

Multifunctional Information Distribution System (MIDS)– Joint Tactical Radio System (JTRS)

INVESTMENT COMPONENT

Modernization

Recapitalization

Maintenance

MISSION

To provide real-time information and situational awareness to the warfighter in fast mover platforms (e.g., Navy F/A/18) via secure wireless, jam-resistant digital and voice communications.

DESCRIPTION

The Multifunctional Information Distribution System (MIDS) is a wireless, jam-resistant, and secure information system providing TACAN and Link-16 to Air, Land and Sea warfighting platforms. It provides real-time and low-cost information and situational awareness via digital and voice, communications. The MIDS program includes MIDS–Low Volume Terminal (LVT) full rate production and JTRS evolutionary development. MIDS–JTRS is a “form fit function”

replacement for MIDS–LVT and adds three additional channels for JTRS waveforms as requested by platforms.

The MIDS–LVT program is a multinational cooperative development program with joint service participation. DoD established the program to design, develop, and deliver low-volume, lightweight tactical information system terminals for U.S. and allied aircraft, helicopters, ships, and ground sites. MIDS–LVT provides interoperability with NATO users, significantly increasing force effectiveness and minimizing hostile actions and friend-on-friend engagements. Three principal configurations of the terminal are in production and use an open-system, modular architecture. MIDS–LVT(1) includes voice, Tactical Air Navigation (TACAN) and variable-power transmission with maximum power of 200 watts. MIDS–LVT(1) also provides a Link 16 capability to Navy and Air Force platforms, which were previously unable to use Joint Tactical Information Distribution System (JTIDS) due to space and weight limitations. MIDS–LVT(2) is an Army

variant of MIDS that is a functional replacement for the JTIDS Class 2M terminal. MIDS–LVT(3), also referred to as MIDS Fighter Data Link, is a reduced-function terminal for the Air Force (no voice, no TACAN, maximum power of 40 watts).

As the MIDS–LVT migrates to JTRS compliance, the system will maintain its Link 16 and TACAN functionality with Navy and Air Force platforms that use MIDS–LVT but also accommodate future technologies and capabilities. MIDS–JTRS improvements include enhanced Link 16 throughput, Link 16 frequency remapping, and programmable crypto. MIDS–JTRS will provide and additional three 2-megahertz or 2-gigahertz programmable channels to accommodate incremental delivery of the advanced JTRS waveforms through MIDS–JTRS Platform Capability Packages, such as the JAN–TE capability. Total program requirements include terminal development, F/A-18 Level 0 integration, software hosting (Operating Environment/

JTRS Waveforms), implementation of National Security Agency guidelines and production transition.

SYSTEM INTERDEPENDENCIES

Link 16, TACAN, and JAN–TE Waveforms

PROGRAM STATUS

- **3QFY09:** PTT ongoing; Production verification terminals started
- **4QFY09:** Milestone C decision approving entry into production and deployment

PROJECTED ACTIVITIES

- **2QFY10:** Low-rate initial production (LRIP) award
- **2QFY10:** PTT concludes
- **3QFY10:** F/A-18 Initial Operational Capability
- **1QFY11:** LRIP concludes

ACQUISITION PHASE

Technology Development

Engineering & Manufacturing Development

Production & Deployment

Operations & Support

**Multifunctional Information
Distribution System (MIDS)–Joint
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MIDS Low Volume Terminal Variants

**MIDS-LVT (1) Family
(includes LVT (4), (6),
& (7))**



- Open and Modular Design
- 1553/Ethernet/X.25 Interfaces
- Optional J Voice and TACAN
- 200 Watt Transmitter
- Dual Antenna
- Primarily Airborne Applications

MIDS-LVT (2)/(11)



- MIDS-LVT Commonality
- ADDSI X.25, Ethernet Interface
- Optional J Voice
- No TACAN
- 200 Watt Transmitter
- Single Antenna
- Unique Blower and Power Supply
- Primarily Ground Applications

**MIDS-LVT (3)
(Fighter Data Link)**



- MIDS-LVT Commonality
- MIL-STD 1553 Interface
- No Voice or TACAN
- 50 Watt Transmitter

FOREIGN MILITARY SALES

MIDS–LVT:

1,881 terminals (internationally)

JTRS MIDS:

None

CONTRACTORS

ViaSat (Carlsbad, CA)

Data Link Solutions (Cedar Rapids, IA)

