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# MULTIFUNCTIONAL INFORMATION DISTRIBUTION SYSTEM (MIDS)

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## Contents

Program Manager .....	2
Mission and Description .....	3
Executive Summary .....	4
History of Significant Developments Since Program Initiation .....	7
Schedule .....	10
Schedule Events .....	10
Schedule Notes: .....	12
Deviation Explanations: .....	12
Significant Schedule Risks .....	12
Performance .....	13
Performance Notes: .....	32
Requirements Source: .....	32
Acquisition Budget Estimate .....	33
Total Acquisition Cost .....	33
Total End Item Quantity .....	33
Budget Notes: .....	33
Quantity Notes: .....	33
Risk and Sensitivity Analysis .....	34
Unit Cost .....	35
Current Baseline Compared with Current Estimate .....	35
Original Baseline Compared with Current Estimate .....	35
Contracts .....	36
Contract Notes: .....	36
Contract Notes: .....	37
Contract Notes: .....	38
Contract Notes: .....	39
Contract Notes: .....	40
Contract Notes: .....	41
Technologies and Systems Engineering .....	42
Significant Technical Risks .....	42
Deliveries and Expenditures .....	43
Low Rate Initial Production .....	44
LRIP Note: .....	44
Operating and Support Costs .....	45
Total Program O&S Cost Compared with Baseline .....	45
O&S Cost Breakdown .....	45
Cost Estimate Source .....	45
O&S Cost Notes .....	45

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**Common Acronyms and Abbreviations**

Acq O&M - Acquisition-Related Operations and Maintenance  
ACAT - Acquisition Category  
ADM - Acquisition Decision Memorandum  
APB - Acquisition Program Baseline  
APPN - Appropriation  
APUC - Average Procurement Unit Cost  
\$B - Billions of Dollars  
BA - Budget Authority/Budget Activity  
Blk - Block  
BY - Base Year  
CAPE - Cost Assessment and Program Evaluation  
CARD - Cost Analysis Requirements Description  
CDD - Capability Development Document  
CLIN - Contract Line Item Number  
CPD - Capability Production Document  
CY - Calendar Year  
DAB - Defense Acquisition Board  
DAE - Defense Acquisition Executive  
DAMIR - Defense Acquisition Management Information Retrieval  
DoD - Department of Defense  
DSN - Defense Switched Network  
EMD - Engineering and Manufacturing Development  
EVM - Earned Value Management  
FOC - Full Operational Capability  
FMS - Foreign Military Sales  
FRP - Full Rate Production  
FY - Fiscal Year  
FYDP - Future Years Defense Program  
ICE - Independent Cost Estimate  
IOC - Initial Operational Capability  
Inc - Increment  
JROC - Joint Requirements Oversight Council  
\$K - Thousands of Dollars  
KPP - Key Performance Parameter  
LRIP - Low Rate Initial Production  
\$M - Millions of Dollars  
MDA - Milestone Decision Authority  
MDAP - Major Defense Acquisition Program  
MILCON - Military Construction  
N/A - Not Applicable  
O&M - Operations and Maintenance  
ORD - Operational Requirements Document  
OSD - Office of the Secretary of Defense  
O&S - Operating and Support  
PAUC - Program Acquisition Unit Cost  
PB - President's Budget  
PE - Program Element  
PEO - Program Executive Officer  
PM - Program Manager  
POE - Program Office Estimate  
RDT&E - Research, Development, Test, and Evaluation  
SAR - Selected Acquisition Report  
SCP - Service Cost Position  
TBD - To Be Determined  
TY - Then Year  
UCR - Unit Cost Reporting  
U.S. - United States  
USD(A&S) - Under Secretary of Defense (Acquisition and Sustainment)  
USD(AT&L) - Under Secretary of Defense (Acquisition, Technology and Logistics)

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## Program Manager

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## Mission and Description

The Multifunctional Information Distribution System (MIDS) Program consists of two products, the MIDS Low Volume Terminal (MIDS-LVT) System and the MIDS Joint Tactical Radio System (MIDS JTRS), which consists of both the Concurrent Multi-Netting-4 (CMN-4) and Tactical Targeting Networking Technology (TTNT) variants.

The MIDS-LVT is the product of the MIDS International Program Office (IPO), a multinational (U.S., France (FRA), Germany (DEU), Italy (ITA), and Spain (ESP)) cooperative development program with joint service participation (U.S. Navy (USN), U.S. Army (USA), and U.S. Air Force (USAF)). The DoD established the program to design, develop and deliver low volume, lightweight tactical information system terminals for U.S. and Allied fighter aircraft, bombers, helicopters, ships, and ground sites. MIDS-LVT provides interoperability with North Atlantic Treaty Organization (NATO) and non-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 and provides a Link 16 capability to the F/A-18, which was 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-LVT tailored as a functional replacement for the JTIDS Class 2M terminal. MIDS-LVT(3), also referred to, as MIDS Fighter Data Link (FDL), is a reduced function terminal for the Air Force (no voice, no TACAN). MIDS-LVT developed Block Upgrade 2 (BU2) to incorporate Cryptographic (Crypto) Modernization (CM), Enhanced Throughput (ET), and Frequency Remapping (FR) in the MIDS-LVT terminal.

MIDS JTRS is designed as a U.S. Only Pre-Planned Product Improvement (P3I), executed as an Engineering Change Proposal (ECP) to the production MIDS-LVT configuration, and is fully compatible with MIDS-LVT. MIDS JTRS completed qualification in first quarter of FY 2010. It facilitated the Joint Program Executive Office (JPEO) JTRS incremental approach for fielding advanced JTRS transformational networking capability and transformed the MIDS-LVT into a four channel, Software Communications Architecture (SCA) compliant, Joint Tactical Radio. A form-fit-function replacement to MIDS-LVT, MIDS JTRS also adds three programmable 2 Megahertz (MHz) to 2 Gigahertz (GHz) channels capable of hosting the JTRS legacy and networking Waveforms (WFs). In addition to the Link 16, TACAN, and voice functionality found in MIDS-LVT, and MIDS-LVT BU2, MIDS JTRS adds capabilities such as CM, ET, FR, software programmability, Four Net Concurrent Multi-Netting with Concurrent Contention Receive (CMN-4), and Tactical Targeting Network Technology (TTNT). CMN-4 and TTNT are foundational components of Naval Integrated Fire Control (NIFC).

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## Executive Summary

### Significant Accomplishments:

As of March 2022, the MIDS Program Office (MPO) has procured and fielded over 14,800 MIDS Terminals (MIDS-LVT, MIDS JTRS Variants) to Joint, Coalition, and International warfighters across the tactical units for Ground, Sea, and Air, including over 59 foreign partners. These milestones reflect the strong commitment by the United States, the 5-Nation Partners covered under the International Program Office (IPO) Program Memorandum of Understanding and industry partners to deliver interoperable, affordable and secure Link 16 and programmable networking technologies for the Joint, Coalition, and International Warfighter. The MPO continues to focus on accelerating the delivery of MIDS JTRS and MIDS-LVT Terminals to the maximum extent possible in order for our platform partners to meet the National Security Agency mandate for Crypto Modernization (CM) by January 2022. The primary risks to achieving this objective are continued production capacity and production lot awards commensurate with the demand and platform integration. Mitigation plans have been in place and status is reported to the Naval Information Forces Information Warfare Enterprise Executive Commander and Fleet Commander's on a monthly and quarterly basis. For US forces, Link 16 Modernization was achieved by the deadline, and all US Services and warfighting domains are postured to support Link 16 requirements.

The MIDS-LVT Block Upgrade 2 (BU2) provides the critical upgrades to meet the National Security Agency mandate for CM and National Telecommunications and Information Agency and Federal Aviation Agency mandate for Frequency Remapping capability to the MIDS-LVT terminal. Since January 2020 when MIDS-LVT BU2 development and formal government qualification acceptance testing completed, U.S. vendors (Viasat and Data Link Solutions (DLS)) have continued production/retrofit activities. Viasat and DLS production schedules are continuously monitored and assessed for confidence and updated accordingly. A second BU2 Retrofit line has been added at each US vendor that doubles current capacity of Full Production Rate production. The MPO continues to closely coordinate with vendors' production/retrofit activities to mitigate any additional or anticipated impacts to the 5-Nation partners and other FMS customers in meeting platform demands. MIDS JTRS Four Net Concurrent Multi-Netting with Concurrent Contention Receive (CMN-4) (Variant 5) is an enhancement to Link 16 and provides a significant capability upgrade to the Fleet. The IOC ADM was signed May 30, 2019 by Commander, Naval Air Forces – Atlantic and endorsed by Deputy Assistant Secretary of the Navy (DASN) (Air) on July 26, 2019. The FOC ADM was signed September 23, 2021 by OPNAV N2N6, Mr. Flynn. As of March 2022, 6,995 MIDS JTRS terminals are on contract with DLS and Viasat, with 5,256 delivered and accepted by the government. The MPO continues to develop and upgrade the (V5) software/firmware/hardware configurations to address JTRS problem reports and other needed improvements. The degree of Electromagnetic Compatibility Features (EMCF) re-certification and scope of regression testing is a current issue that is being addressed at the highest levels of senior leadership at the U.S. Navy, U.S. Air Force, Federal Aviation Administration (FAA), Navy Marine Corps Spectrum Center (NMSC), Assistant Secretary of the Navy (ASN), Program Executive Officer, Tactical Aircraft Programs (PEO(T)) and MPO. The schedule of future MIDS JTRS (V5) terminal deliveries and retrofits with upgraded software/firmware may be negatively impacted if additional EMCF/regression testing is mandated. Ongoing coordination of production awards, terminal deliveries and platform installations continues with all stakeholders to support CM compliance to the maximum extent possible.

A variant of the MIDS JTRS (V5) Terminal to support the MIDS on Ship Modernization efforts has completed Software Confidence Testing (SCT) and is scheduled to conduct EMCF Test Readiness Review and testing in the 4Q FY 2022.

The U.S. Air Force has continued to fund development efforts to support migrating certain legacy Air Force tactical aircraft to a modified configuration of MIDS JTRS (V5). Successful completion of SCT, concurrence with FAA on the implementation of Platform Parameter Files for each of these aircraft, and Temporary Frequency Assignment approvals will be followed by terminal installations/testing and final

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Stage 4 Spectrum certifications. The MIDS JTRS F-22 Terminal (V8), a modified configuration of MIDS JTRS (V5), has completed formal qualification testing, with the exception of EMCF. On October 25, 2021, the first MIDS JTRS Remote Radio Frequency Unit (RRFU) terminal was delivered to the U.S. Air Force F-22 Raptor program. Within the past three months, over 35 test sorties have been conducted with no significant defaults reported. Formal EMCF testing is scheduled to begin in August 2022 followed by resumed operational testing. The MPO continues to coordinate and collaborate with the PEO(Joint Strike Fighter) to address Link 16 interoperability requirements for future implementation into the F-35 platform.

MIDS Modernization is a continuous technology development/acquisition strategy for robust interoperable communications for MIDS JTRS hosted waveforms. The first phase of this capability is a Link 16 enhancement to the MIDS JTRS CMN-4 known as Block Upgrade 3 (BU3). The next evolution of this modernized capability, funded in FY 2021, implements the required software and firmware updates necessary to meet the Joint Combatant Commander's prioritized requirements for Integrated Fire Control and Joint Tactical Grid information exchange requirements at the Tactical Edge. The contract ceilings for DLS and Viasat BU3 contracts have been increased to allow for this follow on work. The Test Readiness Review (TRR) for this combined capability was successfully conducted in January 2022. Contractor First Article Qualification Testing is ongoing and projected to complete by July 2022. The EMCF TRR is projected for August 2022.

MIDS JTRS Tactical Targeting Network Technology (TTNT) provides an Internet Protocol-based networking capability on tactical aircraft. Operational Assessment (OA) Phase 2 testing completed in May 2021 and OA Phase 3 testing completed November 5, 2021. The purpose of the OA Phase 1-3 tests was to provide an assessment of system capability as a risk reduction to lead platforms' Follow-On Test and Evaluation. All test objectives were completed and Operational Test and Evaluation Force (OPTEVFOR) recommended continuing program development for MIDS JTRS TTNT and integration in lead platform tactical aircraft. The Final OA Report was been completed and signed March 28, 2022 by OPTEVFOR. TTNT EMCF dry-run testing started in August 2021 with formal testing to commence in 4Q FY 2022. Due to revised schedules received from the two lead platforms, the MIDS JTRS TTNT (V6) IOC is projected to be declared in 4Q FY 2022 (vice 4Q FY 2021) and the MIDS JTRS TTNT (V7) IOC is projected to be declared in 4Q FY 2023 (vice 4Q FY 2022). The revised scheduled IOC milestones exceed the Schedule Thresholds as set forth in the approved Change 6 APB approved July 7, 2020. Planned/funded TTNT development enhancements in support of CNO's Project Overmatch initiatives are ongoing with development, integration and formal test throughout FY 2022/2023/2024.

A summary of the significant MIDS Program contract actions from March 2020 - December 2021 include:

- Awarded new Delivery Orders for MIDS JTRS Sustainment and JPR Support for a total value of \$67M (April/May 2020).
- Awarded two competitive indefinite-delivery/indefinite-quantity contracts for \$1.997B (May 2020).
- Lot 9 MIDS JTRS CMN-4 Production: awarded competitive delivery orders to procure 563 Terminals and 14 Shop Replaceable Units (SRUs) for a total value of \$112.4M (May 2020).
- Awarded Delivery Order for the production of 58 MIDS JTRS F-22 Identify Friend or Foe Transponder (IFFT) SRU and RRFU Line Replaceable Units (LRU) spare parts for \$22.2M (June 2020).
- Lot 9 Emergent MIDS JTRS CMN-4 Production – Firm Fixed Price (FFP) awards for 116 Terminals at a total value of \$23.3M(June/July 2020).
- MIDS-LVT BU2 Retrofit Production – FFP awards for 118 LVT(1) and LVT(2) Retrofit Kits for a total value of \$14M (August 2020).
- Delivery Order modification for \$11.3M to procure additional work within scope for the MIDS JTRS TTNT Problem Report Investigations (September 2020).
- Lot 21 MIDS-LVT Terminal Production - Awarded FFP Delivery Orders for \$37.8M to procure 152 Terminals and 73 SRUs (September 2020).

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- Firm Fixed Price awards for 85 LVT (1) BU2 retrofit kits, services, and associated FMS surcharge in support of various U.S. platforms and FMS customers for a total value of \$5.6M (September 2020).
- Firm Fixed Price awards for 272 LVT (1) BU2 retrofit kits, services, and associated FMS surcharge in support of various U.S. platforms and FMS customers for a total value of \$25.4M (September 2020).
- Lot 9A/Emergent MIDS JTRS CMN-4 Production – FFP awards for 272 Terminals and 35 SRUs for a total value of \$55.4M (September 2020).
- Lot 9B MIDS JTRS TTNT Production – FFP awards for 64 Terminals and 526 SRUs for a total value of \$84M (September 2020).
- Lot 9C MIDS JTRS F-22 Production – FFP award for 48 Terminals for a total value of \$7.3M (November 2020).
- Awarded five-year indefinite-delivery/indefinite-quantity contract for systems engineering and integration of MIDS-LVTs for a total value of \$86.9M (December 2020).
- Lot 9A/Emergent MIDS JTRS CMN-4 Production – FFP awards for 28 Terminals for a total value of \$5M (January 2021).
- Awarded MIDS JTRS BU3 Contract Ceiling Increases to procure additional work within scope (January/February 2021)
- Lot 2 MIDS JTRS (8) FFP award for 48 F-22 IFFT SRUs and 48 RRFU LRUs for a total value of \$17M (February 2021)
- FFP award for a total of 21 MIDS-LVT (11) BU2 terminals for Qatar for a total value of \$6.2M (March 2021)
- Lot 9A Emergent MIDS JTRS CMN-4 Production – FFP awards for 48 Terminals for a total value of \$9.6M (March 2021)
- Lot 9A Emergent MIDS JTRS TTNT Production – FFP awards for 3 Terminals and 9 SRUs for a total value of \$3.6M (March 2021)
- Awarded new Delivery Orders for MIDS JTRS Joint Problem Report investigations for a total value of \$76M (April 2021)
- Lot 10C MIDS JTRS (V8) Production – FFP award for the procurement of 70 MIDS JTRS (V8) – F-22 Terminals for a total value of \$10.4M (June 2021)
- Lot 10 MIDS JTRS Production – FFP awards MIDS JTRS terminals for a total value of \$148.1M (July 2021)
- Lot 3 MIDS JTRS (V8) – FFP award for the procurement of MIDS JTRS F-22 IFFT SRU and RRFU LRU spare parts for a total value of \$29.3M (July 2021).
- Awarded FFP Delivery Order to Viasat for the procurement of 436 MIDS-LVT secure data units that support MIDS-LVT BU2 terminals for a total value of \$4.1M (July 2021)
- Lot 10 Emergent MIDS JTRS/TTNT Production – FFP awards for MIDS JTRS and MIDS JTRS TTNT Terminals for a total value of \$41.8M (September 2021)
- Awarded competitive Delivery Order to Viasat for MIDS JTRS Depot Level Special Test Equipment and Support for a total value of \$4.2M (September 2021)
- Lot 10 Emergent MIDS JTRS/TTNT Production – FFP awards for the procurement of MIDS JTRS/TTNT Terminals and Spares for a total value of \$11.8M (September 2021)
- Lot 22 MIDS-LVT BU2 Production – FFP awards for the procurement of MIDS-LVT (1/4/6) BU2 Terminals and Spares for a total value of \$25.9M (September 2021)
- Lot 10 Emergent MIDS JTRS (FMS) – FFP awards for MIDS JTRS Terminals for a total value of \$15M (October/November 2021)
- Awarded FFP Delivery Order to DLS for the procurement of 116 MIDS-LVT BU2 retrofit kits, a quantity of 59 MIDS-LVT BU2 retrofit services, and a quantity of 43 FMS surcharge for a total value of \$8.5M (December 2021)
- Lot 10 Emergent MIDS JTRS Production – FFP awards for the emergent procurement of MIDS JTRS Terminals and Spares for a total value of \$19.6M (December 2021)

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- Lot 10A MIDS JTRS Terminals (FMS) – FFP award for procurement of MIDS JTRS Terminals for Chile for a total value of \$9M (December 2021)

### Significant Issues:

There are no significant software-related issues with this program at this time.

### History of Significant Developments Since Program Initiation

History of Significant Developments Since Program Initiation	
Date	Significant Development Description
April 1990	Joint Requirements Oversight Council Memorandum (JROCM 031-90) approved the Mission Need Statement (MNS) for MIDS-LVT.
December 1993	At MS II, USD(AT&L) authorized MIDS to proceed with MIDS-LVT EMD.
September 2001	USD(AT&L) directed the MIDS Program to update the Acquisition Strategy to include a JTRS Compliance Migration Strategy.
September 2003	At MS III, Assistant Secretary of the Navy for Research, Development & Acquisition (ASN(RDA)) authorized Full Rate Production for MIDS-LVT.
July 2004	ASN(RDA) approved the Acquisition Strategy to develop MIDS JTRS via an Engineering Change Proposal ().
February 2005	USD(AT&L) authorized the establishment of the Joint Program Executive Office (JPEO) Joint Tactical Radio System (JTRS) for authority over all JTRS products, including MIDS.
May 2008	JROCM 112-08 approved MIDS JTRS Capability Production Document.
December 2009	MIDS JTRS completed Contractor First Article Qualification Test and Government First Article Qualification Test (GFAQT). USD(AT&L) approved the Limited Production & Fielding of MIDS JTRS.
April 2011	MIDS JTRS completed Initial Operational Test & Evaluation including Verification of the Correction of Deficiencies (VCD), COMOPTEVFOR (Naval Command Operational Test and Evaluation Force) and Director of Operational Test & Evaluation Reports.
April 2012	USD(AT&L) approved the Full Production and Fielding of MIDS JTRS.
July 2012	USD(AT&L) directed the JPEO JTRS reorganization and realignment to transfer MIDS to Navy MDA alignment and designated MIDS as an ACAT IC program.
November 2012	ASN(RDA) approved MIDS JTRS IOC.
January 2013	ASN(RDA) designated MIDS as the Program Manager Air/Program Manager Warfare-101.
January 2013	ASN(RDA) authorized development of MIDS JTRS TTNT and MIDS JTRS CMN-4 capabilities to be managed as ECPs to the MIDS ACAT IC Program.
January 2013	PEO(Tactical Aircraft) assigned MIDS as the Naval Integrated Fire Control – Counter Air From the Air Advanced Tactical Data Link (ATDL) lead to coordinate with F/A-18, E-2D, EA-18G and other platform offices.
May 2013	Procurement, and Operating and Sustainment (O&S) breaches were realized due to increased procurement quantities of MIDS terminals by F/A-18. Program Deviation Report was submitted by the MIDS PM and approved by ASN(RD&A).
July 2013	MIDS JTRS CMN-4 Cooperative Development delivery orders were awarded to ViaSat and DLS.
November 2013	Due to the May Program Deviation Report, a revised APB) was approved by ASN(RD&A).

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History of Significant Developments Since Program Initiation	
Date	Significant Development Description
November 2013	MIDS-LVT Block Upgrade 2 (BU2) Award. MIDS-LVT BU2 development contracts were awarded to DLS, EuroMIDS and ViaSat. MIDS-LVT BU2 is a 39-month ECP to bring National Security Agency mandated Crypto Modernization and National Telecommunications and Information Agency and Federal Aviation Administration mandated Frequency Remapping capabilities to the MIDS-LVT Link-16 product line.
August 2014	MIDS JTRS TTNT L-Band Full Development Contract was awarded to DLS and ViaSat.
November 2014	MIDS JTRS TTNT waveform development was completed. The next step is early porting and demonstration of the waveform.
March 2015	Conducted the first MIDS JTRS CMN-4 flight on F/A-18 aircraft at China Lake.
May 2015	MIDS Modernization Increment 1 (MMI 1) demonstration testing was conducted, and development/delivery orders were awarded to DLS and ViaSat.
June 2015	Responsibilities for the Link-16 waveform were transferred to MIDS program office from Joint Tactical Networking Center (JTNC).
January 2016	The MIDS Program delivered its 10,000 <sup>th</sup> MIDS-LVT terminal.
November 2017	The MIDS Program delivered its 1,000 <sup>th</sup> MIDS JTRS terminal.
November 2017	ASN(RD&A) delegated future approval authority to PEO (T)(Tactical Aircraft) for procurements of the MIDS JTRS CMN-4 terminals and authority for production fielding of the MIDS JTRS CMN-4 terminal with H-12 and H-14 based off of satisfactory results November 8, 2017.
November 2017	MIDS APB Change 5 approved by ASN(RD&A) November 16, 2017.
September 2018	PEO(T) authorized the Full Production & Limited Fielding for the MIDS JTRS CMN-4 Terminal subject to the availability of funds September 10, 2018.
February 2019	PEO(T) authorized the Full Production and Full Fielding for the MIDS JTRS CMN-4 Terminal on February 20, 2019.
May 2019	Commander, Naval Air Force N421, as the operational authority, declared MIDS JTRS CMN-4 had met the requirements for IOC on May 30, 2019.
September 2019	ASN(RD&A) approved MIDS JTRS TTNT Limited Production and Fielding on September 24, 2019. This was subsequent to a successful From the Air Advanced Tactical Data Link Interim Program Review #7 conducted on September 9, 2019.
September 2020	On September 22, 2020, the ASN(RD&A) signed an Acquisition Decision Memorandum approving the satisfactory review of the MIDS program health; approved the updated Naval Integrated Fires Control (NIFC) Tactical Data Link (TDL) Interim Program Review Entrance/Exit Criteria and roadmap (2028); approved the second Limited Production & Fielding (LP&F) decision for MIDS JTRS TTNT (V6); approved the initial LP&F for the MIDS JTRS TTNT (V7); approved the delegation of authority to PEO(T) for additional LP&F and Full Rate Production (FRP) decisions for the MIDS JTRS TTNT (V6) and (V7) configurations; and approved the updated MIDS Program Product Support Strategy that adds a Public Private Partnership (PPP) Depot and transition to an Outcome Based Contracting arrangement.
September 2021	Commander, Naval Air Force N421, as the operational authority, declared MIDS JTRS CMN-4 had met the requirements for FOC on September 23, 2021.
November 2021	On November 23, 2021, ASN(RD&A) signed an ADM stating that PMA/PMW-101 will be realigned back under PEO (C4I). Early last decade when the Navy was establishing NIFC (FTA), this Program Office was realigned under PEO(T) to better focus critical work associated with LINK-16 modifications and TTNT development for incorporation into key platforms within PEO (T). TTNT development work continues, but realignment under PEO (C4I) will enable tighter coordination with Overmatch priorities. Delivering integrated fires is an enduring

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History of Significant Developments Since Program Initiation	
Date	Significant Development Description
	requirement that requires intense collaboration between programs to ensure seamless OFF, combat system and weapon integration to complete the kill chain. A MOA will be developed between PEO (T) and PEO (C4I) to ensure relationships and execution risks are thoughtfully managed.
February 2022	On February 2, 2022, ASN(RD&A) signed and approved the Gate 6/IPR#9 Minutes stating the satisfactory review of the MIDS program health based on the Gate 6/IPR#9 Review conducted July 19, 2021.

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## Schedule

### Schedule Events

Schedule Events					
Events	Development APB Objective	Current APB Development Objective/Threshold		Current Estimate/Actual	Deviation
Milestone II (DAB)	Dec 1993	Dec 1993	Dec 1993	Dec 1993	N/A
Development Contract Award					
LVT Contract Award	Mar 1994	Mar 1994	Mar 1994	Mar 1994	N/A
LVT(2) Modification	Aug 1995	Aug 1995	Aug 1995	Aug 1995	N/A
LVT(3) Qual Contract Award	Sep 1996	Sep 1996	Sep 1996	Sep 1996	N/A
Critical Design Review (MIDS Terminal)					
LVT	Nov 1995	Nov 1995	Nov 1995	Nov 1995	N/A
LVT(2)	Feb 1997	Feb 1997	Feb 1997	Feb 1997	N/A
First EMD Terminal Delivery					
LVT	Dec 1997	Dec 1997	Dec 1997	Dec 1997	N/A
LVT(3)	Feb 1998	Feb 1998	Feb 1998	Feb 1998	N/A
LVT(2)	May 1998	May 1998	May 1998	May 1998	N/A
Initial Carrier Suitability	Nov 1998	Nov 1998	Nov 1998	Nov 1998	N/A
IOT&E Complete					
LVT(3)	Jul 1999	Jul 1999	Jul 1999	Jul 1999	N/A
LVT(2)	Feb 2002	Feb 2002	Feb 2002	Feb 2002	N/A
LVT	Jan 2003	Jan 2003	Jan 2003	Jan 2003	N/A
Milestone III					
LVT (3)	Dec 1999	Dec 1999	Dec 1999	Dec 1999	N/A
LVT (Air Force)	Sep 2003	Sep 2003	Sep 2003	Sep 2003	N/A
LVT (Navy)	Apr 2004	Apr 2004	Apr 2004	Apr 2004	N/A
Program Review DAB for LRIP	Feb 2000	Feb 2000	Feb 2000	Feb 2000	N/A
LRIP Production Contract Award	Mar 2000	Mar 2000	Mar 2000	Mar 2000	N/A

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Schedule Events					
Events	Development APB Objective	Current APB Development Objective/Threshold		Current Estimate/Actual	Deviation
IOC					
LVT(3)	Jan 2001	Jan 2001	Jan 2001	Jan 2001	N/A
LVT(2)	Jun 2002	Jun 2002	Jun 2002	Jun 2002	N/A
LVT	May 2003	May 2003	May 2003	May 2003	N/A
Full Rate Production - LVT(2)	May 2003	May 2003	May 2003	May 2003	N/A
FOT&E					
LVT (F/A-18) Start	Mar 2004	Mar 2004	Mar 2004	Mar 2004	N/A
LVT (F/A-18) Complete	Nov 2005	Nov 2005	Nov 2005	Nov 2005	N/A
FOC					
LVT (F/A-18) Complete	Nov 2005	Nov 2005	Nov 2005	Nov 2005	N/A
LVT(3)	Mar 2004	Mar 2004	Mar 2004	Mar 2004	N/A
LVT (F/A-18)	Mar 2012	Mar 2012	Mar 2012	Mar 2012	N/A
MSD					
LVT (F/A-18)	Jun 2005	Jun 2005	Jun 2005	Jun 2005	N/A
MIDS JTRS (Core Terminal)					
LP&F	N/A	Dec 2009	Dec 2009	Dec 2009	N/A
FP&F	N/A	Mar 2012	Mar 2012	Mar 2012	N/A
IOC	N/A	May 2012	May 2012	May 2012	N/A
MIDS JTRS (V5) - CMN-4 IOC	N/A	May 2019	May 2019	May 2019	N/A
MIDS JTRS (V6)/(V7) TTNT (Note 1)					
MIDS JTRS (V6) TTNT LP&F#1	N/A	Sep 2019	Sep 2019	Sep 2019 (Note 2)	N/A
MIDS JTRS (V6/V7) TTNT LP&F#2	N/A	Sep 2020	Mar 2021	Sep 2020 (Note 3)	N/A
MIDS JTRS (V6) TTNT IOC	N/A	Sep 2021	Mar 2022	Sep 2022	Breach
MIDS JTRS	N/A	Sep 2022	Mar 2023	Sep 2023	Breach

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Schedule Events				
Events	Development APB Objective	Current APB Development Objective/Threshold	Current Estimate/Actual	Deviation
(V7) TTNT IOC				

**Schedule Notes:**

- (1) Change 6 APB (approved July 2020) reflected the key schedule parameters documented in the approved MIDS JTRS CPD Change Two of November 2019
- (2) MIDS JTRS (V6) TTNT LP&F approved by MDA at IPR#7/Gate 6 Review in September 2019.
- (3) MIDS JTRS (V6/V7) LP&F#2 approved during IPR#8/Gate 6 Review in September 2020.

**Deviation Explanations:**

At the time the MIDS JTRS CPD Change Two was prepared and approved (2019/2020), the Key Schedule Parameters for MIDS JTRS (V6) and (V7) were determined based on our lead platform integration, developmental test and operational test timelines. In FY 2021, the MPO was informed that these schedules were shifting right. In July 2021, it was reported that these schedules were shifting one year respectively.

**Significant Schedule Risks**

Significant Schedule Risks
Current Estimate (December 2021)
<p>1. <b>Risk:</b> The degree of EMCF re-certification and scope of regression testing is a current issue that is being addressed at the highest levels of senior leadership at the U.S. Navy, U.S. Air Force, FAA, NMSC, ASN, PEO(T) and MPO. The schedule of future MIDS JTRS (V5) terminal deliveries and retrofits with upgraded software/firmware may be negatively impacted if additional testing is mandated. <b>Root Cause/Driver:</b> New EMCF testing processes, stricter requirements, and new resource constraints adversely impact MIDS JTRS platforms' terminal integration, testing and operational schedule milestones. <b>Mitigation:</b> The MPO is actively engaged with our industry partners to ensure they are prepared to conduct required testing as soon as the NMSC Certification Team (CT) is prepared to witness. The MPO is actively engaged with our Platform partners to communicate schedule status and manage expectations for terminal integration and operational fielding. The degree of re-certification and scope of regression testing is a current issue that is being addressed at the highest levels of senior leadership at the FAA, NMSC, ASN, PEO(T) and MPO. Quarterly EMCF Technical Interchange Meetings (TIMs) are being conducted with all stakeholders in order to reach consensus on way forward and resolve any issues/risks to attaining TFA approvals followed by Stage 4 Certifications.</p>

## Performance

Performance Characteristics					
Development APB Objective	Current APB Development Objective/Threshold	Demonstrated Performance (include Date of Demonstration)	Current Estimate/Actual	Deviation	
<b>Interoperability</b>					
All top level IERs in SMORD	All top level IERs in SMORD	All critical top level IERs in SMORD	100% Demonstrated (1/20/2003)	All top level IERs in SMORD	N/A
<b>Waveform Compatibility</b>					
STANAG 4175 & JTIDS SSS	STANAG 4175 & JTIDS SSS	(T=O) STANAG 4175 & JTIDS SSS	JITC Certified (1/31/2003)	STANAG 4175 & JTIDS SSS	N/A
<b>Message Standard</b>					
STANAG 5516 (& 5616 for Data Fwds.) & MIL-STD-6016B	STANAG 5516 (& 5616 for Data Fwds.) & MIL-STD-6016B	(T=O) STANAG 5516 (& 5616 for Data Fwds.) & MIL-STD-6016B	JITC Certified (1/31/2003)	STANAG 5516 (& 5616 for Data Fwds.) & MIL-STD-6016B	N/A
<b>Maximum Power Transmission (w) LVT</b>					
Multiple selectable levels	Multiple selectable levels	>=200 with IF for 1000	200 with IF	Multiple selectable levels	N/A
<b>Maximum Power Transmission (w) LVT(2)</b>					
Multiple selectable levels	Multiple selectable levels	>=200 or 25 selectable	200/25	Multiple selectable levels	N/A
<b>Maximum Power Transmission (w) LVT(3)</b>					
Multiple selectable levels	Multiple selectable levels	>=50	50	Multiple selectable levels	N/A
<b>IER (Kbps)</b>					
1000	>=1000	28.8 -115.2	1100 kbps	>=1000	N/A
<b>Paired Time Slot Relay Capability</b>					
Integral and automated	Integral and automated	(T=O) Integral and automated	Integral & automated	Integral & automated	N/A
<b>Re-promulgation Relay (nm) MIDS-LVT(2)</b>					
4 hop	4 hops	3 hops	4 hops	4 hops	N/A

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Performance Characteristics					
Development APB Objective	Current APB Development Objective/Threshold	Demonstrated Performance (include Date of Demonstration)	Current Estimate/Actual	Deviation	
<b>Paired Time Slot Relay Range (nm) (USN Only)</b>					
1200	>=1200	>=500	520	>=1200	N/A
<b>Communication Range</b>					
<b>LVT (USN: C2 to C2)</b>					
1200	>=1200	>=500	520	>=1200	N/A
<b>LV LVT (USN: Non-C2 to C2)T (USN: C2 to C2)</b>					
1200	>=1200	>=500	520	>=1200	N/A
240	>=240	>=220	240	>=240	N/A
<b>LVT (USN: Non-C2 to Non-C2)</b>					
200	>=200	>=180	220	>=200	N/A
<b>LVT (USN: Surface Platforms)</b>					
LOS up to 300	LOS >=300	(T=O) LOS >=300	300	LOS >=300	N/A
<b>LVT (F-16: Non-C2 to C2)</b>					
300	>=300	>=200	200	>=300	N/A
<b>LVT (F-16: Non-C2 to Non-C2)</b>					
150	>=150	>=100	150	>=150	N/A
<b>LVT(2)</b>					
Up to 300 with LOS at 200 w	Up to 300 with LOS at 200 w	(T=O) Up to 300 with LOS at 200 w	300	Up to 300 with LOS at 200 w	N/A
<b>LVT(3) (Non-C2 to C2)</b>					
300	>=300	>=200	300	>=300	N/A
<b>LVT(3) (Non-C2 to Non-C2)</b>					
150	>=150	>=100	170	>=150	N/A
<b>Voice Channels: LVT (USN)</b>					
Capable of 2	Capable of 2	1	2	Capable of 2	N/A
<b>Coded Message Error Probability (%)</b>					
<b>LVT</b>					
1	<=1	<=2	Passed	<=1	N/A
<b>LVT(3)</b>					
< 1 detected	<= 1 detected	<=2	Passed	<= 1 detected	N/A
<b>LVT(2)</b>					
1	<=1	<=2	Passed	<=1	N/A
<b>Jam Resistance</b>					

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Performance Characteristics					
Development APB Objective	Current APB Development Objective/Threshold		Demonstrated Performance (include Date of Demonstration)	Current Estimate/Actual	Deviation
<b>LVT (USN) (db)</b>					
MJCS-194 -89	MJCS-194-89	(T=O) MJCS-194-89	Compliant	MJCS-194-89	N/A
<b>LVT (F-16) (%)</b>					
< 1 detectederror	<=1 detected error	(T=O) <=1 detected error	Passed	<=1 detected error	N/A
<b>LVT(2) (%)</b>					
< 1 detectederror	<= 1 detected error	<= 5	Passed	<= 1 detected error	N/A
<b>LVT(3) (%)</b>					
< 1 detectederror	<= 1 detected error	(T=O) <= 1 detected error	Passed	<= 1 detected error	N/A
<b>Ao</b>					
<b>LVT</b>					
.90	>=.90	(T=O) >=.90	.91	>=.90	N/A
<b>LVT(2) (Terminal)</b>					
.94	>=.94	>=.90	.94	>=.94	N/A
<b>LVT(3)</b>					
.97	>=.97	>=.95	.965	>=.97	N/A
<b>MTBF (hr)(lab)</b>					
<b>USN</b>					
1000	>=1000	(T=O) >=1000	1850	>=1000	N/A
<b>USA</b>					
1800	>=1800	>=1000	1850	>=1800	N/A
<b>USAF</b>					
1500	>=1500	>=1000	1850	>=1500	N/A
<b>MFHBOMF/MTBOMF (hr)</b>					
<b>System</b>					
25	>=25	(T=O) >=25	32	>=25	N/A
<b>LVT (Aircraft) (Terminal)</b>					
300	>=300	>=220	240	>=300	N/A
<b>LVT (Ships) (Terminal)</b>					
350	>=350	>=257	275	>=350	N/A
<b>LVT(2) (Terminal)</b>					

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Performance Characteristics					
Development APB Objective	Current APB Development Objective/Threshold		Demonstrated Performance (include Date of Demonstration)	Current Estimate/Actual	Deviation
393	>=393	(T=O) >=393	425	>=393	N/A
<b>MTTR (O-level) (min)</b>					
<b>LVT(2) (Terminal)</b>					
30	<=30	(T=O) <=30	25	<=30	N/A
<b>MCMTOMF</b>					
<b>LVT (USN Aircraft)</b>					
60	<=60	<=90	75	<=60	N/A
<b>LVT (USN Ships)</b>					
60	<=60	<=90	80	<=60	N/A
<b>LVT (USAF)</b>					
MRT < 20	MRT < 20	MRT < 30	25	MRT < 20	N/A
<b>LVT(3)</b>					
MRT < 20	MRT < 20	MRT < 30	28	MRT < 20	N/A
<b>Volume (Cubic Feet)</b>					
<b>LVT</b>					
< .6	<= .6	(T=O) <= .6	.58	<= .6	N/A
<b>LVT(2)</b>					
< 1.4	<=1.4	(T=O) <=1.4	1.32	<=1.4	N/A
<b>LVT(3)</b>					
< .6	<= .6	(T=O) <= .6	.56	<= .6	N/A
<b>Weight (lbs)</b>					
<b>LVT</b>					
< 65	<=65	(T=O) <=65	63.8	<=65	N/A
<b>LVT(2)</b>					
< 88	<=88	(T=O) <=88	87.9	<=88	N/A
<b>LVT(3)</b>					
< 65	<=65	(T=O) <=65	63.8	<=65	N/A
<b>MIDS-LVT Enhancement ECPs</b>					
<b>Message Standards</b>					
N/A	STANAG 5516 (& 5616 for Data Fwds.) & MIL-STD-6016C	STANAG 5516 (& 5516 for Data Fwds.) & MIL-STD-6016B	STANAG 5516 (& 5616 for Data Fwds.) & MIL-STD-6016C	STANAG 5516 (& 5616 for Data Fwds.) & MIL-STD-6016C	N/A
<b>Communications Range</b>					
N/A	see note 12c	(T=O)	Met Objective	Met Objective	N/A

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Performance Characteristics					
Development APB Objective	Current APB Development Objective/Threshold	Demonstrated Performance (include Date of Demonstration)	Current Estimate/Actual	Deviation	
	through17c				
<b>Information Exchange Rate (Kbps)</b>					
<b>LET 0</b>					
N/A	>=358	>=107	>=358	>=358	N/A
<b>LET 1</b>					
N/A	>=546	>=358	>=546	>=546	N/A
<b>LET 2</b>					
N/A	>=833	>=546	>=833	>=833	N/A
<b>LET 3</b>					
N/A	>=968	>=833	>=968	>=968	N/A
<b>LET 4</b>					
N/A	>=1100	>=968	>=1100	>=1100	N/A
<b>Coded Message Error Probability (%)</b>					
<b>LET 0</b>					
N/A	<=1%	<=2%	<=1%	<=1%	N/A
<b>LET 1</b>					
N/A	<=1%	<=2%	<=1%	<=1%	N/A
<b>LET 2</b>					
N/A	<=1%	<=2%	<=1%	<=1%	N/A
<b>LET 3</b>					
N/A	<=1%	<=2%	<=1%	<=1%	N/A
<b>LET 4</b>					
N/A	<=1%	<=2%	<=1%	<=1%	N/A
<b>Jam Resistance</b>					
N/A	MJCS-194-89	(T=O) MJCS-194-89	MJCS-194-89	MJCS-194-89	N/A
<b>MIDS JTRS Performance Parameters</b>					
<b>Link-16 Waveform compatibility</b>					
N/A	STANAG 4175 and MIDS LVT SSS	(T=O) STANAG 4175 and MIDS LVT SSS	Passed JITC waveform conformance test.	Passed JITC waveform conformance test.	N/A
<b>Link-16 Message Standard</b>					
N/A	MIL-STD-6016C and STANAG 5516	(T=O) MIL-STD-6016C and STANAG	Passed JITC waveform conformance test.	Passed JITC waveform conformance test.	N/A

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Performance Characteristics					
Development APB Objective	Current APB Development Objective/Threshold		Demonstrated Performance (include Date of Demonstration)	Current Estimate/Actual	Deviation
		5516		e test.	
<b>Link-16 IER</b>					
<b>Normal Operations with JTRS</b>					
N/A	>=1100 Kbps	>=28-115.2 Kbps	128	128	N/A
<b>LET 0</b>					
N/A	>=358	>=107	107	107	N/A
<b>LET 1</b>					
N/A	>=546	>=358	358	358	N/A
<b>LET 2</b>					
N/A	>=833	>=546	546	546	N/A
<b>LET 3</b>					
N/A	>=968	>=833	837	837	N/A
<b>LET 4</b>					
N/A	>=1100	>=968	968	968	N/A
<b>Interoperability: All top level IERs will be satisfied to the standards specified in the threshold (T) and objective (O) values.</b>					
N/A	All top-level Information exchange Requirements (IERs) are met.	(T=O) All top-level Information Exchange Requirements (IERs) are met.	All top-level IERs transferred.	All top-level IERs transferred.	N/A
<b>Link-16 Coded Message Error Probability (CMEP)</b>					
<b>LET 0</b>					
N/A	<=1%	<=2%	<=2%	<=1%	N/A
<b>LET 1</b>					
N/A	<=1%	<=2%	<=2%	<=1%	N/A
<b>LET 2</b>					
N/A	<=1%	<=2%	<=2%	<=1%	N/A
<b>LET 3</b>					
N/A	<=1%	<=2%	<=2%	<=1%	N/A
<b>LET 4</b>					
N/A	<=1%	<=2%	<=2%	<=1%	N/A
<b>Weight/Volume</b>					
N/A	<=65 lbs., <=.6 cu.ft.	(T=O) <=65 lbs., <=.6 cu.ft.	Measured 54.7 lbs.; measured .573 cu. ft.	<=65 lbs., <=.6 cu.ft.	N/A

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Performance Characteristics					
Development APB Objective	Current APB Development Objective/Threshold	Demonstrated Performance (include Date of Demonstration)	Current Estimate/Actual	Deviation	
<b>Link-16 Jam Resistance</b>					
<b>JTRS (USN) (db)</b>					
N/A	MJCS-194-89	(T=O) MJCS-194-89	Exceeds threshold by 1-3 db. In 95% of all cases.	Exceeds threshold by 1-3 db. In 95% of all cases.	N/A
<b>All Others</b>					
N/A	<=1% Detected message error rate	(T=O) <=1% Detected message error rate	.98%	.98%	N/A
<b>Link-16 J-Voice Channels</b>					
N/A	2	(T=O) 2	2	2	N/A
<b>Link-16 Communications Range Data</b>					
N/A	=300 nm (C2-C2 w/HPA); =240 nm (C2-non-C2); =200 nm (non-C2-non-C2)	=300 nm (C2-C2 w/HPA); =220 nm (C2-non-C2); =180 nm (non-C2-non-C2)	>=250 nm	>=250 nm.	N/A
<b>Link-16 Communications Range J-Voice</b>					
N/A	(T=O) >=220nm (C2-C2 w/HPA); >=140nm (C2-non-C2); >=90nm (non-C2-nonC2/non C2-C2)	(T=O) >=220nm (C2-C2 w/HPA); >=140nm (C2-non-C2); >=90nm (non-C2-nonC2/non C2-C2)	>=220nm (C2-C2 w/HPA) - Not Tested; >=140nm (C2-non-C2 - Not tested; >=90nm (non-C2-nonC2/non C2-C2) - 150.	>=220nm (C2-C2 w/HPA) - Terminal not installed in C2 platform yet; >=140nm (C2-non-C2 - Terminal not installed in C2 platform yet; >=90nm (non-C2-nonC2/non C2-C2) - 150.	N/A
<b>Link-16 Relay</b>					
N/A	>=1200nm	>=500nm	Not tested yet.	>=500 nm	N/A
<b>Multi-Channels/Networks</b>					
N/A	4 Channels simultaneously with	(T=O) 4 Channels simultaneous	4 Channels passed.	4 Channels passed.	N/A

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Performance Characteristics					
Development APB Objective	Current APB Development Objective/Threshold		Demonstrated Performance (include Date of Demonstration)	Current Estimate/Actual	Deviation
	TACAN/multi-net (single network) Link-16 fixed operation on Channel 1	ly with TACAN/multi-net (single network) Link-16 fixed operation on Channel 1			
<b>Scan Frequencies</b>					
N/A	Scan a minimum of 10 frequencies or presets	(T=O) Scan a minimum of 10 frequencies or presets	FOT&E: No MIDS JTRS waveforms require presets.	FOT&E: No MIDS JTRS waveforms require presets.	
<b>Terminal Start-up/Restart (Link-16 only)</b>					
N/A	<=2.0 min	<=3.5 min	1.45 min	3.2 min	N/A
<b>IBIT Performance (Link-16 only)</b>					
N/A	<=30seconds	<=70 seconds	29 seconds	29 seconds	N/A
<b>Link-16 Net Entry/Synchronization</b>					
N/A	<=30 seconds	Not to exceed 4 min fromtime that coarse sync is initiated	30 sec - 2.5 min	30 sec - 2.5 min	N/A
<b>Crypto-Rekeying</b>					
N/A	Over the Air Rekeying (OTAR) through electronic media, or common reprogramming hardware / software	At O-level	MIDS JTRS CMN-4 demonstrated Objective during qualification testing. Not yet implemented by platform in operational environment.	OTAR through electronic media, or common reprogramming hardware/software	N/A
<b>Link-16 Transmission of Unit Position and Status Reports</b>					
N/A	<=100 ft. accuracy	<=300 ft. accuracy	78 ft.	78 ft.	N/A
<b>TACAN Performance Start-up/Restart</b>					
N/A	<=14 seconds	<=30 seconds	15 seconds	15 seconds	N/A
<b>MFHBOMF (System/Single Channel)</b>					
N/A	>=36 hrs. (Other Platfor	>=25 hrs. (F/A-18E/F, EA-18G, TACAIR)	36.5 hrs.	36.5 hrs.	N/A

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Performance Characteristics					
Development APB Objective	Current APB Development Objective/Threshold	Demonstrated Performance (include Date of Demonstration)	Current Estimate/Actual	Deviation	
	ms)				
<b>MTBF Lab (Ch. 1(Link-16))</b>					
N/A	>=1800 hrs.	>= 1200 hrs.	1285 hrs.	1285 hrs.	N/A
<b>MTBF Lab (Ch. 2, 3 &amp; 4)</b>					
N/A	>=1800 hrs.	>=1550 hrs.	1550 hrs.	1550 hrs.	N/A
<b>MFHBOMF (Terminal/Single Channel))</b>					
N/A	>=300 hrs.	>=220 hrs.	724 (includes lab data)	220 hrs.	N/A
<b>MCMTOMF (Single Channel)</b>					
N/A	<= 60 min	<=120 min; <= 90 min (F/A-18 E/F, EA- 18G, NAVAIR)	60 min	60 min (Single channel )	N/A
<b>MRT</b>					
N/A	<= 20 min	<= 45 min	20 min	45 min	N/A
<b>BIT PCD</b>					
N/A	PCD>= 98%	PCD>= 95%	97%	97%	N/A
<b>BIT MFHBFA</b>					
N/A	MFHBFA: >= 113 hrs.	MFHBFA: >= 60 hrs.	80 hrs.	120 hrs.	N/A
<b>Start-Up (Terminal/Single Channel)</b>					
N/A	<=2min (OE, cryptoand waveform); <=2min (fine sync)	<=3.5min (OE, Crypto and waveform); <=4min(fine sync)	3.2 min	3.2 min	N/A
<b>Start-Up (Waveform/Link-16 only)</b>					
N/A	<=2min (OE, crypto, and waveform); <=2min (fine sync)	<=3.5min (OE, crypto, and waveform); <=4min(fine sync)	.5 - 2.5 min	.5 - 2.5 min	N/A
<b>Restart &lt; 50 milliseconds (Core configuration only)</b>					
N/A	Operates through	(T=O) Operates through	Operates through	Operates through	N/A
<b>Restart &lt;10 seconds (Terminal)</b>					
N/A	<=2min	<=3.5min	2.5 min	2.5 min	N/A

UNCLASSIFIED

Performance Characteristics					
Development APB Objective	Current APB Development Objective/Threshold	Demonstrated Performance (include Date of Demonstration)	Current Estimate/Actual	Deviation	
<b>Restart &lt;10 seconds (Link-16 waveform)</b>					
N/A	<=10sec	(T=O) <=10sec	9 sec	9 sec	N/A
<b>Restart &gt;=10 seconds and &lt;2min (Terminal)</b>					
N/A	<=2min	<=3.5min	3.2 min	3.2 min	N/A
<b>Restart &gt;=10 seconds and &lt;2min (Link-16)</b>					
N/A	<=2min	<=4min	3.2 min	3.2 min	N/A
<b>Restart &gt;= 2 min (Terminal)</b>					
N/A	<=2min	<=3.5min	3.2 min	3.2 min	N/A
<b>Restart &gt;=2 min (Link-16 Waveform)</b>					
N/A	<=2min	<=4min	3.2 min	3.2 min	N/A
<b>TACAN Start-up/Restart</b>					
N/A	<=14sec	<=30sec	15 sec	15 sec	N/A
<b>IBIT Performance</b>					
N/A	<=30sec	<=70sec	30 sec	30 sec	N/A
<b>Terminal Operating Frequency Range</b>					
N/A	Operate 2-2000 MHz	(T=O) Operate 2-2000MHz	Operation within 2 -2000 MHz	Operate 2-2000 MHz	N/A
<b>MIDS JTRS Capability</b>					
N/A	F3I for MIDS-LVT (1) and shall meet the performance measures in MIDS JTRS Core Terminal in Table 6 of the CPD in addition to TACAN and J-Voice.	(T=O) F3I for MIDS-LVT (1) and shall meet the performance measures in MIDS JTRS Core Terminal in Table 6 of the CPD in addition to TACAN and J-Voice.	11 of 11 Performance measures have been achieved in a Developmental Test period.	11 of 11 Performance measures have been achieved in a Developmental Test period.	N/A
<b>Functionality</b>					
N/A	MIDS JTRS Core Terminal will meet connectivity requirements of ALL Airborne (MIDS JTRS)	The MIDS JTRS Core Terminal shall be capable of supporting secure and non-secure	15 of 15 Performance measures have been achieved.	15 of 15 Performance measures have been achieved.	N/A

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Performance Characteristics					
Development APB Objective	Current APB Development Objective/Threshold		Demonstrated Performance (include Date of Demonstration)	Current Estimate/Actual	Deviation
	Domain Waveforms.	voice, video, and data communications by porting narrowband and wideband JTRS developed waveforms in compliance with the Software Communications Architecture. Where a MIDS JTRS Core Terminal replaces the WF/radio function(s) of one or more legacy radios and continued interoperability with legacy radios is required, software WFs will be ported and JTRS radio shall perform the same WF/radio function(s) and mission(s) supported by the legacy radios. JTRS Core Terminal will meet connectivity requirements of ported Waveforms.			
<b>Number of Channels</b>					
N/A	Threshold same as Objective	One TACAN/Link-16 plus three	1 of 1 Performance measures have	1 of 1 Performance measures have	N/A

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Performance Characteristics					
Development APB Objective	Current APB Development Objective/Threshold		Demonstrated Performance (include Date of Demonstration)	Current Estimate/Actual	Deviation
	(One TACAN/Link-16 plus three additional channels for JTRS Waveforms).	additional channels for JTRS Waveforms. Navy Initial Implementation - TACAN/Link-16 plus 3 additional channels ((2MHz- 2 GHz transceivers) as capability for future JTRS WFs) for F/A-18E/F. USAF Initial Implementation - Link-16for B-1.	been achieved.	beenachieved.	
<b>Net Ready</b>					
N/A	The system must fully support execution of joint critical operational activities identified in the applicable joint andsystem integrated architectures and the system must satisfy the technical requirements for transition to Net- Centric military operations to include 1)DISR mandated GIG IT standards and profiles	The MIDS JTRS Core Terminal will support Net -Centric military operations via a gateway. The system must be able to enter and be managed in the network, and exchange data in a secure manner to enhance mission effectiveness. The systems must have the ability to provide survivable,	5 of 5 Performance measures have been achieved. System certifiedby NSA in March2010	5 of 5 Performance measures have beenachieved. System certified by NSA in March 2010.	N/A

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Performance Characteristics				
Development APB Objective	Current APB Development Objective/Threshold	Demonstrated Performance (include Date of Demonstration)	Current Estimate/Actual	Deviation
	<p>Identified in the TV-1, 2) DISR mandated GIG KIPs identified in the KIP declaration (Table 31), 3) NCOW RM Enterprise Services 4) IA requirements including availability, integrity, authentication, confidentiality, and non-repudiation, and issuance of an IATO by the DAA, and 5) Operationally effective information exchanges; and mission critical performance and information assurance attributes, data correctness, data availability, and consistent data processing specified in the applicable joint and system integrated architecture reviews.</p>	<p>interoperable, secure and operationally effective information exchanges to enable a Net-centric military capability. The system must fully support execution of all operational activities identified in the applicable joint and system integrated architectures and the system must satisfy the technical requirements for Net-Centric military operations to include 1) DISR mandated GIG IT standards and profiles identified in the TV-1, 2) DISR mandated GIG KIPs identified in the KIP declaration (Table 31), 3) NCOW RM Enterprise Services 4) IA requirements including availability, integrity, authentication, confidentiality, and non-repudiation, and issuance of an ATO by the DAA, and</p>		

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Performance Characteristics					
Development APB Objective	Current APB Development Objective/Threshold		Demonstrated Performance (include Date of Demonstration)	Current Estimate/Actual	Deviation
	5) Operationally effective information exchanges; and mission critical performance and information assurance attributes, data correctness, data availability, and consistent data processing specified in the applicable joint and system integrated architecture reviews.				
<b>Operational Availability (Ao)</b>					
N/A	Each MIDS JTRS Terminal shall demonstrate an Ao of >0.99 for all channels.	Each MIDS JTRS Terminal shall demonstrate an Ao of >0.90	96.8%.	96.8%	N/A
<b>Software Configurable</b>					
N/A	Each MIDS JTRS Core Terminal shall provide any designated operator with the ability to load and reconfigure its modes/capabilities via software while in the operational environment	(T=O) Each MIDS JTRS Core Terminal shall provide any designated operator with the ability to load and reconfigure its modes/capabilities via software while in the operational	1 of 1 Performance measures have been achieved.	1 of 1 Performance measures have been achieved.	N/A

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Performance Characteristics					
Development APB Objective	Current APB Development Objective/Threshold	Demonstrated Performance (include Date of Demonstration)	Current Estimate/Actual	Deviation	
	environment				
<b>Growth</b>					
N/A	MIDS JTRS Core Terminal shall provide an internal growth capability through an open systems architecture approach, and shall be modular, scalable and flexible as designed to suit specific operational requirements.	(T=O) MIDS JTRS Core Terminal shall provide an internal growth capability through an open systems architecture approach, and shall be modular, scalable and flexible as designed to suit specific operational requirements.	2 of 2 Performance measures achieved.	2 of 2 Performance measures achieved.	N/A
<b>Navigation – Link-16 Position (PPLI)</b>					
N/A	=100 feet	=300 feet	Operation at ≤100 feet	≤100 feet	N/A
<b>Tactical Air Navigation (TACAN)</b>					
N/A	Capabilities equivalent to LVT	(T=O) Capabilities equivalent to LVT	Capabilities equivalent to LVT	Capabilities equivalent to LVT	N/A
<b>Spectrum Certification</b>					
N/A	Meets DD-1494 Stage 4	(T=O) Meets DD-1494 Stage 4	DD-1494 Stage 4 issued.	Meets DD-1494 Stage 4	N/A
<b>Memory/Processor Reserve</b>					
N/A	Provide growth memory and processor reserve to allow for an increased capability or functionality of each set and with each generation of radios	(T=O) Provide growth memory and processor reserve to allow for an increased capability or functionality of each set and with each generation of radios	Met with no issues.	Provide growth memory and processor reserve to allow for an increased capability or functionality of each set and with each generation of radios	N/A

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Performance Characteristics					
Development APB Objective	Current APB Development Objective/Threshold		Demonstrated Performance (include Date of Demonstration)	Current Estimate/Actual	Deviation
<b>Operational Communications</b>					
<b>Passive Synchronization</b>					
N/A	Fine Sync achieved passively	(T=O) Fine Sync achieved passively	Achieved Fine Sync passively	Fine Sync achieved passively	N/A
<b>Automatic Message Acknowledgement</b>					
N/A	IAW Mil-STD 6016C	(T=O) IAW Mil-STD 6016C	Automatic Message Acknowledgement IAW Mil-STD 6016C	IAW Mil-STD 6016C	N/A
<b>Crypto Control (CTP-11)</b>					
N/A	Proper O-level control of NSA approved crypto device	(T=O) Proper O-level control of NSA approved crypto device	Proper O-level control of NSA approved crypto device	Proper O-level control of NSA approved cryptodevice	N/A
<b>Multi-Net (CTP-10)/8d</b>					
N/A	2 simultaneous nets	(T=O) 2 simultaneo usnets	Performance of two simultaneous nets	2 simultaneous nets	N/A
<b>GIG Requirements</b>					
N/A	DISR mandated GIG requirements specified in TV-1 of ISP	(T=O) DISR mandated GIG requirements specified in TV-1 of ISP	Met DISR mandated GIG requirements specified in TV-1 of ISP	DISR mandated GIG requirements specified in TV-1 of ISP	N/A
<b>Key Information Profile (KIP)</b>					
N/A	DISA mandated GIGKIPs are identified in ISP in the KIP Declaration Table	(T=O) DISA mandated GIG KIPs are identified in ISP in the KIP Declaration Table	The DISA mandated GIG KIPs are identified in the ISP in the KIP Declaration Table	DISA mandated GIG KIPs are identified in ISP in the KIP Declaration Table	N/A
<b>Design per NCOW RM</b>					
N/A	NCOW RM Enterprise Services are met	(T=O) NCOW RM Enterprise Services are met	The NCOW RM Enterprise Services are met	NCOW RM Enterprise Services are met	N/A

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Performance Characteristics					
Development APB Objective	Current APB Development Objective/Threshold	Demonstrated Performance (include Date of Demonstration)	Current Estimate/Actual	Deviation	
<b>Information Exchange Requirements met</b>					
N/A	Operationally Effective exchanges of all messages IAW ISP	(T=O) Operationally Effective exchanges of all messages IAW ISP	Showed Operationally Effective exchange of all messages IAW ISP	Operationally Effective exchanges of all messages IAW ISP	N/A
<b>Enable CMN/CCR Reception</b>					
N/A	Receive on 4 net numbers (CMN); 4 receptions within a timeslot (CCR)	(T=O) Receive on 4 net numbers (CMN); 4 receptions within a timeslot (CCR)	MIDS JTRS CMN-4 demonstrated Objective during qualification testing.	Receive 4 net numbers (CMN); 4 receptions within a timeslot (CCR)	N/A
<b>MIDS JTRS TTNT</b>					
<b>Functionality</b>					
N/A	Same as MIDS JTRS KPP-2 Functionality: The MIDS JTRS Terminal shall be capable of supporting secure and non-secure voice, video, and data communications by porting narrowband and wideband JTRS developed WFs in compliance with the SCA. MIDS JTRS Core Terminal will meet connectivity requirements of ported waveforms.	Same as MIDS JTRS KPP-2 Functionality: Meet connectivity requirements of ALL Airborne (MIDS JTRS) Domain WFs	To be tested/validated during GFAQT and/or Platform DT/OT.	Same as MIDS JTRSKPP-2 Functionality: The MIDS JTRS Terminal shall be capable of supporting secure and non-secure voice, video, and data communications by porting narrowband and wideband JTRS developed WFs in compliance with the SCA. MIDS JTRS Core Terminal will meet connectivity requirements of ported waveforms.	
<b>Net Ready</b>					
N/A	Same as	Same as	To be	Same as MIDS	

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Performance Characteristics					
Development APB Objective	Current APB Development Objective/Threshold		Demonstrated Performance (include Date of Demonstration)	Current Estimate/Actual	Deviation
	MIDS JTRS KPP-4 Net Ready. The MIDS JTRS Terminal shall meet the three principal attributes required for any information technology system: supports military operations; is entered and managed on the network; and effectively exchanges information as detailed in CJCSM 3170 dated 18 December 2015. Refer to MIDS JTRS CPD Change Two for applicable KSAs.	MIDS JTRS KPP-4 Net Ready. (T=O) The MIDS JTRS Terminal shall meet the three principal attributes required for any information technology system: supports military operations; is entered and managed on the network; and effectively exchanges information as detailed in CJCSM 3170 dated 18 December 2015. Refer to MIDS JTRS CPD Change Two for applicable KSAs.	tested/validated during GFAQT and/or Platform DT/OT.	JTRSKPP-4 Net Ready. The MIDS JTRS Terminal shall meet the three principal attributes required for any information technology system: supports military operations; is entered and managed on the network; and effectively exchanges information as detailed in CJCSM 3170 dated 18 December 2015. Refer to MIDS JTRS CPD Change Two for applicable KSAs.	
<b>Software Configurable</b>					
N/A	Same as MIDS JTRS KPP-6 Software Configurable. MIDS JTRS Terminal shall provide any operator with the ability to load and configure its	(T=O) Same as MIDS JTRS KPP-6 Software Configurable. MIDS JTRS Terminal shall provide any operator with the ability to load and configure its modules/capa	To be tested/validated during GFAQT and/or Platform DT/OT.	Same as MIDS JTRSKPP-6 Software Configurable. MIDS JTRS Terminal shall provide any operator with the ability to load and configure its modules/capabilities via	

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Performance Characteristics					
Development APB Objective	Current APB Development Objective/Threshold		Demonstrated Performance (include Date of Demonstration)	Current Estimate/Actual	Deviation
	modules/capabilities via software while in the operational environment.	ilities via software while in the operational environment.		software while in the operational environment.	
<b>Growth</b>					
N/A	Same as MIDS JTRS KPP-6 Growth. MIDS JTRS Terminal shall provide an internal growth capability through an open systems architecture approach, and shall be modular, scalable, and flexible as defined to suit specific operational requirements.	(T=O) Same as MIDS JTRS KPP-6 Growth. MIDS JTRS Terminal shall provide an internal growth capability through an open systems architecture approach, and shall be modular, scalable, and flexible as defined to suit specific operational requirements.	To be tested/validated during GFAQT and/or Platform DT/OT.	Same as MIDS JTRSKPP-6 Growth. MIDS JTRS Terminal shall provide an internal growth capability through an open systems architecture approach, and shall be modular, scalable, and flexible as defined to suit specific operational requirements.	
<b>SWAP-C</b>					
N/A	Same as MIDS JTRS KPP-8. Terminal shall meet the requirements for Size, Weight, Consumed Power, and Consumed Cooling. Refer to MIDS JTRS CPD Change Two for applicable KSAs.	(T=O) Same as MIDS JTRS KPP-8. Terminal shall meet the requirements for Size, Weight, Consumed Power, and Consumed Cooling. Refer to MIDS JTRS CPD Change Two for applicable KSAs.	To be tested/validated during GFAQT and/or Platform DT/OT.	Same as MIDS JTRSKPP-8. Terminal shall meet the requirements for Size, Weight, Consumed Power, and Consumed Cooling. Refer to MIDS JTRS CPD Change Two for applicable KSAs.	
<b>Sustainment</b>					
N/A	Same as MIDS JTRS KPP-9. MIDS	(T=O) Same as MIDS	To be tested/validated during GFAQT	Same as MIDS JTRSKPP-9. MIDS JTRS	

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Performance Characteristics					
Development APB Objective	Current APB Development Objective/Threshold		Demonstrated Performance (include Date of Demonstration)	Current Estimate/Actual	Deviation
	JTRS shall be supportable over the 20 year projected life cycle.	JTRS KPP-9. MIDS JTRS shall be supportable over the 20 year projected life cycle.	and/or Platform DT/OT.	shall be supportable over the 20 year projected life cycle.	

**Performance Notes:**

(Ch-1) Per approved MIDS JTRS CPD Change Two - parameter added

**Requirements Source:** MIDS ORD (MIDS-LVT) dated July 25, 2004, MIDS JTRS CPD dated July 16, 2013, MIDS JTRS CPD Change Two approved November 19, 2019 by Vice Chief Naval of Operations.

## Acquisition Budget Estimate

### Total Acquisition Cost

Category	Base Year	SAR Production Estimate	APB Change 6 07/07/2020		Budget Estimate PB 2023		Deviation
			Objective (BY 2003 \$M)	Threshold (BY 2003 \$M)	BY\$	TY\$	
RDT&E	2003	869.4	2,053.1	2,258.4	2,174.6	2,522.9	5.92%
Procurement	2003	955.4	2,392.2	2,631.4	2,627.1	3,391.0	9.82%
MILCON	2003						N/A
Acq. O&M	2003						N/A
<b>Total</b>		<b>1,824.8</b>	<b>4,4545.3</b>	<b>4,889.8</b>	<b>4,801.7</b>	<b>5,913.9</b>	
PAUC	2003	0.616	0.406	0.447	0.404	0.498	-0.57%
APUC	2003	0.339	0.237	0.261	0.240	0.310	1.39%

### Total End Item Quantity

Quantity Category	Current APB Quantity	Current Estimate Quantity
Development	850	956
Procurement	10,086	10,807

#### Budget Notes:

Procurement TY\$M: \$253.4M increase in cost due to USA being funded to procure 228 MIDS JTRS BU3 terminals and Ground Ancillary Support Equipment (GASE) to support Army specific requirements.

Procurement TY\$M: \$147.6M increase in cost due to an additional 493 USN and USAF MIDS JTRS terminals that were previously unaccounted for.

#### Quantity Notes:

The unit of measure is terminals.

Procurement quantities include MIDS terminals for U.S. Navy, U.S. Air Force, and U.S. Army platforms. The current estimate includes MIDS JTRS procurement quantities for the Phase 2B Core terminals, Four Net Concurrent Multi-Netting with Concurrent Contention Receive (CMN-4), and Tactical Targeting Network Technology (TTNT).

Procurement budgets include funding to upgrade terminals, e.g. make a Core terminal CMN-4 capable, CMN-4 to TTNT, and MIDS-LVT to BU2. However, these terminals are not included in future quantity counts as they have already been accounted for when they were initially procured.

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### Risk and Sensitivity Analysis

Risks and Sensitivity Analysis	
Current Procurement Cost (March 2022)	
1.	The current procurement estimate is \$3.42 Billion (TY\$) which is based on actuals, and the estimated cost of terminals and retrofit kits. MIDS Program Office (MPO) is estimating a quantity of 11,881 U.S. MIDS-LVT and MIDS JTRS terminals. The procurement quantity estimate includes U.S. only terminals currently fielded and on contract plus known requirements FY 2022 through FY 2027. This estimate is dependent on the platform orders and is not controlled by MIDS. It was significantly increased in FY 2015 when the Air Force made the decision to purchase the MIDS JTRS Four Concurrent Multi-Netting with Concurrent Contention Receive (CMN-4) and then again in FY 2022 when the Army was funded for MIDS JTRS CMN-4 terminals and Ground Ancillary Support Equipment (GASE).
Original Baseline Estimate (March 1994)	
2.	Joint Requirements Oversight Council Memorandum (JROCM 031-90) approved the Mission Need Statement (MNS) for MIDS-Low Volume Terminal (MIDS-LVT) in 1990. The original baseline was for MIDSLVT Milestone (MS) II which authorized MIDS to proceed with MIDS-LVT Engineering Manufacturing and Development (EMD). At MS III, Assistant Secretary of the Navy (Research, Development, and Acquisition) (ASN(RDA)) authorized Full Rate Production for MIDS-LVT in 2003. Later in July 2004 ASN approved the acquisition strategy to develop MIDS JTRS via an Engineering Change Proposal (ECP). The July 2012 ADM designated MIDS as an ACAT IC program transferring program monitoring from Cost Assessment and Program Evaluation office (CAPE) to the Navy Center for Cost Analysis.
Revised Original Estimate (N/A)	
None	
Current Baseline Estimate (July 2020)	
1.	The Multifunctional Information Distribution System (MIDS) cost model is built using Microsoft Excel 2010. Total Life Cycle Cost Estimate for MIDS is based on a Sigmoid (S)-Curve. The generated point estimate is based on the developed Cost Estimating Relationships (CERs) and inputted sunk costs rather than an estimate at a chosen confidence level. MIDS has incorporated the actual costs of our most recent development of MIDS Joint Tactical Radio System (MIDS JTRS) Phase 2B to build in more confidence and validate the accuracy.
2.	The Program Office Estimate (POE) reflects an updated forecast of the quantity of MIDS terminals (dated January 12, 2019). The O&S costs are based on an estimate which was evaluated by the Air Force Cost Analysis Agency (AFCAA) and Naval Center for Cost Analysis in support of the MIDS JTRS Full Production & Fielding (FP&F) decision. The O&S estimate quantity of 9,029 terminals includes U.S. only terminals currently fielded and on contract plus known requirements. The terminal lifecycle of 20 years includes a phase-in, steady state, and phase-down profile. Development units have no sustainment costs.

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## Unit Cost

### *Current Baseline Compared with Current Estimate*

Category (\$M)	Current APB	Current Estimate	% Change	NMC Breach
<b>PAUC</b>				
Cost	4,445.3	4,801.7	8.02%	No
Quantity	10936	11881	N/A	N/A
Unit Cost	0.406	0.404	-0.57%	No
<b>APUC</b>				
Cost	2,392.2	2,627.1	9.82%	No
Quantity	10086	10925	N/A	N/A
Unit Cost	0.237	0.240	1.39%	No

### *Original Baseline Compared with Current Estimate*

Category (\$M)	Original APB	Current Estimate	% Change	NMC Breach
<b>PAUC</b>				
Cost	1,091.4	4,801.7	339.96%	No
Quantity	672	11,881	N/A	N/A
Unit Cost	1.624	0.404	-75.12%	No
<b>APUC</b>				
Cost	523.7	2,627.1	401.64%	No
Quantity	630	10925	N/A	N/A
Unit Cost	0.831	0.240	-71.07%	No

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## Contracts

Contract Data (\$TYM)		
Contract Number	N0003915D0042	
Effort Number		
Modification Number	17	
Award Date	21 Aug 2015	
Definitization Date	21 Aug 2015	
Order Number		
CAGE Code/CAGE Legal Name	081U3/ Data Link Solutions LLC	
Contract Title	DLS MIDS-LVT Production	
Contract Address	350 Collins Rd NE, Cedar Rapids IA 52498	
Contracts/Effort Price, Quantity, and Performance (\$M)		
Initial Target Price	Current Target Price	
14.62	87.7	
Initial Ceiling Price	Current Ceiling Price	
366.52	428.3	
Contract's EAC: 87.7	PM's EAC: 87.7	
Initial Quantity	Current Quantity	Delivered Quantity
57	255	164
BAC	BCWP	ACWP
N/A	N/A	N/A
BCWS	Cost Variance	Schedule Variance
N/A	N/A	N/A

### Contract Notes:

This production contract includes nonrecurring engineering, supportability, and the manufacture of MIDS Low Volume Terminal (LVT) and associated spares. Foreign Military Sales are not included in the supplemental contract cost information. This is a Multiple Award Firm Fixed Price (FFP) Indefinite Delivery Indefinite Quantity (IDIQ) contract. Delivery Orders are competed between two vendors, ViaSat and DLS. Current Contract Target Price reflects orders awarded to this vendor.

### Cost Variance:

Cost and Schedule Variance reporting is not required on this (IDIQ/FFP/CPFF) contract.

### Schedule Variance:

Cost and Schedule Variance reporting is not required on this (IDIQ/FFP/CPFF) contract.

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Contract Data (\$TYM)		
Contract Number	N0003915D0043	
Effort Number		
Modification Number	23	
Award Date	21 Aug 2015	
Definitization Date	21 Aug 2015	
Order Number		
CAGE Code/CAGE Legal Name	47358/ VIASAT INC	
Contract Title	Viasat MIDS-LVT Production	
Contract Address	6155 El Camino Real Carlsbad, CA 92009	
Contracts/Effort Price, Quantity, and Performance (\$M)		
Initial Target Price	Current Target Price	
5.12	113.72	
Initial Ceiling Price	Current Ceiling Price	
366.52	599.1	
Contract's EAC: 599.1	PM's EAC: 599.1	
Initial Quantity	Current Quantity	Delivered Quantity
26	183	151
BAC	BCWP	ACWP
N/A	N/A	N/A
BCWS	Cost Variance	Schedule Variance
N/A	N/A	N/A

**Contract Notes:**

This production contract includes nonrecurring engineering, supportability, and the manufacture of MIDS Low Volume Terminal (LVT) and associated spares. Foreign Military Sales are not included in the supplemental contract cost information. This is a Multiple Award Firm Fixed Price (FFP) Indefinite Delivery Indefinite Quantity (IDIQ) contract. Delivery Orders are competed between two vendors, ViaSat and DLS. Current Contract Target Price reflects orders awarded to this vendor.

**Cost Variance:**

Cost and Schedule Variance reporting is not required on this (IDIQ/FFP/CPFF) contract.

**Schedule Variance:**

Cost and Schedule Variance reporting is not required on this (IDIQ/FFP/CPFF) contract.

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Contract Data (\$TYM)		
Contract Number	N0003915D0007	
Effort Number		
Modification Number	25	
Award Date	16 June 2015	
Definitization Date	16 June 2015	
Order Number		
CAGE Code/CAGE Legal Name	081U3/ Data Link Solutions LLC	
Contract Title	DLS MIDS JTRS Production	
Contract Address	350 Collins Rd NE, Cedar Rapids IA 52498	
Contracts/Effort Price, Quantity, and Performance (\$M)		
Initial Target Price	Current Target Price	
50.12	633.61	
Initial Ceiling Price	Current Ceiling Price	
478.6	1055.1	
Contract's EAC	PM's EAC	
Initial Quantity	Current Quantity	Delivered Quantity
153	1716	1612
BAC	BCWP	ACWP
N/A	N/A	N/A
BCWS	Cost Variance	Schedule Variance
N/A	N/A	N/A

**Contract Notes:**

This production contract includes nonrecurring engineering, supportability, and the manufacture of MIDS Joint Tactical Radio System (JTRS) and associated spares. Foreign Military Sales are not included in the supplemental contract cost information. This is a Multiple Award Firm Fixed Price (FFP) Indefinite Delivery Indefinite Quantity (IDIQ) contract. Delivery Orders are competed between two vendors, ViaSat and DLS. Current Contract Target Price reflects orders awarded to this vendor.

**Cost Variance:**

Cost and Schedule Variance reporting is not required on this (IDIQ/FFP/CPFF) contract.

**Schedule Variance:**

Cost and Schedule Variance reporting is not required on this (IDIQ/FFP/CPFF) contract.

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Contract Data (\$TYM)		
Contract Number	N0003915D0008	
Effort Number		
Modification Number	19	
Award Date	16 June 2015	
Definitization Date	16 June 2015	
Order Number		
CAGE Code/CAGE Legal Name	47358/ VIASAT INC	
Contract Title	Viasat MIDS JTRS Production	
Contract Address	6155 El Camino Real Carlsbad, CA 92009	
Contracts/Effort Price, Quantity, and Performance (\$M)		
Initial Target Price	Current Target Price	
19.61	456.23	
Initial Ceiling Price	Current Ceiling Price	
478.6	698.63	
Contract's EAC: 456.23	PM's EAC: 456.23	
Initial Quantity	Current Quantity	Delivered Quantity
42	1390	1347
BAC	BCWP	ACWP
N/A	N/A	N/A
BCWS	Cost Variance	Schedule Variance
N/A	N/A	N/A

**Contract Notes:**

This production contract includes nonrecurring engineering, supportability, and the manufacture of MIDS Joint Tactical Radio System (JTRS) and associated spares. Foreign Military Sales are not included in the supplemental contract cost information. This is a Multiple Award Firm Fixed Price (FFP) Indefinite Delivery Indefinite Quantity (IDIQ) contract. Delivery Orders are competed between two vendors, ViaSat and DLS. Current Contract Target Price reflects orders awarded to this vendor.

**Cost Variance:**

Cost and Schedule Variance reporting is not required on this (IDIQ/FFP/CPFF) contract.

**Schedule Variance:**

Cost and Schedule Variance reporting is not required on this (IDIQ/FFP/CPFF) contract.

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Contract Data (\$TYM)		
Contract Number	N0003920D0057	
Effort Number		
Modification Number	5	
Award Date	19 May 2020	
Definitization Date	19 May 2020	
Order Number		
CAGE Code/CAGE Legal Name	081U3/ Data Link Solutions LLC	
Contract Title	DLS MIDS JTRS and TTNT Production	
Contract Address	350 Collins Rd NE, Cedar Rapids IA 52498	
Contracts/Effort Price, Quantity, and Performance (\$M)		
Initial Target Price	Current Target Price	
42.52	266.6	
Initial Ceiling Price	Current Ceiling Price	
998.83	998.83	
Contract's EAC: 266.6	PM's EAC: 266.6	
Initial Quantity	Current Quantity	Delivered Quantity
218	671	192
BAC	BCWP	ACWP
N/A	N/A	N/A
BCWS	Cost Variance	Schedule Variance
N/A	N/A	N/A

**Contract Notes:**

This production contract includes nonrecurring engineering, supportability, and the manufacture of MIDS Joint Tactical Radio System (JTRS) and Tactical Targeting Network Technology (TTNT) and associated spares. Foreign Military Sales are not included in the supplemental contract cost information. This is a Multiple Award Firm Fixed Price (FFP) Indefinite Delivery Indefinite Quantity (IDIQ) contract. Delivery Orders are competed between two vendors, ViaSat and DLS. Current Contract Target Price reflects orders awarded to this vendor.

**Cost Variance:**

Cost and Schedule Variance reporting is not required on this (IDIQ/FFP/CPFF) contract.

**Schedule Variance:**

Cost and Schedule Variance reporting is not required on this (IDIQ/FFP/CPFF) contract.

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Contract Data (\$TYM)		
Contract Number	N0003920D0058	
Effort Number		
Modification Number	5	
Award Date	19 May 2020	
Definitization Date	19 May 2020	
Order Number		
CAGE Code/CAGE Legal Name	47358/ VIASAT INC	
Contract Title	Viasat MIDS JTRS and TTNT Production	
Contract Address	6155 El Camino Real Carlsbad, CA 92009	
Contracts/Effort Price, Quantity, and Performance (\$M)		
Initial Target Price	Current Target Price	
32.41	185.25	
Initial Ceiling Price	Current Ceiling Price	
998.83	998.83	
Contract's EAC: 185.25	PM's EAC: 185.25	
Initial Quantity	Current Quantity	Delivered Quantity
159	677	190
BAC	BCWP	ACWP
N/A	N/A	N/A
BCWS	Cost Variance	Schedule Variance
N/A	N/A	N/A

**Contract Notes:**

This production contract includes nonrecurring engineering, supportability, and the manufacture of MIDS Joint Tactical Radio System (JTRS) and Tactical Targeting Network Technology (TTNT) and associated spares. Foreign Military Sales are not included in the supplemental contract cost information. This is a Multiple Award Firm Fixed Price (FFP) Indefinite Delivery Indefinite Quantity (IDIQ) contract. Delivery Orders are competed between two vendors, ViaSat and DLS. Current Contract Target Price reflects orders awarded to this vendor.

**Cost Variance:**

Cost and Schedule Variance reporting is not required on this (IDIQ/FFP/CPFF) contract.

**Schedule Variance:**

Cost and Schedule Variance reporting is not required on this (IDIQ/FFP/CPFF) contract.

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## Technologies and Systems Engineering

### *Significant Technical Risks*

Significant Schedule and Technical Risks	
Milestone III (September 2003)	
1.	Risk: Lack of vendor experience and continued impact to terminal completion and delivery. DLS delivery of LRIP terminals commenced November 2001. ViaSat lacked Multifunctional Information Distribution (MIDS) experience and deliveries did not commence until May 2002 at a lower rate than contractually required. With experience, both vendors met terminal delivery schedules.
2.	Risk: Readiness and successful completion of Operational Evaluation (OPEVAL). The F/A-18 MIDS-LVT Technical Evaluation (TECHEVAL) commenced April 2002. The Operational Evaluation (OPEVAL) commenced late October 2002 and completed March 2003. The OPEVAL Report May 2003 cited MIDS as operationally effective, not operationally suitable. Verification of Correction of Deficiencies (VCD) commenced July 2003 and successfully completed August 2003.
Current Estimate (March 2022)	
1.	Risk: Nothing Significant to Report

## Deliveries and Expenditures

Deliveries				
Delivered to Date	Planned to Date	Actual to Date	Total Quantity	Percent Delivered
Development	842	842	956	88.08%
Production	7821	7701	10807	71.26%
Total Program Quantity Delivered	8663	8543	11763	72.63%

### Expended and Appropriated (TY \$M)

Total Acquisition Cost: \$5913.9

Expended to Date: \$4775.21

Percent Expended: 80.39%

Total Funding Years: 32

Years Appropriated: 27

Percent Years Appropriated: 85.75%

Appropriated to Date: \$4978.9

Percent Appropriated: 84%

The above data is current as of April 18, 2022.

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## Low Rate Initial Production

Item	Initial LRIP Decision	Current Total LRIP
<b>Approval Date</b>	5/11/2000	12/8/2003
<b>Approved Quantity</b>	70	544
<b>Reference</b>	Milestone II ADM	Milestone C ADM
<b>Start Year</b>	2000	2000
<b>End Year</b>	2001	2003

### LRIP Note:

The MDA authorized LRIP on May 11, 2000 for 70 MIDS Low Volume Terminal (MIDS-LVT). Three additional LRIP decisions were authorized for a cumulative total of 544 MIDS-LVT and MIDS-LVT(2) variants (about 25 percent of the then planned procurement of 2,145 terminals). Based on a Milestone C decision in 2003 for the MIDS program, USD (AT&L) General Counsel and senior staff changed the title of the 2009 DAB decision for MIDS JTRS to Limited Production and Fielding (LP&F). A follow-on decision for the MIDS JTRS variant was made for Full Production and Fielding (FP&F), and not FRP.

On December 23, 2009 an ADM approved the award of the limited production of 41 MIDS JTRS variant terminals to support the Navy production schedule and Joint Surveillance Target Attack Radar System (JSTARS) integration and testing requirements. On January 31, 2011, an ADM approved an award of a second limited production for 42 MIDS JTRS variant terminals to support Navy production, Air Force and other Service requirements.

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## Operating and Support Costs

### Total Program O&S Cost Compared with Baseline

	Current APB Objective (BY\$)	Current APB Threshold (BY\$)	Current Estimate (BY\$)	Current Estimate (TY\$)	Deviation
Total O&S (\$Millions)	2,064.8	2,271.3	2,213.3	3,970.4	6.71%

### O&S Cost Breakdown

Category (BY2003 \$K)	MIDS
Unit-Level Manpower	0.250
Unit Operations	0.000
Maintenance	0.440
Sustaining Support	4.120
Continued System Improvements	5.430
Other	0.000
Total O&S	10.240

**Cost Estimate Source:** POE, dated March 2022

#### O&S Cost Notes:

The POE reflects an updated forecast of the quantity of MIDS terminals. The O&S costs are based on an estimate evaluated by the Air Force Cost Analysis Agency (AFCAA) and Naval Center for Cost Analysis in support of the MIDS Joint Tactical Radio System (JTRS) Full Production & Fielding (FP&F) decision. The quantity of 10,807 includes U.S. only terminals currently fielded and known requirements for FY 2022 through FY 2027. This period includes a phase-in, steady state, and phase-down profile.

The current production terminal estimate increased by 721 terminals due to the increased procurement orders from the U.S. Navy, Air Force and Army. The current Development units increased by 106 terminals and do not have any sustainment costs associated to them.

There are 956 development terminals that have no sustainment costs.

- a. Disposal/Demilitarization Cost Estimate and Source of Estimate: Disposal costs are not identified at this time.
- b. Sustainment Strategy: For Navy aircraft and Army platforms, maintenance is a three-level structure (i.e. Organizational, Intermediate/Direct Support and Depot). For Navy ships and Air Force aircraft platforms, it is a two-level structure (i.e. Organizational and Depot). Navy aircraft support costs assume the use of the Consolidated Automated Support System at the Intermediate level of maintenance. The terminal reliability and maintainability characteristics used are consistent with the requirements contained in the ORD.
- c. For Each Acquired System or System Variant:
  - i. Quantity to Sustain: 10,807
  - ii. First Operational Fiscal Year: 1996
  - iii. Final Operational Fiscal Year: 2047
  - iv. Unit Expected Service Life: 20 years
- d. Antecedent System(s) O&S Costs: No Antecedent. The MIDS Low Volume Terminal (MIDS-LVT) does not replace an existing DoD system because it provides Link 16 capability to platforms that were unable to employ analogous systems due to space and weight constraints. The MIDS JTRS

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terminal is a form, fit, and function replacement and upgrade for MIDS-LVT in selected DoD systems.

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