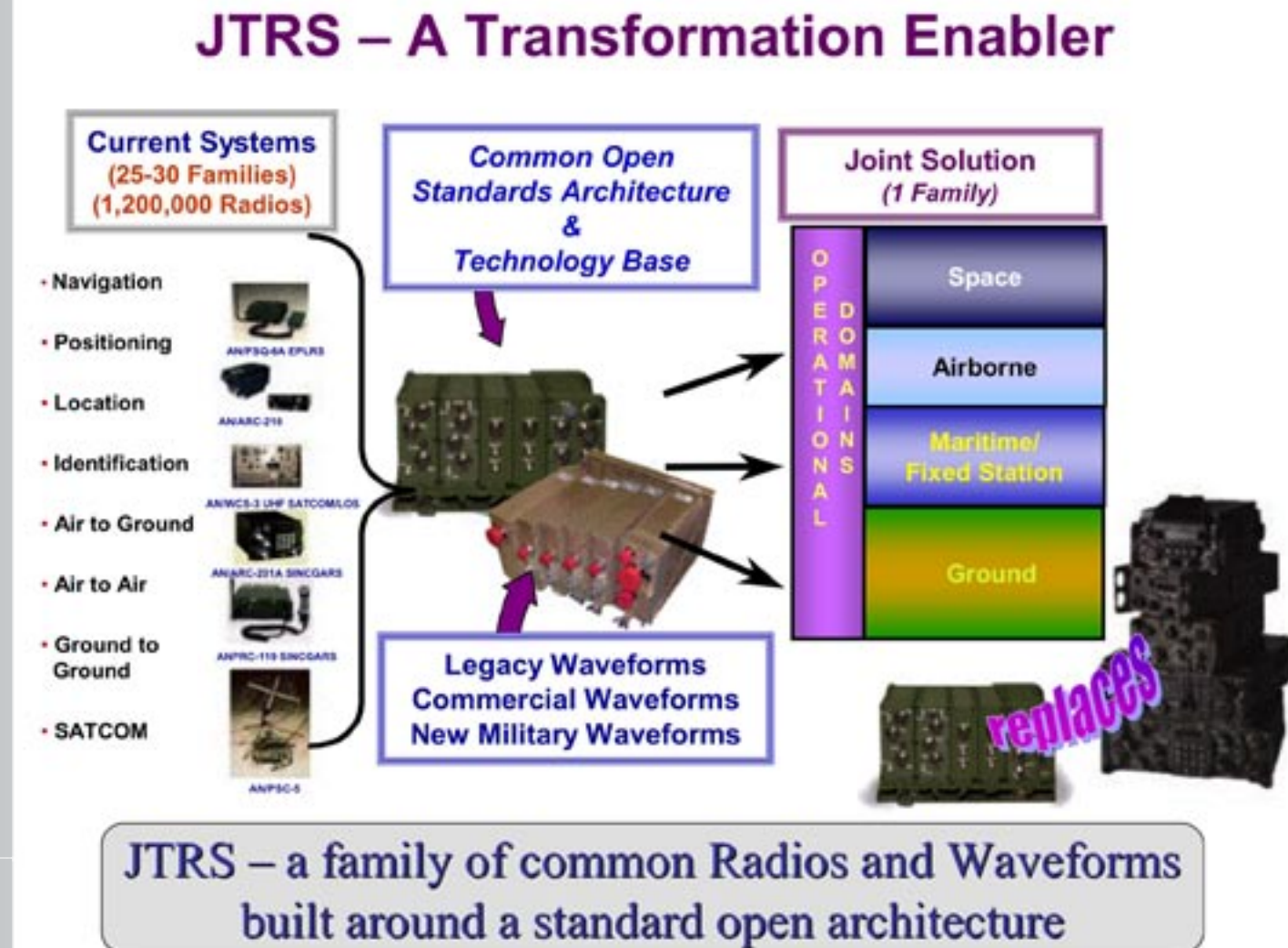


Improves joint warfighter command and control and situational awareness through an enhanced network of interoperable line-of-sight and beyond-line-of-sight secure voice, data, and video communication systems.



DESCRIPTION AND SPECIFICATIONS

The Joint Tactical Radio System (JTRS) Waveform is a software reprogrammable, multi-band/multi-mode and network-capable system that provides JTRS software products developed for use by all services. The system features a number of improved capabilities, including multiple-frequency bands and channels for better communication capability and flexibility; full interoperability with legacy operational requirements document (ORD) waveforms; software upgradability; and embedded/programmable crypto equipment applications (CEA).

The JTRS software radio is based on a common architecture and is to meet the following goals:

- Interoperability with legacy system radios
- Use of commercial technology
- Open system architecture
- High reliability
- Low unit cost
- Competitive acquisition
- Use by all services

Special features include the following:

- Waveforms interoperable between radios
- Use/reuse common software across waveforms
- Scalability in number of channels and across form factors
- Open commercial standard architecture
- Includes all radio systems (2MHz to 2 GHz and above)

The JTRS Waveform Program, managed by the JTRS Joint Program Office (JPO), is responsible for:

- Developing software waveform applications and software representations of associated cryptography
- Evolving the software communications architecture (SCA)

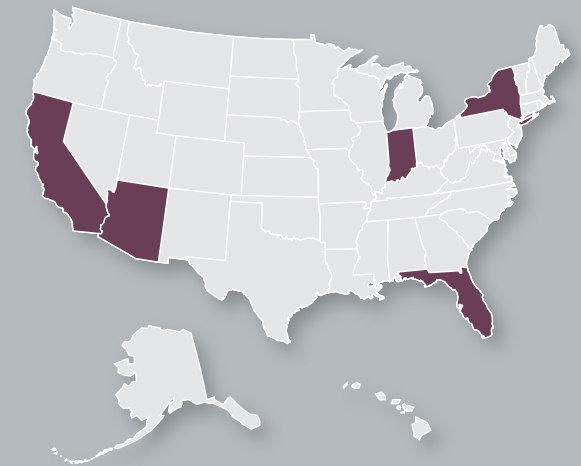
- Certifying compliance of both hardware (with system software) and software waveforms with the SCA
- Ensuring overall joint interoperability and adaptability in support of varied mission taskings

PROGRAM STATUS

- **4QFY04** Waveform deliveries for SINCGARS (ESIP)
- **FY04** Delivered two waveforms, 12 cryptographic equipment algorithms and two cryptographic chips.
- **Current** Critical design reviews for 21 waveforms under initial hardware contract completed; impacts of ASD (NII) mandated Internet protocol version 6 requirement and radio frequency policy are being assessed.

PROJECTED ACTIVITIES

- **FY05** Continue technology advancement to include areas such as multiple independent levels of security (MILS), multiple level security (MLS), and network modeling and security
- **3QFY05** Waveform deliveries for HAVEQUICK II, May 2005
- **FY06** Operate JTRS Technical Laboratory (JTeL) to certify waveforms; establish JTRS post-deployment software support for base waveform software applications; provide JTRS technical policy to hardware managers and services.
- **1QFY07** Milestone C, post-deployment software support scheduled upon delivery of certified wideband networking waveform



CONTRACTORS

Prime/System Integrator/Waveform Developer: Boeing (Anaheim, CA)
CEA Developer: Harris Corporation (Rochester, NY)
Waveform Developer: Raytheon (Fort Wayne, IN)
Waveform Developer: Assurance Technology Corporation (ASC) (Melbourne, FL)
CEA Developer: General Dynamics (Scottsdale, AZ)

INVESTMENT COMPONENT
 Modernization

ACQUISITION PHASE

- System Development and Demonstration