Selected Acquisition Report (SAR)

RCS: DD-A&T(Q&A)823-554

Multifunctional Information Distribution System (MIDS)

As of FY 2020 President's Budget

Defense Acquisition Management
Information Retrieval
(DAMIR)

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Sensitivity Originator

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Common Acronyms and Abbreviations for MDAP Programs

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(AT&L) - Under Secretary of Defense (Acquisition, Technology and Logistics)
USD(A&S) - Under Secretary of Defense (Acquisition and Sustainment)

Program Information

Program Name

Multifunctional Information Distribution System (MIDS)

DoD Component

Navy

Joint Participants

Air Force; Army

Navy is the lead Component as specified in the USD(AT&L) Navy Program Delegation Decisions Acquisition Decision Memorandum (ADM) dated July 24, 2012.

Responsible Office

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References

SAR Baseline (Production Estimate)

Navy Acquisition Executive (NAE) Approved Acquisition Program Baseline (APB) dated March 22, 2006

Approved APB

Assistant Secretary of the Navy (Research, Development & Acquisition) (ASN(RDA)) Approved Acquisition Program Baseline (APB) dated November 16, 2017

Mission and Description

The Multifunctional Information Distribution System (MIDS) program consists of two products, MIDS Low Volume Terminal (MIDS-LVT) and MIDS Joint Tactical Radio System (MIDS JTRS).

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 contracted for 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 integral components of Naval Integrated Fire Control (NIFC) and link together aircraft and the aircraft carrier itself.

Executive Summary

Program Highlights Since Last Report

As of March 12,2019 the MIDS Program Office (MPO) contracted for 2974 MIDS Joint Tactical Radio System (JTRS) Terminals, of which 1635 have been delivered and accepted by the government. This is an increase of over 500 terminals from December 2017. Together with over 10,000 MIDS-Low Volume Terminal (LVT) Terminals procured and delivered, 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 our industry partners to deliver interoperable, affordable and secure Link 16 and programmable networking technologies for the Joint, Coalition, and International Warfighter.

The MIDS-LVT Block Upgrade 2 (BU2) hardware and software development contract was awarded in November 2013. This Engineering Change Proposal (ECP) provides the critical upgrades to meet the National Security Agency mandate for Crypto Modernization (CM) and National Telecommunications and Information Agency and Federal Aviation Agency mandate for Frequency Remapping (FR) capability to the MIDS-LVT terminal. MIDS-LVT BU2 is undergoing formal government qualification acceptance testing, and preparing for platform integration and retrofit production activities for 4th quarter FY 2019.

MIDS JTRS Four Net Concurrent Multi-Netting with Concurrent Contention Receive (CMN-4) is an enhancement to Link 16 and provides a significant capability upgrade to the Fleet. Software discrepancies discovered during Developmental Test in March 2017 prevented MIDS JTRS CMN-4 entrance to Operational Testing. Throughout 2018, software discrepancies were fixed, regression testing was performed, early flight confidence testing was completed and an Operational Test event commenced in September 2018. A Limited Fielding and Full Production Decision was granted 10 September 2018. A Full Fielding and Production Decision was granted February 25, 2019. An Initial Operational Capability (IOC) decision is expected in March 2019.

The Joint Requirements Oversight Council (JROC) endorsed the advanced capabilities of CMN-4 and Enhanced Throughput (ET) as the DoD baseline for all future upgrades to Link 16 platforms [JROCM 089-18, August 20, 2018]. As a result of this endorsement and the CM and FR mandates, MIDS JTRS CMN-4 Navy and Air Force platform customers are looking to accelerate their terminal procurement plans in FY 2019.

The U.S. Air Force continues to fund development efforts contracted by the MPO to support migrating F-15, F-16 and F-22 squadrons to MIDS JTRS CMN-4. As a life cycle cost savings/avoidance opportunity, the MPO has developed a common software/firmware build (Integrated Build 8.x) that will support both the F-15 and F-16. Integrated Build 8 is scheduled to go into qualification testing in the 2nd quarter of FY 2019. F-15 and F-16 program offices have been concurrently conducting early flight testing with plans to conduct final development and operational testing in the 3rd quarter of FY 2019.Once completed, the MIDS JTRS F-15 Operational Test is scheduled to commence. The MIDS JTRS F-22 is undergoing system integration and pre-qualification testing activities. A Test Readiness Review is scheduled for February 2019 followed by formal qualification and acceptance testing and the first flight test in 4th quarter of FY 2019. The MPO continues to coordinate with the PEO (Joint Strike Fighter) to address Link 16 interoperability requirements for future implementation into the platform.

MIDS JTRS Tactical Targeting Network Technology (TTNT) provides an Internet Protocol-based networking capability on tactical aircraft. MIDS JTRS TTNT development started in October 2014 and evolved into two concurrent development efforts due to the AWS-3 sell off of a subset of existing TTNT L-Band frequencies. The second effort, TTNT Spectrum Relocation, is building off the MIDS JTRS TTNT EDM Terminal L-Band design to support TTNT operations in the combined L-Band and S-Band frequency spectrum.

The MIDS Program awarded the MIDS JTRS TTNT System Design and Development effort to Data Link Solutions and ViaSat in September 2016 to perform all of the necessary design, integration, testing, and qualification work to support the MIDS JTRS TTNT terminal. Funding shortfalls reported in SAR 2017 were resolved early in FY 2018 and development and system integration activities have progressed. Deliveries of production representative terminals to support early platform (E

-2D, EA-18G) integration and air worthiness testing efforts started in 4th quarter of FY 2018. Qualification testing is scheduled to begin in 2nd quarter of FY 2019. EA-18G Development Testing is scheduled to commence in 3rd quarter of FY 2019. MIDS JTRS TTNT IOC is projected to be accomplished in the 1st quarter of FY 2022.

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. The next evolution of this modernized capability was funded beginning in FY 2018 to incorporate additional technologies targeted to out-pace current and emerging operational threats. The original scope of this enhancement evolved throughout FY 2018 due to funding reductions and changes in scope. Specification development and re-planning continued throughout FY 2018 and delayed the April 2018 Development contract award. The Development award is now expected to be February 2019.

Significant MIDS production contract actions during this reporting period include:

- Lot 6b MIDS JTRS TTNT Production Representative Terminal (PRT) – Firm Fixed Price Delivery Order under ViaSat Production contract for 15 PRTs. (April 2018)
- Lot 7 MIDS JTRS CMN-4 Production – Firm Fixed Price Delivery Order under the ViaSat Production contract for 329 MIDS JTRS CMN-4 Terminals (May 2018); Firm fixed Price Delivery Order under DLS Production contract for 88 MIDS JTRS CMN-4 Terminals. (June 2018)
- Lot 7a MIDS JTRS CMN-4 Production – Firm Fixed Price Delivery Order under the ViaSat Production contract for 181 MIDS JTRS CMN-4 Terminals (September 2018); and Firm Fixed Price Delivery Order under DLS Production contract for 252 MIDS JTRS CMN-4 Terminals. (September 2018)
- Lot 19 MIDS-LVT Production – Firm Fixed Price Delivery Order under DLS Production contract for 181 Terminals (September 2018); and Firm Fixed Price Delivery Order under ViaSat Production contract for 47 Terminals. (September 2018)
- Lot 7b MIDS JTRS TTNT Production Representative Terminal (PRT) – Firm Fixed Price Delivery Order under DLS Production contract for 15 PRTs (November 2018)
- Lot 8 MIDS JTRS CMN-4 Production - Firm Fixed Price Delivery under ViaSat Production contract for 170 Terminals and 44 Spares (February 2019); and Firm Fixed Price Delivery Order under DLS Production contract for 519 Terminals and 54 Spares (February 2019).

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).
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.

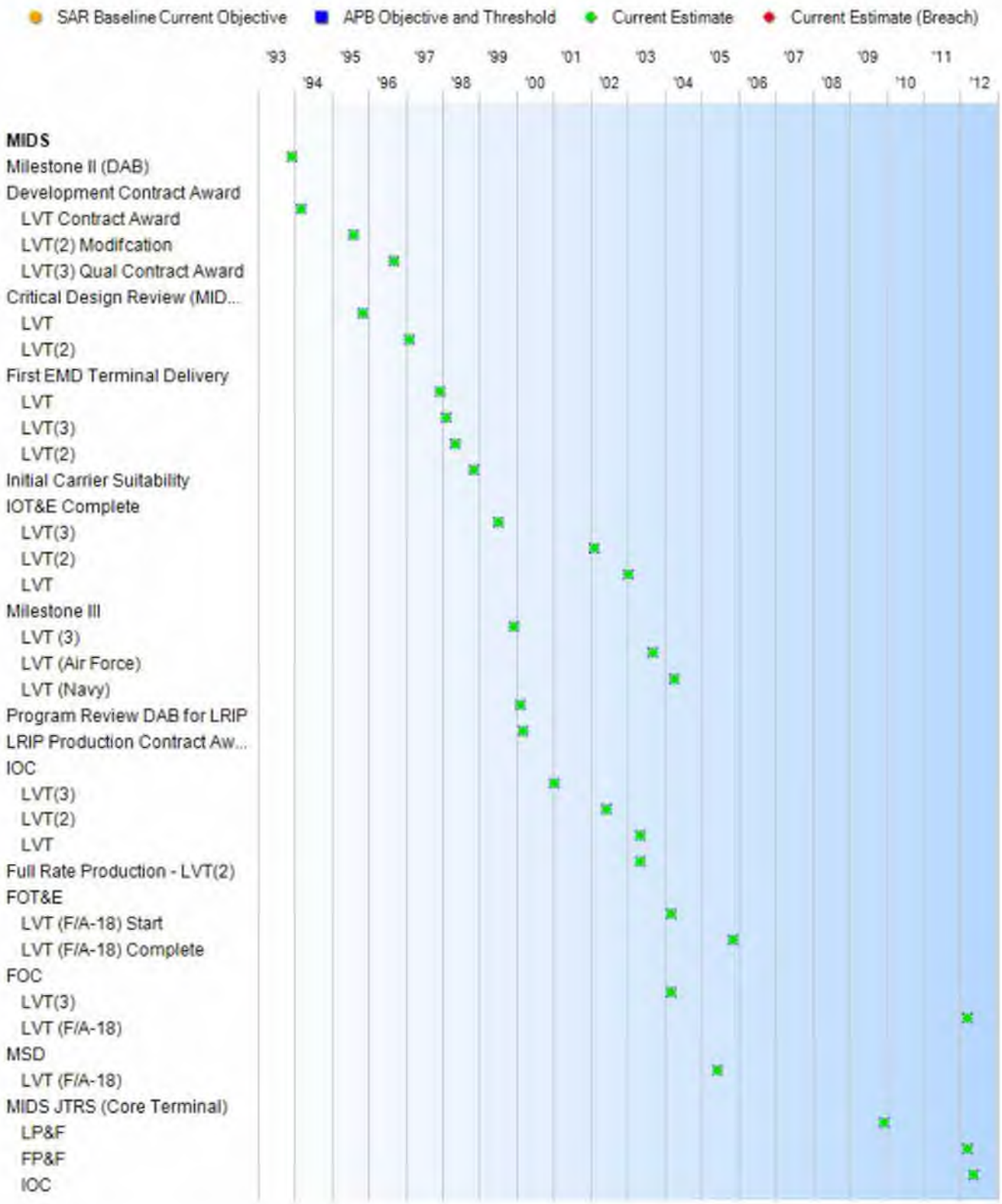
March 2015	Conducted the first MIDS JTRS CMN-4 flight on F/A-18 aircraft at China Lake.
May 2015	MIDS Modernization Increment 1 (MMI 1) demonstration testing was conducted, and development delivery orders were awarded to DLS and ViaSat.
June 2015	Responsibilities for the Link-16 waveform were transferred to MIDS program office from Joint Tactical Networking Center (JTNC).
January 2016	The MIDS Program delivered its 10,000th MIDS-LVT terminal.
November 2017	The MIDS Program delivered its 1,000th 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.

Threshold Breaches

APB Breaches		
Schedule		☐
Performance		☐
Cost	RDT&E	☐
	Procurement	☐
	MILCON	☐
	Acq O&M	☐
O&S Cost		☐
Unit Cost	PAUC	☐
	APUC	☐

Nunn-McCurdy Breaches		
Current UCR Baseline		
	PAUC	None
	APUC	None
Original UCR Baseline		
	PAUC	None
	APUC	None

Schedule


SAR Baseline Current Objective
APB Objective and Threshold
Current Estimate
Current Estimate (Breach)
'93
'94
'95
'96
'97
'98
'99
'00
'01
'02
'03
'04
'05
'06
'07
'08
'09
'10
'11
'12
MIDS
Milestone II (DAB)
Development Contract Award
LVT Contract Award
LVT(2) Modifcation
LVT(3) Qual Contract Award
Critical Design Review (MID...
LVT
LVT(2)
First EMD Terminal Delivery
LVT
LVT(3)
LVT(2)
Initial Carrier Suitability
IOT&E Complete
LVT(3)
LVT(2)
LVT
Milestone III
LVT (3)
LVT (Air Force)
LVT (Navy)
Program Review DAB for LRIP
LRIP Production Contract Aw...
IOC
LVT(3)
LVT(2)
LVT
Full Rate Production - LVT(2)
FOT&E
LVT (F/A-18) Start
LVT (F/A-18) Complete
FOC
LVT(3)
LVT (F/A-18)
MSD
LVT (F/A-18)
MIDS JTRS (Core Terminal)
LP&F
FP&F
IOC

Schedule Events				
Events	**SAR Baseline Production Estimate**	**Current APB Production Objective/Threshold**		**Current Estimate**
Milestone II (DAB)	Dec 1993	Dec 1993	Dec 1993	Dec 1993
Development Contract Award				
LVT Contract Award	Mar 1994	Mar 1994	Mar 1994	Mar 1994
LVT(2) Modifcation	Aug 1995	Aug 1995	Aug 1995	Aug 1995
LVT(3) Qual Contract Award	Sep 1996	Sep 1996	Sep 1996	Sep 1996
Critical Design Review (MIDS Terminal)	N/A			
LVT	Nov 1995	Nov 1995	Nov 1995	Nov 1995
LVT(2)	Feb 1997	Feb 1997	Feb 1997	Feb 1997
First EMD Terminal Delivery				
LVT	Dec 1997	Dec 1997	Dec 1997	Dec 1997
LVT(3)	Feb 1998	Feb 1998	Feb 1998	Feb 1998
LVT(2)	May 1998	May 1998	May 1998	May 1998
Initial Carrier Suitability	Nov 1998	Nov 1998	Nov 1998	Nov 1998
IOT&E Complete				
LVT(3)	Jul 1999	Jul 1999	Jul 1999	Jul 1999
LVT(2)	Feb 2002	Feb 2002	Feb 2002	Feb 2002
LVT	Jan 2003	Jan 2003	Jan 2003	Jan 2003
Milestone III				
LVT (3)	Dec 1999	Dec 1999	Dec 1999	Dec 1999
LVT (Air Force)	Sep 2003	Sep 2003	Sep 2003	Sep 2003
LVT (Navy)	Apr 2004	Apr 2004	Apr 2004	Apr 2004
Program Review DAB for LRIP	Feb 2000	Feb 2000	Feb 2000	Feb 2000
LRIP Production Contract Award	Mar 2000	Mar 2000	Mar 2000	Mar 2000
IOC				
LVT(3)	Jan 2001	Jan 2001	Jan 2001	Jan 2001
LVT(2)	Jun 2002	Jun 2002	Jun 2002	Jun 2002
LVT	May 2003	May 2003	May 2003	May 2003
Full Rate Production - LVT(2)	May 2003	May 2003	May 2003	May 2003
FOT&E				
LVT (F/A-18) Start	Mar 2004	Mar 2004	Mar 2004	Mar 2004
LVT (F/A-18) Complete	Nov 2005	Nov 2005	Nov 2005	Nov 2005
FOC				
LVT(3)	Mar 2004	Mar 2004	Mar 2004	Mar 2004
LVT (F/A-18)	Mar 2012	Mar 2012	Mar 2012	Mar 2012

MSD				
LVT (F/A-18)	Jun 2005	Jun 2005	Jun 2005	Jun 2005
MIDS JTRS (Core Terminal)				
LP&F	N/A	Dec 2009	Dec 2009	Dec 2009
FP&F	N/A	Mar 2012	Mar 2012	Mar 2012
IOC	N/A	May 2012	May 2012	May 2012

Change Explanations

None

Acronyms and Abbreviations

FOT&E - Follow-On Test and Evaluation
FP&F - Full Production and Fielding
IOT&E - Initial Operational Test and Evaluation
JTRS - Joint Tactical Radio System
LP&F - Limited Production and Fielding
LVT - Low Volume Terminal
MSD - Material Support Date
Qual - Qualification

(U//~~FOUO~~) Performance

Performance Characteristics			
SAR Baseline Production Estimate	**Current APB Production Objective/Threshold**	**Demonstrated Performance**	**Current Estimate**
(b)(3):10 USC § 130			

(b)(3):10 USC § 130

(b)(3):10 USC § 130

(b)(3):10 USC § 130

(b)(3):10 USC § 130

(b)(3):10 USC § 130

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(b)(3):10 USC § 130

(b)(3):10 USC § 130

(b)(3):10 USC § 130

(b)(3):10 USC § 130

Requirements Reference

MIDS ORD (MIDS-LVT) dated July 25, 2004 and MIDS JTRS CPD dated July 16, 2013

Change Explanations

None

~~(U//FOUO)~~ Notes

(b)(3):10 USC § 130

The Performance Characteristics for MIDS is For Official Use Only - Exempt from FOIA release under 5 U.S.C. 552(b)(3).

Acronyms and Abbreviations

AFCAA - Air Force Cost Analysis Agency
Ao - Operational Availability
ASN (RD&A) - Assistant Secretary of the Navy for Research, Development & Acquisition
ATO - Authority to Operate
BIT - Built in Test
BU2 - Block Upgrade 2
C2 - Command and Control
CFAQT - Contractor First Article Qualification Testing
CMEP - Coded Message Error Probability
CMN/CCR - Concurrent Multi-Netting/Concurrent Contention Receive
CMN-4 - Four Net Concurrent Multi-Netting with Concurrent Contention Receive
CPFF - Cost Plus Fixed Fee
cu. ft. - cubic feet
DAA - Designated Approving Authority
db - decibel(s)
DISR - Defense Information Standards Registry
ECP - Engineering Change Proposal
ET - Enhanced Throughput
F3I - Form, Fit, Function and interface
FDL - Fighter Data Link
FFP - Firm Fixed Price
FOT&E - Follow-on Test and Evaluation
FP&F - Full Production & Fielding
GFAQT - Government First Article Qualification Testing
GIG IT - Global Information Grid Information Technology
HPA - High Power Amplifier
hr - hour(s)
IATO - Interim Authority to Operate
IBIT - Initialization Built in Test
IDIQ - Indefinite Delivery Indefinite Quantity
IER - Information Exchange Requirements
IF - Interface
JITC - Joint Interoperability Test Command
JTIDS - Joint Tactical Information Distribution System
JTRS - Joint Tactical Radio System
kbps - kilobits per second
KIPs - Key Interface Profiles
lbs - Pounds
LET - Link 16 Enhanced Throughput
LOS - Line of sight
LVT - Low Volume Terminal
MCMTOMF - Mean Corrective Maintenance Time for Operational Mission Failures
MFHBFA - Mean Flight Hours Between False Alarms
MFHBOMF - Mean Flight Hours Between Operational Mission Failures
MHz - Megahertz
MIDS - Multifunctional Information Distribution System
Mil-Std - Military Standard
min - minute(s)
MJCS - Memorandum Joint Chiefs of Staff
MRT - Mean Repair Time
MTBF - Mean Time Between Failure
MTBOMF - Mean Time Between Operational Mission Failures

MTTR - Mean Time to Repair
NCOW RM - Net-Centric Operations and Warfare Reference Model
nm, nmi - Nautical mile
NSA - National Security Agency
OE - Operational Environment
O-Level - Organization Level
OTAR - Over the Air Re-keying
PAC4 - Packed-4
PCD - Percent Correct Detect
RMD - Resource Management Decision
sec - second(s)
SINCGARS - Single Channel Ground and Airborne Radio System
SMORD - Single MIDS ORD
SSS - System Segment Specification
STANAG - Standardization Agreement
TACAN - Tactical Air Navigation
TTNT - Tactical Targeting Network Technology
TV - Technical View
w - watt(s)

Track to Budget

General Notes

The current RDT&E increased to fund MIDS Joint Tactical Radio System (JTRS) Modernization Increment 2 (MMI2)..
The current production terminal quantity estimate increased by a total of 522 (53 Development/469 Procurement) terminals due to a procurement order from the U.S. Air Force (Platforms: F-15, B-1, B-52).

RDT&E

Appn	BA	PE		
Navy	07	0205604N		
Project		Name		
2126		ATDLS Integration	(Shared)	(Sunk)
Navy	05	0205604N		
Project		Name		
2126		ATDLS Integration	(Shared)	(Sunk)
Navy	07	0205604N		
Project		Name		
3020		MIDS/JTRS	(Shared)	
Navy	05	0604234N		
Project		Name		
3051		E-2D Advanced Hawkeye	(Shared)	(Sunk)
Navy	05	0604270N		
Project		Name		
0556		EW Counter Response	(Shared)	(Sunk)
2781		Navy EA-6B Integration/EA-6B	(Shared)	(Sunk)
E0556		EA-6B Integration/EA-6B	(Shared)	(Sunk)
E2781		EA-6B Integration/EA-6B	(Shared)	(Sunk)
Navy	05	0604280N		
Project		Name		
3020		MIDS/JTRS	(Shared)	
Notes:		In FY 2020 PB MIDS RDT&E Funding moved from PE 025604N to 0604280N (Project 3020 for both).		
3073		AMF/JTRS	(Shared)	(Sunk)
Army	05	0603713A		
Project		Name		
D370		Army MIDS	(Shared)	(Sunk)
Army	05	0604280A		
Project		Name		
162		Network Enterprise Domain (NED)	(Shared)	(Sunk)
Air Force	07	0101126F		
Project		Name		
675344		B-1B Modernization	(Shared)	(Sunk)

Air Force	3600	07	0101127F		
	Project		**Name**		
	675345		B-2 Modernization	(Shared)	(Sunk)
Air Force	3600	05	0207130F		
	Project		**Name**		
	F15		Air Force MIDS/F-15C/D	(Shared)	(Sunk)
Air Force	3600	07	0207133F		
	Project		**Name**		
	672671		F-16 Squadrons	(Shared)	(Sunk)
Air Force	3600	05	0207133F		
	Project		**Name**		
	672671		Air Force MIDS/F-16	(Shared)	(Sunk)
Air Force	3600	05	0207134F		
	Project		**Name**		
	674703		Air Force MIDS/F-15E	(Shared)	(Sunk)
Air Force	3600	07	0207134F		
	Project		**Name**		
	676020		B-1B Modernization	(Shared)	(Sunk)
Air Force	3600	07	0207138F		
	Project		**Name**		
	674788		F-22 Mandates	(Shared)	(Sunk)
Air Force	3600	07	0207417F		
	Project		**Name**		
	67411L		Airborne Warning and Control System (AWACS)	(Shared)	(Sunk)
Air Force	3600	07	0207448F		
	Project		**Name**		
	675045		C2ISR Tactical Data Link	(Shared)	(Sunk)
Air Force	3600	07	0208006F		
	Project		**Name**		
	675380		Combat Air Forces (CAF) Ping Systems	(Shared)	(Sunk)
Air Force	3600	07	0305207F		
	Project		**Name**		
	674754		Manned Reconnaissance Systems	(Shared)	(Sunk)
Air Force	3600	05	0604240F		
	Project		**Name**		
	11B002		Air Force MIDS	(Shared)	(Sunk)
Air Force	3600	05	0604280F		
	Project		**Name**		
	655068		Joint Tactical Radio System (JTRS)	(Shared)	(Sunk)

Air Force	3600	05	0604281F		
	Project		**Name**		
	655050		TLC System Integration	(Shared)	(Sunk)
Defense-Wide	0400	05	0603883C		
	Project		**Name**		
	0010		DOD	(Shared)	(Sunk)
Defense-Wide	0400	04	0604250D		
	Project		**Name**		
	P250		Advanced Innovative Technologies	(Shared)	(Sunk)
Defense-Wide	0400	05	0604771D		
	Project		**Name**		
	P771		OSD, DA/JTRS	(Shared)	(Sunk)
	P773		OSD, DA/Multifunctional Information Distribution System	(Shared)	(Sunk)

Procurement

Appn		**BA**	**PE**		
Navy	1506	01	0204136N		
	Line Item		**Name**		
	0145		F/A-18E/F (Fighter) Hornet	(Shared)	(Sunk)
Navy	1506	05	0204154N		
	Line Item		**Name**		
	0511		EA-6 Series	(Shared)	
Navy	1506	05	0204136N		
	Line Item		**Name**		
	0525		F-18 Series	(Shared)	
Navy	1506	05	0204152N		
	Line Item		**Name**		
	0544		E-2 Series	(Shared)	(Sunk)
Navy	1611	02	0204112N		
	Line Item		**Name**		
	2001		Carrier Replacement Program	(Shared)	
	2086		Multi-Purpose CVNs	(Shared)	(Sunk)
Navy	1611	02	0204222N		
	Line Item		**Name**		
	2122		DDG-51	(Shared)	
Navy	1611	02	0204230N		
	Line Item		**Name**		
	2127		Littoral Combat Ship	(Shared)	
Navy	1611	03	0204411N		
	Line Item		**Name**		

	3035		Amphibious Assault Ships	(Shared)	(Sunk)
	3036		LPD-17	(Shared)	
Navy	1611	05	0204411N		
	Line Item		**Name**		
	5110		Outfitting	(Shared)	
Navy	1810	02	0205604N		
	Line Item		**Name**		
	2614		Advanced Tactical Data Link System	(Shared)	
Army	2035	02	0214400A		
	Line Item		**Name**		
	B22603		Radio Terminal Set, MIDS-LVT (2)	(Shared)	
Air Force	3010	05	0207446F		
	Line Item		**Name**		
	B00200		B-2A	(Shared)	
Air Force	3010	07	0207132F		
	Line Item		**Name**		
	F01500		F-15	(Shared)	(Sunk)
Air Force	3010	05	0207130F		
	Line Item		**Name**		
	F01500		F-15	(Shared)	(Sunk)
Air Force	3010	05	0207133F		
	Line Item		**Name**		
	F01600		F-16	(Shared)	
Air Force	3010	07	0207133F		
	Line Item		**Name**		
	F0160P		F-16	(Shared)	(Sunk)
Air Force	3010	05	0207423F		
	Line Item		**Name**		
	MN9860		Joint Tactical Radio System	(Shared)	(Sunk)
Air Force	3010	05	0207133F		
	Line Item		**Name**		
	OTHACF		Other Aircraft	(Shared)	(Sunk)
	Notes:		Battlefield ABN Comm Node (BACN)		
Air Force	3080	03	0207448F		
	Line Item		**Name**		
	831010		Comsec Equipment	(Shared)	(Sunk)
	834010		General Information Technology	(Shared)	(Sunk)
Air Force	3080	03	0401840F		
	Line Item		**Name**		
	834070		Mobility Command and Control	(Shared)	
Air Force	3080	03	0201131F		

Line Item	Name	
835140	USCENTCOM	(Shared)
Notes:	AFCENT	

Air Force	3080	02	0207133F		
	Line Item		**Name**		
	F01600		F-16	(Shared)	(Sunk)
Defense-Wide	0300	02			
	Line Item		**Name**		
	10		DOD	(Shared)	(Sunk)
Defense-Wide	0300	02	0208865C		
	Line Item		**Name**		
	2257		DA, Patriot	(Shared)	(Sunk)
Defense-Wide	0300	02	0208861C		
	Line Item		**Name**		
	2260		DA, THAAD	(Shared)	(Sunk)
Defense-Wide	0300	02			
	Line Item		**Name**		
	30		GAPO	(Shared)	(Sunk)
Defense-Wide	0350	01			
	Line Item		**Name**		
	022005		Air National Guard	(Shared)	(Sunk)

Cost and Funding

Cost Summary

Total Acquisition Cost							
Appropriation	BY 2003 $M			BY 2003 $M	TY $M		
	SAR Baseline Production Estimate	Current APB Production Objective/Threshold		Current Estimate	SAR Baseline Production Estimate	Current APB Production Objective	Current Estimate
RDT&E	869.4	1849.9	2034.9	1924.7	825.8	2029.7	2136.9
Procurement	955.4	2220.5	2442.6	2430.9	993.1	2756.2	3052.9
Flyaway	--	--	--	2271.8	--	--	2882.1
Recurring	--	--	--	2199.2	--	--	2810.7
Non Recurring	--	--	--	72.6	--	--	71.4
Support	--	--	--	159.1	--	--	170.8
Other Support	--	--	--	37.6	--	--	41.8
Initial Spares	--	--	--	121.5	--	--	129.0
MILCON	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Acq O&M	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total	1824.8	4070.4	N/A	4355.6	1818.9	4785.9	5189.8

Current APB Cost Estimate Reference

The generated point estimate is based on the developed Cost Estimating Relationships (CERs) and inputted sunk costs. dated July 25, 2017

Cost Notes

RDT&E costs include the MIDS Low Volume Terminal (MIDS-LVT) and MIDS Joint Tactical Radio System (MIDS JTRS) terminal development, terminal acquisition, integration and test on the United States Navy platforms for all current MIDS Program Managment Office enhancement efforts.

Procurement costs are for MIDS-LVT and MIDS JTRS terminals purchased by the platforms.

The costs of platform installation and platform kits, and United States Air Force and United States Army platform integration and testing of MIDS-LVT and MIDS JTRS are to be included in the respective budgets and baseline agreements of the various platforms implementing MIDS.

MIDS has completed several Program Office Estimates (POE) for the RDT&E programs in the MIDS portfolio. During the development of the POE estimates MIDS identified a potential conflict with the use of limited test equipment resources between the TTNT and JTRS programs in the MIDS portfolio. The impact if unmitigated would delay the completion of the development programs. MIDS Program is developing detailed schedules to avoid potential scheduling conflicts.

Total Quantity			
Quantity	**SAR Baseline Production Estimate**	**Current APB Production**	**Current Estimate**
RDT&E	143	659	780
Procurement	2821	8469	9029
Total	2964	9128	9809

Quantity Notes

The unit of measure is terminals.

Procurement quantities include MIDS terminals for United States Navy, United States Air Force, and United States Army platforms. The current estimate includes MIDS Joint Tactical Radio System (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.

The current production terminal procurement estimate increased by a total of 163 (73 Development/90 Procurement) terminals due to the procurement orders from the U.S. Navy and Air Force.

Cost and Funding

Funding Summary

Appropriation Summary FY 2020 President's Budget / December 2018 SAR (TY$ M)									
Appropriation	Prior	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	To Complete	Total
RDT&E	1931.1	43.8	39.2	31.1	29.5	30.5	31.7	0.0	2136.9
Procurement	1924.3	299.0	261.1	203.9	170.0	83.7	47.7	63.2	3052.9
MILCON	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Acq O&M	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PB 2020 Total	3855.4	342.8	300.3	235.0	199.5	114.2	79.4	63.2	5189.8
PB 2019 Total	3787.5	305.8	256.7	242.1	154.7	95.5	55.2	106.1	5003.6
Delta	67.9	37.0	43.6	-7.1	44.8	18.7	24.2	-42.9	186.2

Quantity Summary FY 2020 President's Budget / December 2018 SAR (TY$ M)										
Quantity	Undistributed	Prior	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	To Complete	Total
Development	780	0	0	0	0	0	0	0	0	780
Production	0	6739	979	510	410	308	58	11	14	9029
PB 2020 Total	780	6739	979	510	410	308	58	11	14	9809
PB 2019 Total	707	6528	741	558	466	288	119	73	166	9646
Delta	73	211	238	-48	-56	20	-61	-62	-152	163

Cost and Funding

Annual Funding By Appropriation

Annual Funding 0400 | RDT&E | Research, Development, Test, and Evaluation, Defense-Wide							
		TY $M					
Fiscal Year	Quantity	End Item Recurring Flyaway	Non End Item Recurring Flyaway	Non Recurring Flyaway	Total Flyaway	Total Support	Total Program
1990	--	--	--	--	--	--	9.0
1991	--	--	--	--	--	--	5.0
1992	--	--	--	--	--	--	16.5
1993	--	--	--	--	--	--	23.9
1994	--	--	--	--	--	--	23.3
1995	--	--	--	--	--	--	49.6
1996	--	--	--	--	--	--	42.7
1997	--	--	--	--	--	--	36.9
1998	--	--	--	--	--	--	45.2
1999	--	--	--	--	--	--	27.9
2000	--	--	--	--	--	--	39.0
2001	--	--	--	--	--	--	12.0
2002	--	--	--	--	--	--	13.1
2003	--	--	--	--	--	--	7.7
2004	--	--	--	--	--	--	7.0
2005	--	--	--	--	--	--	9.6
2006	--	--	--	--	--	--	1.0
2007	--	--	--	--	--	--	2.0
2008	--	--	--	--	--	--	--
2009	--	--	--	--	--	--	0.8
2010	--	--	--	--	--	--	--
2011	--	--	--	--	--	--	0.2
2012	--	--	--	--	--	--	--
2013	--	--	--	--	--	--	0.3
2014	--	--	--	--	--	--	--
2015	--	--	--	--	--	--	--
2016	--	--	--	--	--	--	--
2017	--	--	--	--	--	--	--
2018	--	--	--	--	--	--	0.7
Subtotal	73	--	--	--	--	--	373.4

Annual Funding 0400 | RDT&E | Research, Development, Test, and Evaluation, Defense-Wide							
		BY 2003 $M					
Fiscal Year	Quantity	End Item Recurring Flyaway	Non End Item Recurring Flyaway	Non Recurring Flyaway	Total Flyaway	Total Support	Total Program
1990	--	--	--	--	--	--	11.1
1991	--	--	--	--	--	--	5.9
1992	--	--	--	--	--	--	19.1
1993	--	--	--	--	--	--	27.2
1994	--	--	--	--	--	--	26.0
1995	--	--	--	--	--	--	54.3
1996	--	--	--	--	--	--	45.9
1997	--	--	--	--	--	--	39.2
1998	--	--	--	--	--	--	47.6
1999	--	--	--	--	--	--	29.0
2000	--	--	--	--	--	--	40.0
2001	--	--	--	--	--	--	12.1
2002	--	--	--	--	--	--	13.1
2003	--	--	--	--	--	--	7.6
2004	--	--	--	--	--	--	6.7
2005	--	--	--	--	--	--	9.0
2006	--	--	--	--	--	--	0.9
2007	--	--	--	--	--	--	1.8
2008	--	--	--	--	--	--	--
2009	--	--	--	--	--	--	0.7
2010	--	--	--	--	--	--	--
2011	--	--	--	--	--	--	0.2
2012	--	--	--	--	--	--	--
2013	--	--	--	--	--	--	0.2
2014	--	--	--	--	--	--	--
2015	--	--	--	--	--	--	--
2016	--	--	--	--	--	--	--
2017	--	--	--	--	--	--	--
2018	--	--	--	--	--	--	0.5
Subtotal	73	--	--	--	--	--	398.1

Annual Funding 1319 | RDT&E | Research, Development, Test, and Evaluation, Navy							
Fiscal Year	Quantity	TY $M					
		End Item Recurring Flyaway	Non End Item Recurring Flyaway	Non Recurring Flyaway	Total Flyaway	Total Support	Total Program
1990	--	--	--	--	--	--	2.9
1991	--	--	--	--	--	--	4.7
1992	--	--	--	--	--	--	10.0
1993	--	--	--	--	--	--	12.4
1994	--	--	--	--	--	--	23.0
1995	--	--	--	--	--	--	18.4
1996	--	--	--	--	--	--	31.0
1997	--	--	--	--	--	--	28.2
1998	--	--	--	--	--	--	39.8
1999	--	--	--	--	--	--	45.4
2000	--	--	--	--	--	--	62.3
2001	--	--	--	--	--	--	37.7
2002	--	--	--	--	--	--	26.2
2003	--	--	--	--	--	--	16.8
2004	--	--	--	--	--	--	22.4
2005	--	--	--	--	--	--	27.6
2006	--	--	--	--	--	--	98.2
2007	--	--	--	--	--	--	162.5
2008	--	--	--	--	--	--	77.2
2009	--	--	--	--	--	--	26.6
2010	--	--	--	--	--	--	16.2
2011	--	--	--	--	--	--	24.2
2012	--	--	--	--	--	--	100.8
2013	--	--	--	--	--	--	47.2
2014	--	--	--	--	--	--	120.7
2015	--	--	--	--	--	--	80.5
2016	--	--	--	--	--	--	71.0
2017	--	--	--	--	--	--	68.0
2018	--	--	--	--	--	--	46.4
2019	--	--	--	--	--	--	43.8
2020	--	--	--	--	--	--	39.2
2021	--	--	--	--	--	--	31.1
2022	--	--	--	--	--	--	29.5
2023	--	--	--	--	--	--	30.5
2024	--	--	--	--	--	--	31.7
Subtotal	228	--	--	--	--	--	1554.1

Annual Funding 1319 | RDT&E | Research, Development, Test, and Evaluation, Navy							
		BY 2003 $M					
Fiscal Year	Quantity	End Item Recurring Flyaway	Non End Item Recurring Flyaway	Non Recurring Flyaway	Total Flyaway	Total Support	Total Program
1990	--	--	--	--	--	--	3.6
1991	--	--	--	--	--	--	5.6
1992	--	--	--	--	--	--	11.6
1993	--	--	--	--	--	--	14.1
1994	--	--	--	--	--	--	25.6
1995	--	--	--	--	--	--	20.1
1996	--	--	--	--	--	--	33.3
1997	--	--	--	--	--	--	30.0
1998	--	--	--	--	--	--	41.9
1999	--	--	--	--	--	--	47.3
2000	--	--	--	--	--	--	63.9
2001	--	--	--	--	--	--	38.2
2002	--	--	--	--	--	--	26.3
2003	--	--	--	--	--	--	16.6
2004	--	--	--	--	--	--	21.5
2005	--	--	--	--	--	--	25.8
2006	--	--	--	--	--	--	89.2
2007	--	--	--	--	--	--	144.0
2008	--	--	--	--	--	--	67.2
2009	--	--	--	--	--	--	22.9
2010	--	--	--	--	--	--	13.7
2011	--	--	--	--	--	--	20.0
2012	--	--	--	--	--	--	82.0
2013	--	--	--	--	--	--	38.0
2014	--	--	--	--	--	--	95.8
2015	--	--	--	--	--	--	63.1
2016	--	--	--	--	--	--	54.7
2017	--	--	--	--	--	--	51.4
2018	--	--	--	--	--	--	34.4
2019	--	--	--	--	--	--	31.8
2020	--	--	--	--	--	--	27.9
2021	--	--	--	--	--	--	21.7
2022	--	--	--	--	--	--	20.2
2023	--	--	--	--	--	--	20.5
2024	--	--	--	--	--	--	20.9
Subtotal	228	--	--	--	--	--	1344.8

Annual Funding 2040 | RDT&E | Research, Development, Test, and Evaluation, Army							
Fiscal Year	Quantity	TY $M					
		End Item Recurring Flyaway	Non End Item Recurring Flyaway	Non Recurring Flyaway	Total Flyaway	Total Support	Total Program
1997	--	--	--	--	--	--	0.5
1998	--	--	--	--	--	--	2.4
1999	--	--	--	--	--	--	5.2
2000	--	--	--	--	--	--	--
2001	--	--	--	--	--	--	0.1
2002	--	--	--	--	--	--	3.1
2003	--	--	--	--	--	--	0.6
2004	--	--	--	--	--	--	3.1
2005	--	--	--	--	--	--	4.4
2006	--	--	--	--	--	--	--
2007	--	--	--	--	--	--	1.5
2008	--	--	--	--	--	--	1.9
2009	--	--	--	--	--	--	3.3
2010	--	--	--	--	--	--	0.2
2011	--	--	--	--	--	--	--
2012	--	--	--	--	--	--	0.2
2013	--	--	--	--	--	--	0.4
2014	--	--	--	--	--	--	0.2
Subtotal	78	--	--	--	--	--	27.1

Annual Funding 2040 | RDT&E | Research, Development, Test, and Evaluation, Army							
Fiscal Year	Quantity	BY 2003 $M					
		End Item Recurring Flyaway	Non End Item Recurring Flyaway	Non Recurring Flyaway	Total Flyaway	Total Support	Total Program
1997	--	--	--	--	--	--	0.5
1998	--	--	--	--	--	--	2.5
1999	--	--	--	--	--	--	5.4
2000	--	--	--	--	--	--	--
2001	--	--	--	--	--	--	0.1
2002	--	--	--	--	--	--	3.1
2003	--	--	--	--	--	--	0.6
2004	--	--	--	--	--	--	3.0
2005	--	--	--	--	--	--	4.1
2006	--	--	--	--	--	--	--
2007	--	--	--	--	--	--	1.3
2008	--	--	--	--	--	--	1.6
2009	--	--	--	--	--	--	2.8
2010	--	--	--	--	--	--	0.2
2011	--	--	--	--	--	--	--
2012	--	--	--	--	--	--	0.2
2013	--	--	--	--	--	--	0.3
2014	--	--	--	--	--	--	0.2
Subtotal	78	--	--	--	--	--	25.9

Annual Funding 3600 | RDT&E | Research, Development, Test, and Evaluation, Air Force							
Fiscal Year	Quantity	TY $M					
		End Item Recurring Flyaway	Non End Item Recurring Flyaway	Non Recurring Flyaway	Total Flyaway	Total Support	Total Program
1997	--	--	--	--	--	--	3.9
1998	--	--	--	--	--	--	8.0
1999	--	--	--	--	--	--	0.2
2000	--	--	--	--	--	--	6.3
2001	--	--	--	--	--	--	3.9
2002	--	--	--	--	--	--	2.9
2003	--	--	--	--	--	--	4.3
2004	--	--	--	--	--	--	14.3
2005	--	--	--	--	--	--	19.6
2006	--	--	--	--	--	--	4.5
2007	--	--	--	--	--	--	2.2
2008	--	--	--	--	--	--	1.4
2009	--	--	--	--	--	--	5.7
2010	--	--	--	--	--	--	1.5
2011	--	--	--	--	--	--	2.4
2012	--	--	--	--	--	--	2.2
2013	--	--	--	--	--	--	3.6
2014	--	--	--	--	--	--	2.6
2015	--	--	--	--	--	--	20.9
2016	--	--	--	--	--	--	14.6
2017	--	--	--	--	--	--	31.7
2018	--	--	--	--	--	--	25.6
Subtotal	401	--	--	--	--	--	182.3

Annual Funding 3600 | RDT&E | Research, Development, Test, and Evaluation, Air Force							
Fiscal Year	Quantity	BY 2003 $M					
		End Item Recurring Flyaway	Non End Item Recurring Flyaway	Non Recurring Flyaway	Total Flyaway	Total Support	Total Program
1997	--	--	--	--	--	--	4.1
1998	--	--	--	--	--	--	8.4
1999	--	--	--	--	--	--	0.2
2000	--	--	--	--	--	--	6.5
2001	--	--	--	--	--	--	4.0
2002	--	--	--	--	--	--	2.9
2003	--	--	--	--	--	--	4.3
2004	--	--	--	--	--	--	13.8
2005	--	--	--	--	--	--	18.4
2006	--	--	--	--	--	--	4.1
2007	--	--	--	--	--	--	2.0
2008	--	--	--	--	--	--	1.2
2009	--	--	--	--	--	--	4.9
2010	--	--	--	--	--	--	1.3
2011	--	--	--	--	--	--	2.0
2012	--	--	--	--	--	--	1.8
2013	--	--	--	--	--	--	2.9
2014	--	--	--	--	--	--	2.1
2015	--	--	--	--	--	--	16.5
2016	--	--	--	--	--	--	11.3
2017	--	--	--	--	--	--	24.1
2018	--	--	--	--	--	--	19.1
Subtotal	401	--	--	--	--	--	155.9

Annual Funding 0300 | Procurement | Procurement, Defense-Wide							
Fiscal Year	Quantity	TY $M					
		End Item Recurring Flyaway	Non End Item Recurring Flyaway	Non Recurring Flyaway	Total Flyaway	Total Support	Total Program
1999	11	2.7	0.1	4.5	7.3	0.6	7.9
2000	--	--	--	--	--	--	--
2001	19	4.8	0.1	--	4.9	1.0	5.9
2002	--	--	--	--	--	0.3	0.3
2003	10	2.5	--	--	2.5	0.1	2.6
2004	--	--	--	--	--	--	--
2005	4	1.0	--	--	1.0	--	1.0
2006	--	--	--	--	--	--	--
2007	--	--	--	--	--	--	--
2008	--	--	--	--	--	--	--
2009	--	--	--	--	--	--	--
2010	7	1.5	--	--	1.5	--	1.5
2011	5	1.1	--	--	1.1	--	1.1
2012	--	--	--	--	--	--	--
2013	--	--	--	--	--	--	--
2014	2	0.5	--	--	0.5	--	0.5
2015	--	--	--	--	--	--	--
2016	--	--	--	--	--	--	--
2017	3	0.7	--	--	0.7	--	0.7
2018	9	2.2	--	--	2.2	--	2.2
Subtotal	70	17.0	0.2	4.5	21.7	2.0	23.7

Annual Funding 0300 | Procurement | Procurement, Defense-Wide							
Fiscal Year	Quantity	BY 2003 $M					
		End Item Recurring Flyaway	Non End Item Recurring Flyaway	Non Recurring Flyaway	Total Flyaway	Total Support	Total Program
1999	11	2.8	0.1	4.7	7.6	0.6	8.2
2000	--	--	--	--	--	--	--
2001	19	4.8	0.1	--	4.9	1.0	5.9
2002	--	--	--	--	--	0.3	0.3
2003	10	2.4	--	--	2.4	0.1	2.5
2004	--	--	--	--	--	--	--
2005	4	0.9	--	--	0.9	--	0.9
2006	--	--	--	--	--	--	--
2007	--	--	--	--	--	--	--
2008	--	--	--	--	--	--	--
2009	--	--	--	--	--	--	--
2010	7	1.3	--	--	1.3	--	1.3
2011	5	0.9	--	--	0.9	--	0.9
2012	--	--	--	--	--	--	--
2013	--	--	--	--	--	--	--
2014	2	0.4	--	--	0.4	--	0.4
2015	--	--	--	--	--	--	--
2016	--	--	--	--	--	--	--
2017	3	0.5	--	--	0.5	--	0.5
2018	9	1.6	--	--	1.6	--	1.6
Subtotal	70	15.6	0.2	4.7	20.5	2.0	22.5

This appropriation provides for the procurement of the MIDS terminals for the Department of Defense.

This appropriation increased by 9 MIDS terminals since the previous SAR.

Annual Funding 1506 | Procurement | Aircraft Procurement, Navy							
Fiscal Year	Quantity	TY $M					
		End Item Recurring Flyaway	Non End Item Recurring Flyaway	Non Recurring Flyaway	Total Flyaway	Total Support	Total Program
1999	16	5.9	1.3	0.5	7.7	0.3	8.0
2000	58	15.1	1.8	35.5	52.4	8.3	60.7
2001	64	20.2	3.7	0.2	24.1	2.5	26.6
2002	103	23.9	0.5	--	24.4	10.6	35.0
2003	116	22.7	3.6	--	26.3	10.4	36.7
2004	138	27.8	3.2	--	31.0	8.4	39.4
2005	130	25.7	2.9	--	28.6	13.8	42.4
2006	169	31.0	2.9	0.1	34.0	1.8	35.8
2007	169	35.2	3.0	--	38.2	5.2	43.4
2008	202	40.4	2.9	--	43.3	9.4	52.7
2009	127	28.5	2.9	--	31.4	1.0	32.4
2010	174	29.9	0.2	--	30.1	3.9	34.0
2011	147	29.1	0.2	--	29.3	3.9	33.2
2012	128	31.6	0.2	--	31.8	7.5	39.3
2013	262	74.8	--	--	74.8	--	74.8
2014	177	48.7	--	--	48.7	--	48.7
2015	161	45.7	--	--	45.7	--	45.7
2016	696	190.1	--	--	190.1	--	190.1
2017	91	67.1	--	--	67.1	--	67.1
2018	84	43.1	--	--	43.1	--	43.1
2019	103	78.0	--	--	78.0	--	78.0
2020	151	142.4	--	--	142.4	--	142.4
2021	120	119.8	--	--	119.8	--	119.8
2022	48	98.0	--	--	98.0	--	98.0
2023	24	73.0	--	--	73.0	--	73.0
2024	1	30.3	--	--	30.3	--	30.3
2025	1	30.3	--	--	30.3	--	30.3
2026	1	29.7	--	--	29.7	--	29.7
Subtotal	3661	1438.0	29.3	36.3	1503.6	87.0	1590.6

Annual Funding 1506 | Procurement | Aircraft Procurement, Navy							
Fiscal Year	Quantity	BY 2003 $M					
		End Item Recurring Flyaway	Non End Item Recurring Flyaway	Non Recurring Flyaway	Total Flyaway	Total Support	Total Program
1999	16	6.1	1.3	0.5	7.9	0.3	8.2
2000	58	15.3	1.8	36.1	53.2	8.4	61.6
2001	64	20.2	3.8	0.2	24.2	2.5	26.7
2002	103	23.7	0.5	--	24.2	10.4	34.6
2003	116	22.0	3.5	--	25.5	10.1	35.6
2004	138	26.3	3.0	--	29.3	8.0	37.3
2005	130	23.6	2.7	--	26.3	12.7	39.0
2006	169	27.7	2.6	0.1	30.4	1.6	32.0
2007	169	30.8	2.6	--	33.4	4.5	37.9
2008	202	34.8	2.5	--	37.3	8.1	45.4
2009	127	24.2	2.5	--	26.7	0.8	27.5
2010	174	24.9	0.2	--	25.1	3.2	28.3
2011	147	23.7	0.2	--	23.9	3.2	27.1
2012	128	25.4	0.2	--	25.6	6.0	31.6
2013	262	59.5	--	--	59.5	--	59.5
2014	177	38.3	--	--	38.3	--	38.3
2015	161	35.4	--	--	35.4	--	35.4
2016	696	144.1	--	--	144.1	--	144.1
2017	91	49.9	--	--	49.9	--	49.9
2018	84	31.4	--	--	31.4	--	31.4
2019	103	55.7	--	--	55.7	--	55.7
2020	151	99.7	--	--	99.7	--	99.7
2021	120	82.2	--	--	82.2	--	82.2
2022	48	65.9	--	--	65.9	--	65.9
2023	24	48.2	--	--	48.2	--	48.2
2024	1	19.6	--	--	19.6	--	19.6
2025	1	19.2	--	--	19.2	--	19.2
2026	1	18.5	--	--	18.5	--	18.5
Subtotal	3661	1096.3	27.4	36.9	1160.6	79.8	1240.4

This appropriation identifies the MIDS Low Volume Terminal (MIDS-LVT) and MIDS Joint Tactical Radio System (MIDS JTRS) core, CMN4 and TTNT that are planned for the Navy.

This appropriation decreased by 104 MIDS terminals.

Annual Funding 1611 | Procurement | Shipbuilding and Conversion, Navy							
Fiscal Year	Quantity	TY $M					
		End Item Recurring Flyaway	Non End Item Recurring Flyaway	Non Recurring Flyaway	Total Flyaway	Total Support	Total Program
2001	1	0.4	--	--	0.4	--	0.4
2002	2	0.9	--	--	0.9	--	0.9
2003	5	2.1	--	--	2.1	--	2.1
2004	5	0.9	--	--	0.9	--	0.9
2005	3	0.7	--	--	0.7	--	0.7
2006	4	0.7	--	--	0.7	--	0.7
2007	--	--	--	--	--	--	--
2008	2	0.4	--	--	0.4	--	0.4
2009	2	0.4	--	--	0.4	--	0.4
2010	4	0.7	--	--	0.7	--	0.7
2011	8	1.4	--	--	1.4	--	1.4
2012	7	1.3	--	--	1.3	--	1.3
2013	5	0.9	--	--	0.9	--	0.9
2014	5	0.9	--	--	0.9	--	0.9
2015	8	1.4	--	--	1.4	--	1.4
2016	7	1.4	--	--	1.4	--	1.4
2017	6	1.1	--	--	1.1	--	1.1
2018	2	0.4	--	--	0.4	--	0.4
2019	16	3.6	--	--	3.6	--	3.6
2020	18	4.1	--	--	4.1	--	4.1
Subtotal	110	23.7	--	--	23.7	--	23.7

Annual Funding 1611 | Procurement | Shipbuilding and Conversion, Navy							
Fiscal Year	Quantity	BY 2003 $M					
		End Item Recurring Flyaway	Non End Item Recurring Flyaway	Non Recurring Flyaway	Total Flyaway	Total Support	Total Program
2001	1	0.4	--	--	0.4	--	0.4
2002	2	0.9	--	--	0.9	--	0.9
2003	5	1.9	--	--	1.9	--	1.9
2004	5	0.8	--	--	0.8	--	0.8
2005	3	0.6	--	--	0.6	--	0.6
2006	4	0.6	--	--	0.6	--	0.6
2007	--	--	--	--	--	--	--
2008	2	0.3	--	--	0.3	--	0.3
2009	2	0.3	--	--	0.3	--	0.3
2010	4	0.5	--	--	0.5	--	0.5
2011	8	0.9	--	--	0.9	--	0.9
2012	7	0.9	--	--	0.9	--	0.9
2013	5	0.6	--	--	0.6	--	0.6
2014	5	0.6	--	--	0.6	--	0.6
2015	8	0.9	--	--	0.9	--	0.9
2016	7	0.9	--	--	0.9	--	0.9
2017	6	0.7	--	--	0.7	--	0.7
2018	2	0.2	--	--	0.2	--	0.2
2019	16	2.1	--	--	2.1	--	2.1
2020	18	2.3	--	--	2.3	--	2.3
Subtotal	110	16.4	--	--	16.4	--	16.4

This appropriation identifies the MIDS on Ship variant for new construction surface ships.

This appropriation increased by 10 MIDS terminals since the previous SAR.

Annual Funding 1810 | Procurement | Other Procurement, Navy							
Fiscal Year	Quantity	TY $M					
		End Item Recurring Flyaway	Non End Item Recurring Flyaway	Non Recurring Flyaway	Total Flyaway	Total Support	Total Program
1999	3	1.1	--	--	1.1	--	1.1
2000	--	--	--	--	--	--	--
2001	--	--	--	--	--	--	--
2002	2	0.5	--	--	0.5	--	0.5
2003	6	1.7	--	--	1.7	--	1.7
2004	8	1.8	--	--	1.8	--	1.8
2005	--	--	--	--	--	0.1	0.1
2006	8	1.9	--	0.1	2.0	--	2.0
2007	17	3.8	--	--	3.8	0.6	4.4
2008	26	6.6	--	--	6.6	--	6.6
2009	6	1.2	--	--	1.2	--	1.2
2010	12	2.5	--	--	2.5	--	2.5
2011	44	9.8	--	--	9.8	--	9.8
2012	6	1.2	--	--	1.2	--	1.2
2013	26	7.0	--	--	7.0	--	7.0
2014	7	1.5	--	--	1.5	--	1.5
2015	16	3.0	--	--	3.0	--	3.0
2016	7	7.5	--	--	7.5	--	7.5
2017	11	5.7	--	--	5.7	--	5.7
2018	23	4.2	--	--	4.2	--	4.2
Subtotal	228	61.0	--	0.1	61.1	0.7	61.8

Annual Funding 1810 | Procurement | Other Procurement, Navy							
Fiscal Year	Quantity	BY 2003 $M					
		End Item Recurring Flyaway	Non End Item Recurring Flyaway	Non Recurring Flyaway	Total Flyaway	Total Support	Total Program
1999	3	1.1	--	--	1.1	--	1.1
2000	--	--	--	--	--	--	--
2001	--	--	--	--	--	--	--
2002	2	0.5	--	--	0.5	--	0.5
2003	6	1.7	--	--	1.7	--	1.7
2004	8	1.7	--	--	1.7	--	1.7
2005	--	--	--	--	--	0.1	0.1
2006	8	1.7	--	0.1	1.8	--	1.8
2007	17	3.3	--	--	3.3	0.6	3.9
2008	26	5.7	--	--	5.7	--	5.7
2009	6	1.0	--	--	1.0	--	1.0
2010	12	2.1	--	--	2.1	--	2.1
2011	44	8.1	--	--	8.1	--	8.1
2012	6	1.0	--	--	1.0	--	1.0
2013	26	5.6	--	--	5.6	--	5.6
2014	7	1.2	--	--	1.2	--	1.2
2015	16	2.3	--	--	2.3	--	2.3
2016	7	5.7	--	--	5.7	--	5.7
2017	11	4.3	--	--	4.3	--	4.3
2018	23	3.1	--	--	3.1	--	3.1
Subtotal	228	50.1	--	0.1	50.2	0.7	50.9

This appropriation decreased by 14 MIDS terminals since the previous SAR.

Annual Funding 2035 | Procurement | Other Procurement, Army							
Fiscal Year	Quantity	TY $M					
		End Item Recurring Flyaway	Non End Item Recurring Flyaway	Non Recurring Flyaway	Total Flyaway	Total Support	Total Program
2001	1	0.3	--	--	0.3	--	0.3
2002	--	--	--	--	--	--	--
2003	4	1.0	--	--	1.0	0.4	1.4
2004	5	1.3	--	--	1.3	0.4	1.7
2005	62	15.7	--	--	15.7	1.2	16.9
2006	67	16.3	--	--	16.3	0.1	16.4
2007	40	9.4	--	--	9.4	1.1	10.5
2008	144	33.5	--	--	33.5	--	33.5
2009	29	6.4	--	--	6.4	2.2	8.6
2010	30	7.0	--	--	7.0	1.6	8.6
2011	22	4.8	--	--	4.8	1.0	5.8
2012	9	2.0	--	--	2.0	0.1	2.1
2013	5	3.3	--	--	3.3	0.4	3.7
2014	--	--	--	--	--	--	--
2015	2	0.1	--	--	0.1	--	0.1
2016	1	8.2	--	--	8.2	--	8.2
2017	1	6.1	--	--	6.1	--	6.1
2018	2	17.1	--	--	17.1	--	17.1
2019	1	4.6	--	--	4.6	--	4.6
2020	1	23.8	--	--	23.8	--	23.8
2021	1	8.4	--	--	8.4	--	8.4
2022	1	3.0	--	--	3.0	--	3.0
2023	1	2.2	--	--	2.2	--	2.2
2024	1	15.0	--	--	15.0	--	15.0
Subtotal	430	189.5	--	--	189.5	8.5	198.0

Annual Funding 2035 | Procurement | Other Procurement, Army							
Fiscal Year	Quantity	BY 2003 $M					
		End Item Recurring Flyaway	Non End Item Recurring Flyaway	Non Recurring Flyaway	Total Flyaway	Total Support	Total Program
2001	1	0.3	--	--	0.3	--	0.3
2002	--	--	--	--	--	--	--
2003	4	1.0	--	--	1.0	0.4	1.4
2004	5	1.2	--	--	1.2	0.4	1.6
2005	62	14.5	--	--	14.5	1.1	15.6
2006	67	14.7	--	--	14.7	0.1	14.8
2007	40	8.3	--	--	8.3	0.9	9.2
2008	144	29.0	--	--	29.0	--	29.0
2009	29	5.5	--	--	5.5	1.8	7.3
2010	30	5.9	--	--	5.9	1.3	7.2
2011	22	4.0	--	--	4.0	0.8	4.8
2012	9	1.6	--	--	1.6	0.1	1.7
2013	5	2.6	--	--	2.6	0.3	2.9
2014	--	--	--	--	--	--	--
2015	2	0.1	--	--	0.1	--	0.1
2016	1	6.2	--	--	6.2	--	6.2
2017	1	4.5	--	--	4.5	--	4.5
2018	2	12.5	--	--	12.5	--	12.5
2019	1	3.3	--	--	3.3	--	3.3
2020	1	16.7	--	--	16.7	--	16.7
2021	1	5.8	--	--	5.8	--	5.8
2022	1	2.0	--	--	2.0	--	2.0
2023	1	1.5	--	--	1.5	--	1.5
2024	1	9.7	--	--	9.7	--	9.7
Subtotal	430	150.9	--	--	150.9	7.2	158.1

This appropriation provides for the procurement of the Army unique MIDS-LVT(2) and MIDS-LVT(11) variants.

This appropriation increased by 2 MIDS-LVT terminals since the previous SAR.

Annual Funding 3010 | Procurement | Aircraft Procurement, Air Force							
Fiscal Year	Quantity	TY $M					
		End Item Recurring Flyaway	Non End Item Recurring Flyaway	Non Recurring Flyaway	Total Flyaway	Total Support	Total Program
2001	52	8.5	--	4.4	12.9	6.9	19.8
2002	150	32.5	--	--	32.5	10.2	42.7
2003	180	36.8	--	--	36.8	10.5	47.3
2004	137	24.3	--	--	24.3	13.8	38.1
2005	164	35.5	--	0.1	35.6	4.3	39.9
2006	129	25.1	--	--	25.1	1.7	26.8
2007	152	31.1	--	--	31.1	3.4	34.5
2008	52	14.7	--	--	14.7	4.4	19.1
2009	15	5.0	--	--	5.0	1.6	6.6
2010	51	13.0	--	--	13.0	2.4	15.4
2011	34	9.5	--	--	9.5	0.2	9.7
2012	83	25.8	--	--	25.8	--	25.8
2013	43	11.3	--	--	11.3	--	11.3
2014	61	11.5	--	--	11.5	--	11.5
2015	5	7.4	--	--	7.4	--	7.4
2016	3	0.9	--	--	0.9	--	0.9
2017	86	25.1	--	--	25.1	--	25.1
2018	428	101.0	--	--	101.0	--	101.0
2019	859	212.8	--	--	212.8	--	212.8
2020	340	90.8	--	--	90.8	--	90.8
2021	289	75.7	--	--	75.7	--	75.7
2022	259	69.0	--	--	69.0	--	69.0
2023	33	8.5	--	--	8.5	--	8.5
2024	9	2.4	--	--	2.4	--	2.4
2025	12	3.2	--	--	3.2	--	3.2
Subtotal	3626	881.4	--	4.5	885.9	59.4	945.3

Annual Funding 3010 | Procurement | Aircraft Procurement, Air Force							
Fiscal Year	Quantity	BY 2003 $M					
		End Item Recurring Flyaway	Non End Item Recurring Flyaway	Non Recurring Flyaway	Total Flyaway	Total Support	Total Program
2001	52	8.5	--	4.4	12.9	7.0	19.9
2002	150	32.2	--	--	32.2	10.1	42.3
2003	180	35.9	--	--	35.9	10.2	46.1
2004	137	23.1	--	--	23.1	13.1	36.2
2005	164	32.8	--	0.1	32.9	3.9	36.8
2006	129	22.6	--	--	22.6	1.5	24.1
2007	152	27.2	--	--	27.2	3.0	30.2
2008	52	12.7	--	--	12.7	3.8	16.5
2009	15	4.2	--	--	4.2	1.4	5.6
2010	51	10.8	--	--	10.8	2.0	12.8
2011	34	7.8	--	--	7.8	0.1	7.9
2012	83	20.8	--	--	20.8	--	20.8
2013	43	8.9	--	--	8.9	--	8.9
2014	61	9.0	--	--	9.0	--	9.0
2015	5	5.7	--	--	5.7	--	5.7
2016	3	0.7	--	--	0.7	--	0.7
2017	86	18.5	--	--	18.5	--	18.5
2018	428	72.9	--	--	72.9	--	72.9
2019	859	150.7	--	--	150.7	--	150.7
2020	340	63.0	--	--	63.0	--	63.0
2021	289	51.5	--	--	51.5	--	51.5
2022	259	46.0	--	--	46.0	--	46.0
2023	33	5.6	--	--	5.6	--	5.6
2024	9	1.5	--	--	1.5	--	1.5
2025	12	2.0	--	--	2.0	--	2.0
Subtotal	3626	674.6	--	4.5	679.1	56.1	735.2

This appropriation identifies the MIDS Low Volume Terminal (MIDS-LVT) and MIDS Joint Tactical Radio System (MIDS JTRS) terminals that are planned for the Air Force.

This appropriation increased by 143 MIDS terminals since the previous SAR.

Annual Funding 3080 | Procurement | Other Procurement, Air Force							
Fiscal Year	Quantity	TY $M					
		End Item Recurring Flyaway	Non End Item Recurring Flyaway	Non Recurring Flyaway	Total Flyaway	Total Support	Total Program
1996	6	3.0	--	--	3.0	--	3.0
1997	--	--	--	0.3	0.3	--	0.3
1998	77	18.5	--	15.2	33.7	1.0	34.7
1999	173	33.0	0.3	--	33.3	2.1	35.4
2000	294	49.8	0.7	0.5	51.0	3.8	54.8
2001	148	26.7	0.6	4.4	31.7	1.0	32.7
2002	97	18.6	--	5.6	24.2	--	24.2
2003	30	0.4	--	--	0.4	5.3	5.7
2004	--	--	--	--	--	--	--
2005	--	--	--	--	--	--	--
2006	--	--	--	--	--	--	--
2007	--	--	--	--	--	--	--
2008	--	--	--	--	--	--	--
2009	--	--	--	--	--	--	--
2010	--	--	--	--	--	--	--
2011	--	--	--	--	--	--	--
2012	--	--	--	--	--	--	--
2013	--	--	--	--	--	--	--
2014	--	--	--	--	--	--	--
2015	1	0.3	--	--	0.3	--	0.3
2016	9	2.1	--	--	2.1	--	2.1
2017	13	3.1	--	--	3.1	--	3.1
2018	27	6.4	--	--	6.4	--	6.4
Subtotal	875	161.9	1.6	26.0	189.5	13.2	202.7

Annual Funding 3080 | Procurement | Other Procurement, Air Force							
Fiscal Year	Quantity	BY 2003 $M					
		End Item Recurring Flyaway	Non End Item Recurring Flyaway	Non Recurring Flyaway	Total Flyaway	Total Support	Total Program
1996	6	3.2	--	--	3.2	--	3.2
1997	--	--	--	0.3	0.3	--	0.3
1998	77	19.2	--	15.8	35.0	1.0	36.0
1999	173	33.8	0.3	--	34.1	2.2	36.3
2000	294	50.3	0.7	0.5	51.5	3.9	55.4
2001	148	26.6	0.6	4.3	31.5	1.0	32.5
2002	97	18.2	--	5.5	23.7	--	23.7
2003	30	0.4	--	--	0.4	5.2	5.6
2004	--	--	--	--	--	--	--
2005	--	--	--	--	--	--	--
2006	--	--	--	--	--	--	--
2007	--	--	--	--	--	--	--
2008	--	--	--	--	--	--	--
2009	--	--	--	--	--	--	--
2010	--	--	--	--	--	--	--
2011	--	--	--	--	--	--	--
2012	--	--	--	--	--	--	--
2013	--	--	--	--	--	--	--
2014	--	--	--	--	--	--	--
2015	1	0.2	--	--	0.2	--	0.2
2016	9	1.6	--	--	1.6	--	1.6
2017	13	2.4	--	--	2.4	--	2.4
2018	27	4.8	--	--	4.8	--	4.8
Subtotal	875	160.7	1.6	26.4	188.7	13.3	202.0

This appropriation identifies the MIDS Fighter Data Link (FDL) terminals for the Air Force that are being procured on a separate contract. The FY 1996 funding (TY $3.0M) reports the United States Air Force funds contributed to the qualification and build of six FDL terminals. Additional funds in excess of $8.0M were contributed by the contractor, Data Link Solutions L.L.C., for completion of the full qualification program requirements.

This appropriation increased by 42 MIDS terminals since the previous SAR.

Annual Funding 0350 | Procurement | National Guard and Reserve Equipment ,Defense							
Fiscal Year	Quantity	TY $M					
		End Item Recurring Flyaway	Non End Item Recurring Flyaway	Non Recurring Flyaway	Total Flyaway	Total Support	Total Program
2016	15	3.8	--	--	3.8	--	3.8
2017	6	1.4	--	--	1.4	--	1.4
2018	8	1.9	--	--	1.9	--	1.9
Subtotal	29	7.1	--	--	7.1	--	7.1

Annual Funding 0350 | Procurement | National Guard and Reserve Equipment ,Defense							
Fiscal Year	Quantity	BY 2003 $M					
		End Item Recurring Flyaway	Non End Item Recurring Flyaway	Non Recurring Flyaway	Total Flyaway	Total Support	Total Program
2016	15	2.9	--	--	2.9	--	2.9
2017	6	1.1	--	--	1.1	--	1.1
2018	8	1.4	--	--	1.4	--	1.4
Subtotal	29	5.4	--	--	5.4	--	5.4

This appropriation increased by 12 MIDS terminals. The previous SAR had 10 MIDS terminals that were double counted so the net increase since the previous SAR is 2 MIDS JTRS terminals.

Low Rate Initial Production

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

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.

Foreign Military Sales

Country	Date of Sale	Quantity	Total Cost $M	Description
Japan	11/21/2018	218	43.5	Total Costs are cumulative over multiple years and FMS cases (JA-P-LTY; JA-P-LTD; JA-P-LTV; JA-P-LUD; JA-P-LVM; JA-P-LVY; JA-P-LUO; JA-P-LUP; JA-P-LVE; JA-P-LWC; JA-P-LWJ; JA-P-LWO; JA-P-LXB; JA-P-LXC; JA-P-LXD; JA-P-LXE; JA-P-LXF; JA-P-LXM; JA-P-LXN; JA-P-LXO; JA-P-LYC; JA-P-LYL; JA-P-LYQ; JA-P-LYP; JA-P-LYT; JA-P-LYV; JA-P-LYX; JA-P-LZG; JA-P-NAF; JA-P-NAG; JA-P-NAJ; JA-P-NAL; JA-P-NAU; JA-P-SCJ; JA-P-LZM; JA-P-LZQ). Date of sale listed is the most current buy.
Singapore	11/9/2018	111	16.6	Total Costs are cumulative over multiple years and FMS cases (SN-D-SAA; SN-D-SAC; SN-D-BAA; SN-D-QAT; SN-P-LCF). Date of sale listed is the most current buy. *Not all cost data is available. 20 terminals without pricing.*
Czech Republic	9/28/2018	15	2.6	Date of sale listed is the most current buy on FMS case EZ-P-LCL.
NATO	9/28/2018	20	3.9	Total Cost are cumulative over multiple years and date of sale is most current buy for FMS cases (W3-P-LAB; A6-P-LAC; N1-P-LAA; N4-P-LAF).
Australia	9/25/2018	342	77.2	Total Costs are cumulative over multiple years and FMS cases (AT-D-QCI; AT-P-GOV; AT-P-LAB; AT-P-LCE; AT-P-LCK; AT-P-LCQ; AT-P-LDN; AT-P-LER; AT-P-LET; AT-P-SAF; AT-P-SCF; AT-P-SCI; AT-P-LFA; AT-P-LFG; AT-P-LFO; AT-D-QCS; AT-P-GQF; AT-P-LFT). Date of sale listed is the most current buy.
South Korea	8/2/2018	67	16.2	Total Costs are cumulative over multiple years and FMS cases (KS-P-BTV; KS-P-GOL; KS-P-LPN; KS-P-QDW; KS-P-BVB; KS-P-LAA; KS-P-BTZ; KS-P-LQI; KS-P-QEO). Date of sale listed is the most current buy.
Switzerland	6/28/2018	102	24.1	Date of sale listed is the most current buy on FMS case SZ-P-LAC; SZ-P-LAH; SZ-P-LAN; SN-P-LAS.
United Kingdom	6/28/2018	62	16.4	Total Costs are cumulative over multiple years and FMS cases (UK-D-SAO; UK-P-LVE; UK-P-LVR; UK-P-SAN; UK-P-LVQ). Date of sale listed is the most current buy.
Qatar	5/28/2018	26	6.3	Date of sale listed is the most current buy on FMS case QA-P-LAE.
Poland	11/1/2017	97	19.5	Total Costs are cumulative over multiple years and FMS cases (PL-D-SAC; PL-P-LAM; PL-P-LBA). Date of sale listed is the most current buy.
Finland	9/20/2017	128	25.1	Total Costs are cumulative over multiple years and FMS cases (FI-P-LBC; FI-P-LBD; FI-P-LBH; FI-P-LBJ). Date of sale listed is the most current buy.

Romania	8/21/2017	22	4.0	Total Cost is cumulative over multiple years. Date of sale listed is the most current buy on FMS case RO-D-QAH.
Portugal	3/20/2017	80	17.6	Total Costs are cumulative over multiple years and FMS cases (PT-D-NAE; PT-P-LDH; PT-P-LDL; PT-P-LDM). Date of sale listed is the most current buy.
Chile	9/8/2016	25	4.5	Total Cost is cumulative. Date of sale listed is the most current buy on FMS case CI-P-LCW.
Norway	9/8/2016	81	23.6	Total Costs are cumulative over multiple years and FMS cases (NO-D-OAF; NO-D-OAG; NO-P-LBE; NO-P-LBO; NO-P-LCQ). Date of sale listed is the most current buy.
Saudi Arabia	9/8/2016	374	43.4	Total Costs are cumulative over multiple years and FMS cases (SR-D-QAB; SR-D-SAI, SR-P-LCO; SR-D-QBP; SR-P-LCH). Date of sale listed is the most current buy. *Not all cost data is available. 165 terminals without pricing.*
Turkey	9/8/2016	316	63.1	Total Costs are cumulative over multiple years and FMS cases (TK-D-NCU; TK-P-LKT; TK-D-SMB; TK -D-OAD). Date of sale listed is the most current buy.
Taiwan	3/10/2016	248	71.1	Total Costs are cumulative over multiple years and FMS cases (TW-P-GNU; TW-B-YYV; TW-P-GMK; TW-P-LEJ; TW-P-SEG; TW-P-GMG; TW-D-QBZ). Date of sale listed is the most current buy.
Philippines	2/19/2016	15	2.8	Total Cost and date of sale is the most current buy.
Kuwait	9/24/2015	4	0.9	Date of sale listed is the most current buy on FMS case KU-B-UMG.
Netherlands	9/24/2015	10	5.4	Total Costs are cumulative over multiple years and FMS cases (NE-P-LFT; NE-P-LGT). Date of sale listed is the most current buy.
Oman	8/31/2015	72	13.7	Total Costs are cumulative over multiple years and FMS cases (MU-D-SAB; MU-P-LAP). Date of sale listed is the most current buy.
Thailand	8/31/2015	24	4.5	Total Costs are cumulative over multiple years and FMS cases (TH-D-QCZ; TH-P-LFA). Date of sale listed is the most current buy.
Belgium	1/20/2015	84	18.2	Total Costs are cumulative over multiple years and FMS cases (BE-D-DZV; BE-D-QAT, BE-P-LBB). Date of sale listed is the most current buy.
Canada	1/20/2015	144	31.9	Total Costs are cumulative over multiple years and FMS cases (CN-P-LHF; CN-P-LHS; CN-P-LIC; CN-P-LIQ; CN-P-LJC, CN-P-LJR). Date of sale listed is the most current buy.
New Zealand	9/30/2014	8	1.6	Date of sale listed is the most current buy on FMS case (NZ-P-LAJ; NZ-P-LAZ; NZ-P-LAU).
Jordan	8/7/2014	34	5.6	Total Costs are cumulative over multiple years and FMS cases (JO-P-LAZ; JO-P-LBG; JO-D-QBK) Date of sale listed is the most current buy.
United Arab Emirates	8/5/2013	19	3.3	Total Costs are cumulative over multiple years and FMS cases (AE-P-LAA; AE-B-UAF; AE-B-ZUG). Date of sale listed is the most current buy.

Hungary	9/16/2010	22	4.5	Date of sale listed is the most current buy on FMS case HU-P-LAD.
Pakistan	9/16/2010	68	16.1	Total Costs are cumulative over multiple years and FMS cases (PK-D-NAP; PK-D-SAF). Date of sale listed is the most current buy.
Morocco	5/14/2010	30	4.8	Date of sale listed is the most current buy on FMS case MO-D-SAY.
Greece	12/22/2008	40	6.9	Total Costs are cumulative over multiple years and FMS cases (GR-B-XJU; GR-D-SNY). Date of sale listed is the most current buy.
Austria	5/12/2008	24	0.0	FMS total costs not releasable for Austria. AU-P-LAD.
Sweden	8/28/2006	28	4.9	Date of sale listed is the most current buy on FMS case SW-P-LAO.
Germany	2/20/2004	10	6.4	Date of sale listed is the most current buy on FMS case GY-P-LGI.
Denmark	5/16/2002	3	0.9	Date of sale listed is the most current buy on FMS case DE-D-OAB.

Notes

The above FMS cases, with the exception of Australia (AT-P-SCI; AT-P-LFA; AT-P-GQF; AT-P-LFT; AT-D-QCS), Finland (FI-P-GAU), Japan (JA-P-NAZ; JA-P-NBA; JA-P-NCS; JA-P-NCW), Korea (KS-D-QEO; KS-P-LQI), Portugal (PT-P-LDM), Qatar (QA-P-LAE), Switzerland (SZ-P-LAN; SZ-P-LAS) and United Kingdom (UK-D-SAO; UK-P-LVE; UK-P-LVQ; UK-P-LVR; UK-P-SAN), for MIDS Joint Tactical Radio System (MIDS JTRS) terminals, are for MIDS Low Volume Terminals (MIDS-LVT).

Direct Commercial Sales (DCS) totaling 971 MIDS-LVT terminals have been implemented to date with Australia, Belgium, Denmark, Greece, Iceland, Japan, Korea, North Atlantic Treaty Organization (NATO) Air Command and Control System (ACCS) Management Agency (NACMA), Netherlands, NATO EuroFighter 2000 and Tornado Management Agency, Norway, Poland, Singapore, Sweden, Turkey and United Kingdom. (Cost information for direct commercial sales is not available nor is date of sale). Per CJCSI 6510.0C, DCS sales for MIDS-LVT and MIDS JTRS are no longer sanctioned, except for a case-by-case basis with Australia, Canada, New Zealand, and the United Kingdom, or a one-time waiver has already been obtained.

Between December 2017 and December 2018, 89 MIDS-LVT terminals at a cost of $14.94M were implemented; also during this time, 163 MIDS JTRS terminals at a cost of $40.96M were implemented through FMS.

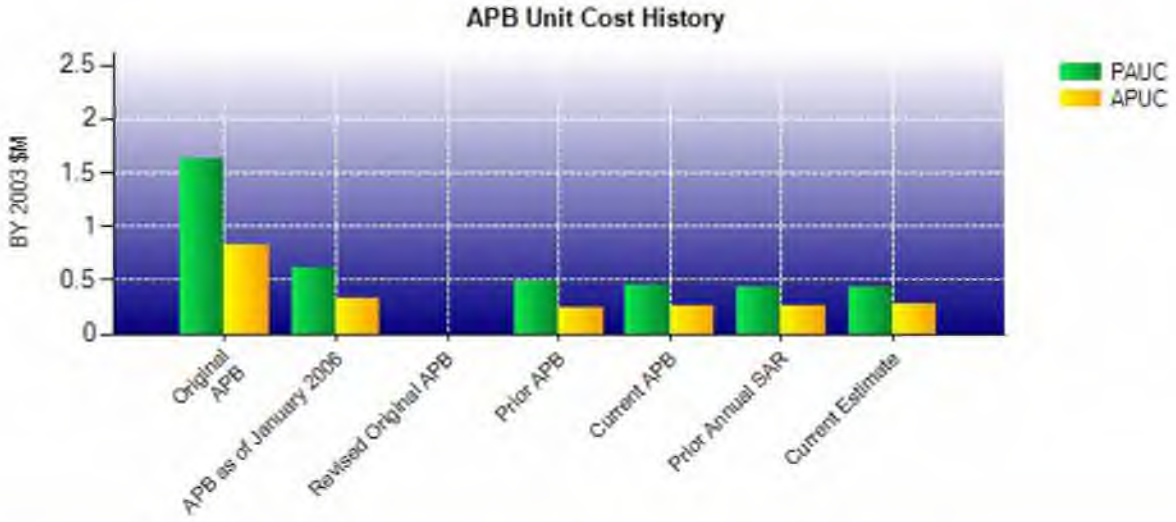
Nuclear Costs

None

Unit Cost

Current UCR Baseline and Current Estimate (Base-Year Dollars)			
Item	BY 2003 $M Current UCR Baseline (Nov 2017 APB)	BY 2003 $M Current Estimate (Dec 2018 SAR)	% Change
Program Acquisition Unit Cost			
Cost	4070.4	4355.6	
Quantity	9128	9809	
Unit Cost	0.446	0.444	-0.45
Average Procurement Unit Cost			
Cost	2220.5	2430.9	
Quantity	8469	9029	
Unit Cost	0.262	0.269	+2.67

Original UCR Baseline and Current Estimate (Base-Year Dollars)			
Item	BY 2003 $M Original UCR Baseline (Mar 1994 APB)	BY 2003 $M Current Estimate (Dec 2018 SAR)	% Change
Program Acquisition Unit Cost			
Cost	1091.4	4355.6	
Quantity	672	9809	
Unit Cost	1.624	0.444	-72.66
Average Procurement Unit Cost			
Cost	523.7	2430.9	
Quantity	630	9029	
Unit Cost	0.831	0.269	-67.63



APB Unit Cost History					
Item	Date	BY 2003 $M		TY $M	
		PAUC	APUC	PAUC	APUC
Original APB	Mar 1994	1.625	0.831	1.666	0.931
APB as of January 2006	Jun 2004	0.616	0.339	0.614	0.352
Revised Original APB	N/A	N/A	N/A	N/A	N/A
Prior APB	Nov 2013	0.486	0.243	0.535	0.276
Current APB	Nov 2017	0.446	0.262	0.524	0.325
Prior Annual SAR	Dec 2017	0.439	0.263	0.519	0.329
Current Estimate	Dec 2018	0.444	0.269	0.529	0.338

SAR Unit Cost History

Initial SAR Baseline to Current SAR Baseline (TY $M)									
Initial PAUC Development Estimate	Changes								PAUC Production Estimate
	Econ	Qty	Sch	Eng	Est	Oth	Spt	Total	
1.670	-0.023	-1.090	0.015	-0.017	0.058	0.000	0.001	-1.056	0.614

Current SAR Baseline to Current Estimate (TY $M)									
PAUC Production Estimate	Changes								PAUC Current Estimate
	Econ	Qty	Sch	Eng	Est	Oth	Spt	Total	
0.614	0.003	-0.162	-0.010	0.057	0.024	0.000	0.003	-0.085	0.529

Initial SAR Baseline to Current SAR Baseline (TY $M)									
Initial APUC Development Estimate	Changes								APUC Production Estimate
	Econ	Qty	Sch	Eng	Est	Oth	Spt	Total	
0.931	-0.019	-0.520	0.016	-0.036	-0.021	0.000	0.001	-0.579	0.352

Current SAR Baseline to Current Estimate (TY $M)									
APUC Production Estimate	Changes								APUC Current Estimate
	Econ	Qty	Sch	Eng	Est	Oth	Spt	Total	
0.352	0.002	0.029	-0.010	-0.016	-0.021	0.000	0.002	-0.014	0.338

SAR Baseline History				
Item	SAR Planning Estimate	SAR Development Estimate	SAR Production Estimate	Current Estimate
Milestone I	N/A	N/A	N/A	N/A
Milestone II	N/A	Dec 1993	Dec 1993	Dec 1993
Milestone III	N/A	N/A	N/A	Dec 1999
IOC	N/A	Dec 2000	N/A	Jan 2001
Total Cost (TY $M)	N/A	1119.5	1818.9	5189.8
Total Quantity	N/A	672	2964	9809
PAUC	N/A	1.666	0.614	0.529

The baseline includes separate Milestone (MS) III decisions for the MIDS Low Volume Terminal (MIDS-LVT) Variant (1) and MIDS-LVT Variant (3) and a separate IOC for each MIDS variant. A MS III decision was originally planned for the United States Army unique MIDS-LVT Variant (2) but it was replaced by an FRP decision approved by the Assistant Secretary of the Navy (Research, Development and Acquisition) in an ADM dated December 8, 2003.

Cost Variance

Summary TY $M				
Item	RDT&E	Procurement	MILCON	Total
SAR Baseline (Production Estimate)	825.8	993.1	--	1818.9
Previous Changes				
Economic	+4.3	+5.7	--	+10.0
Quantity	+148.1	+2409.7	--	+2557.8
Schedule	-0.2	-79.3	--	-79.5
Engineering	+705.6	-140.9	--	+564.7
Estimating	+378.9	-271.8	--	+107.1
Other	--	--	--	--
Support	+3.7	+20.9	--	+24.6
Subtotal	+1240.4	+1944.3	--	+3184.7
Current Changes				
Economic	+1.9	+13.1	--	+15.0
Quantity	+26.4	+37.1	--	+63.5
Schedule	--	-14.4	--	-14.4
Engineering	--	-1.9	--	-1.9
Estimating	+42.4	+81.6	--	+124.0
Other	--	--	--	--
Support	--	--	--	--
Subtotal	+70.7	+115.5	--	+186.2
Total Changes	+1311.1	+2059.8	--	+3370.9
Current Estimate	2136.9	3052.9	--	5189.8

Summary BY 2003 $M				
Item	**RDT&E**	**Procurement**	**MILCON**	**Total**
SAR Baseline (Production Estimate)	869.4	955.4	--	1824.8
Previous Changes				
Economic	--	--	--	--
Quantity	+127.4	+1767.5	--	+1894.9
Schedule	-0.4	-32.4	--	-32.8
Engineering	+592.9	-103.4	--	+489.5
Estimating	+285.0	-250.3	--	+34.7
Other	--	--	--	--
Support	+3.2	+17.7	--	+20.9
Subtotal	+1008.1	+1399.1	--	+2407.2
Current Changes				
Economic	--	--	--	--
Quantity	+19.6	+26.8	--	+46.4
Schedule	--	-0.7	--	-0.7
Engineering	--	-1.2	--	-1.2
Estimating	+27.6	+51.5	--	+79.1
Other	--	--	--	--
Support	--	--	--	--
Subtotal	+47.2	+76.4	--	+123.6
Total Changes	+1055.3	+1475.5	--	+2530.8
Current Estimate	1924.7	2430.9	--	4355.6

Previous Estimate: December 2017

RDT&E	$M	
Current Change Explanations	Base Year	Then Year
Revised escalation indices. (Economic)	N/A	+1.9
Quantity variance from an increase of three MIDS Joint Tactical Radio System (JTRS) terminals. (DOD). (Quantity)	+0.5	+0.7
Quantity variance from an increase of 70 MIDS Joint Tactical Radio System (JTRS) terminals. (Air Force). (Quantity)	+14.3	+19.2
Quantity variance resulting in an increase of 16 MIDS JTRS terminals (Navy). (Quantity)	+3.7	+5.0
Quantity variance resulting in an increase of eight MIDS Low Volume Terminal (LVT)(Navy). (Quantity)	+1.1	+1.5
Adjustment for current and prior escalation. (Estimating)	-0.9	-1.3
Additional funding in FY 2017 for Investigation Reports and Development for implementation of MIDS JTRS to Air Force Platforms (Air Force). (Estimating)	+6.0	+8.0
De-obligation of funding in FY 2017 due to excess funds no longer required. De-obligation of funding FY 2018 was for an Investigation Report for MIDS JTRS (Navy) no longer required. (Estimating)	-0.9	-1.2
Revised estimate to align with FY 2019 PB (Navy). (Estimating)	+23.4	+36.9
RDT&E Subtotal	+47.2	+70.7

Procurement	$M	
Current Change Explanations	Base Year	Then Year
Revised escalation indices. (Economic)	N/A	+13.1
Total Quantity variance resulting from an increase of nine terminals from 61 to 70 (Procurement, Defense Wide (PWD)). (Subtotal)	+2.2	+3.0
Total Quantity variance resulting from an increase of nine terminals from 61 to 70 (PWD). (Quantity)	(+2.7)	(+3.7)
Allocation to Schedule resulting from Quantity change. (Schedule) (QR)	(-0.1)	(-0.1)
Allocation to Engineering resulting from Quantity change. (Engineering) (QR)	(-0.1)	(-0.1)
Allocation to Estimating resulting from Quantity change. (Estimating) (QR)	(-0.3)	(-0.5)
Quantity variance resulting from a decrease of 104 terminals from 3,765 to 3,661 (Aircraft Procurement, Navy(APN)). (Subtotal)	-25.2	-39.7
Total Quantity variance resulting from a decrease of 104 terminals from 3,765 to 3,661 (APN). (Quantity)	(-31.2)	(-49.2)
Allocation to Schedule resulting from Quantity change. (Schedule) (QR)	(+1.0)	(+1.6)
Allocation to Engineering resulting from Quantity change. (Engineering) (QR)	(+1.7)	(+2.6)
Allocation to Estimating resulting from Quantity change. (Estimating) (QR)	(+3.3)	(+5.3)
Total Quantity variance resulting from an increase of ten terminals from 100 to 110 (Ship Conversion, Navy (SCN)). (Subtotal)	+2.4	+4.2
Total Quantity variance resulting from an increase of ten terminals from 100 to 110 (SCN). (Quantity)	(+3.0)	(+5.3)
Allocation to Schedule resulting from Quantity change. (Schedule) (QR)	(-0.1)	(-0.2)
Allocation to Engineering resulting from Quantity change. (Engineering) (QR)	(-0.2)	(-0.4)
Allocation to Estimating resulting from Quantity change. (Estimating) (QR)	(-0.3)	(-0.5)
Total Quantity variance resulting from an decrease of 14 terminals from 242 to 228 (Other Procurement, Navy (OPN)). (Subtotal)	-3.4	-4.8

Total Quantity variance resulting from an decrease of 14 terminals from 242 to 228 (OPN). (Quantity)	(-4.2)	(-6.0)
Allocation to Estimating resulting from Quantity change. (Estimating) (QR)	(+0.5)	(+0.9)
Allocation to Schedule resulting from Quantity change. (Schedule) (QR)	(+0.1)	(+0.1)
Allocation to Engineering resulting from Quantity change. (Engineering) (QR)	(+0.2)	(+0.2)
Total Quantity variance resulting from an increase of two terminals from 428 to 430 (Other Procurement, Army(OPA)). (Subtotal)	+0.4	+0.6
Total Quantity variance resulting from an increase of two terminals from 428 to 430 (OPA). (Quantity)	(+0.6)	(+1.0)
Allocation to Estimating resulting from Quantity change. (Estimating) (QR)	(-0.2)	(-0.4)
Total Quantity variance resulting from an increase of 143 terminals from 3,483 to 3,626 (Aircraft Procurement, Air Force (APAF)). (Subtotal)	+34.8	+52.7
Total Quantity variance resulting from an increase of 143 terminals from 3,483 to 3,626 (APAF). (Quantity)	(+42.9)	(+65.0)
Allocation to Schedule resulting from Quantity change. (Schedule) (QR)	(-1.3)	(-2.1)
Allocation to Engineering resulting from Quantity change. (Engineering) (QR)	(-2.2)	(-3.4)
Allocation to Estimating resulting from Quantity change. (Estimating) (QR)	(-4.6)	(-6.8)
Total Quantity variance resulting from an increase of 42 terminals from 833 to 875 (Other Procurement, Air Force(OPAF)). (Subtotal)	+10.3	+13.6
Total Quantity variance resulting from an increase of 42 terminals from 833 to 875 (OPAF). (Quantity)	(+12.4)	(+16.5)
Allocation to Schedule resulting from Quantity change. (Schedule) (QR)	(-0.3)	(-0.4)
Allocation to Engineering resulting from Quantity change. (Engineering) (QR)	(-0.6)	(-0.8)
Allocation to Estimating resulting from Quantity change. (Estimating) (QR)	(-1.2)	(-1.7)
Total Quantity variance resulting from a increase of two terminals from 27 to 29 (National Guard and Reserve Equipment, Defense (NGRED)). (Subtotal)	+0.5	+0.7
Total Quantity variance resulting from a increase of two terminals from 27 to 29 (NGRED). (Quantity)	(+0.6)	(+0.8)
Allocation to Estimating resulting from Quantity change. (Estimating) (QR)	(-0.1)	(-0.1)
Acceleration of procurement buy profile from FY 2020 to 2018 (APN). (Schedule)	0.0	-0.8
Acceleration of procurement buy profile from FY 2020 to 2018 (SCN). (Schedule)	0.0	-0.6
Acceleration of procurement buy profile from FY 2020 to 2018 (OPN). (Schedule)	0.0	-0.2
Acceleration of procurement buy profile from FY 2020 to 2018 (APAF). (Schedule)	0.0	-11.7
Revised estimate due to updated terminal cost estimates (PDW). (Estimating)	-0.6	-0.8
Revised estimate due to updated terminal cost estimates (APN). (Estimating)	+54.2	+81.1
Revised estimate due to updated terminal cost estimates (SCN). (Estimating)	-1.7	-2.9
Revised estimate due to updated terminal cost estimates (OPN). (Estimating)	-0.2	-0.2
Revised estimate due to updated terminal cost estimates (OPA). (Estimating)	+26.2	+38.1
Revised estimate due to updated terminal cost estimates (APAF). (Estimating)	-16.5	-20.6
Revised estimate due to updated terminal cost estimates (OPAF). (Estimating)	-2.8	-3.7
Revised estimate due to updated terminal cost estimates (NGRED). (Estimating)	-0.3	-0.4
Adjustment for current and prior escalation. (Estimating)	-3.9	-5.2
Procurement Subtotal	+76.4	+115.5

(QR) Quantity Related

Contracts

Contract Identification

Appropriation: Procurement
Contract Name: MIDS JTRS Production Contract
Contractor: BAE Systems/Rockwell Collins Data Link Solutions L.L.C. (DLS)
Contractor Location: 350 Collins Rd NE
Cedar Rapids, IA 52498
Contract Number: N00039-15-D-0007
Contract Type: Indefinite Delivery Indefinite Quantity (IDIQ), Firm Fixed Price (FFP), Cost Plus Fixed Fee (CPFF)
Award Date: June 17, 2015
Definitization Date: June 17, 2015

Contract Price							
Initial Contract Price ($M)			Current Contract Price ($M)			Estimated Price At Completion ($M)	
Target	Ceiling	Qty	Target	Ceiling	Qty	Contractor	Program Manager
50.1	N/A	153	451.1	N/A	1350	989.0	989.0

Target Price Change Explanation

The difference between the Initial Contract Price Target and the Current Contract Price Target is due to exercising options on the IDIQ contract for award of more Delivery Orders (non-Earned Value).

Cost and Schedule Variance Explanations

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

General Contract Variance Explanation

Cost and schedule variances are not reported for this contract, because the cost or incentive portion does not meet the threshold requirements for earned value management reporting. This is the Firm Fixed Price Production only part of the contract.

Notes

The overall value with all Options included of this contract is $988.96M. In the future, more IDIQ orders will be awarded and options exercised increasing the current of the contract.

This production contract includes nonrecurring engineering, supportability, and the manufacture of MIDS Joint Tactical Radio terminals. FMS are not included in the supplemental contract cost information.

This is a Multiple Award Firm Fixed Price IDIQ contract. Delivery Orders are competed between two vendors, ViaSat and DLS. Current Contract Target Price reflects orders awarded to this vendor.

Contract Identification

Appropriation: Procurement

Contract Name: MIDS Production Contract

Contractor: ViaSat, INC

Contractor Location: 6155 El Camino Real
Carlsbad, CA 92009

Contract Number: N00039-15-D-0008

Contract Type: Indefinite Delivery Indefinite Quantity (IDIQ), Firm Fixed Price (FFP), Cost Plus Fixed Fee (CPFF)

Award Date: May 28, 2015

Definitization Date: May 28, 2015

Contract Price							
Initial Contract Price ($M)			Current Contract Price ($M)			Estimated Price At Completion ($M)	
Target	Ceiling	Qty	Target	Ceiling	Qty	Contractor	Program Manager
19.6	N/A	42	371.9	N/A	1172	698.2	698.2

Target Price Change Explanation

The difference between the Initial Contract Price Target and the Current Contract Price Target is due to exercising options on the IDIQ contract for award of more Delivery Orders (non-Earned Value).

Cost and Schedule Variance Explanations

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

General Contract Variance Explanation

Cost and schedule variances are not reported for this contract, because the cost or incentive portion does not meet the threshold requirements for earned value management reporting. This is the Firm Fixed Price Production only part of the contract.

Notes

The overall value with all Options included of this contract is $698.2M. In the future, more IDIQ orders will be awarded and options exercised increasing the current of the contract.

This production contract includes nonrecurring engineering, supportability, and the manufacture of MIDS Joint Tactical Radio System terminal. FMS are not included in the supplemental contract cost information.

This is a Multiple Award Firm Fixed Price IDIQ contract. Delivery Orders are competed between two vendors, ViaSat and DLS. Current Contract Target Price reflects orders awarded to this vendor.

Contract Identification

Appropriation: Procurement

Contract Name: MIDS-LVT Production Contract

Contractor: BAE Systems/Rockwell Collins Data Link Solutions L.L.C. (DLS)

Contractor Location: 350 Collins Rd NE
Cedar Rapids, IA 52498

Contract Number: N00039-15-D-0042

Contract Type: Indefinite Delivery Indefinite Quantity (IDIQ), Firm Fixed Price (FFP), Cost Plus Fixed Fee (CPFF)

Award Date: August 27, 2015

Definitization Date: August 27, 2015

Contract Price							
Initial Contract Price ($M)			Current Contract Price ($M)			Estimated Price At Completion ($M)	
Target	Ceiling	Qty	Target	Ceiling	Qty	Contractor	Program Manager
14.6	N/A	57	33.0	N/A	110	366.5	366.5

Target Price Change Explanation

The difference between the Initial Contract Price Target and the Current Contract Price Target is due to exercising options on the IDIQ contract for award of more Delivery Orders (non-Earned Value).

Cost and Schedule Variance Explanations

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

General Contract Variance Explanation

Cost and schedule variances are not reported for this contract, because the cost or incentive portion does not meet the threshold requirements for earned value management reporting. This is the Firm Fixed Price Production only part of the contract.

Notes

The overall value with all Options included of this contract is $366.5M. In the future, more IDIQ orders will be awarded and options exercised increasing the current of the contract.

This production contract includes nonrecurring engineering, supportability, and the manufacture of MIDS-Low Volume Terminal (MIDS-LVT). FMS are not included in the supplemental contract cost information.

This is a Multiple Award Firm Fixed Price IDIQ contract. Delivery Orders are competed between two vendors, ViaSat and DLS. Current Contract Target Price reflects orders awarded to this vendor.

Contract Identification

Appropriation: Procurement
Contract Name: MIDS-LVT Production Contract
Contractor: ViaSat, INC
Contractor Location: 6155 El Camino Real
Carlsbad, CA 92009
Contract Number: N00039-15-D-0043
Contract Type: Indefinite Delivery Indefinite Quantity (IDIQ), Firm Fixed Price (FFP), Cost Plus Fixed Fee (CPFF)
Award Date: August 21, 2015
Definitization Date: August 21, 2015

Contract Price							
Initial Contract Price ($M)			Current Contract Price ($M)			Estimated Price At Completion ($M)	
Target	Ceiling	Qty	Target	Ceiling	Qty	Contractor	Program Manager
5.1	N/A	26	59.4	N/A	153	366.5	366.5

Target Price Change Explanation

The difference between the Initial Contract Price Target and the Current Contract Price Target is due to exercising options on the IDIQ contract for award of more Delivery Orders (non-Earned Value).

Cost and Schedule Variance Explanations

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

General Contract Variance Explanation

Cost and schedule variances are not reported for this contract, because the cost or incentive portion does not meet the threshold requirements for earned value management reporting. This is the Firm Fixed Price Production only part of the contract.

Notes

The overall value with all Options included of this contract is $514.3M. In the future, more IDIQ orders will be awarded and options exercised increasing the current of the contract.

This production contract includes nonrecurring engineering, supportability, and the manufacture of MIDS-Low Volume Terminal (MIDS-LVT). FMS are not included in the supplemental contract cost information.

This is a Multiple Award Firm Fixed Price IDIQ contract. Delivery Orders are competed between two vendors, ViaSat and DLS. Current Contract Target Price reflects orders awarded to this vendor.

Deliveries and Expenditures

Deliveries				
Delivered to Date	**Planned to Date**	**Actual to Date**	**Total Quantity**	**Percent Delivered**
Development	640	640	780	82.05%
Production	5728	5704	9029	63.17%
Total Program Quantity Delivered	6368	6344	9809	64.68%

Expended and Appropriated (TY $M)			
Total Acquisition Cost	5189.8	Years Appropriated	30
Expended to Date	3861.6	Percent Years Appropriated	81.08%
Percent Expended	74.41%	Appropriated to Date	4198.2
Total Funding Years	37	Percent Appropriated	80.89%

The above data is current as of March 11, 2019.

Notes

Total deliveries listed above do not contain EuroMIDS (non-U.S. vendor) terminals (which are not reported in the SAR).

Operating and Support Cost

Cost Estimate Details

Date of Estimate:	January 12, 2018
Source of Estimate:	POE
Quantity to Sustain:	9029
Unit of Measure:	Terminal
Service Life per Unit:	20.00 Years
Fiscal Years in Service:	FY 1996 - FY 2045

The POE reflects an updated forecast of the quantity of MIDS terminals. 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 Joint Tactical Radio System (JTRS) Full Production & Fielding (FP&F) decision. The quantity of 9029 includes U.S. only terminals currently fielded, and known requirements for FY 2019 through FY 2025. This period includes a phase-in, steady state, and phase-down profile.

The current production terminal procurement estimate increased by a total of 90 terminals due to the increased procurement orders from the U.S. Navy and Air Force. The current Development units increased by 73 terminals and do not have any sustainment costs associated to them.

The 780 development terminals have no sustainment costs.

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.

Antecedent Information

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

Annual O&S Costs BY2003 $K		
Cost Element	**MIDS Average Annual Cost Per Terminal**	**No Antecedent (Antecedent) N/A**
Unit-Level Manpower	0.250	--
Unit Operations	0.000	--
Maintenance	0.440	--
Sustaining Support	4.120	--
Continuing System Improvements	5.430	--
Indirect Support	0.000	--
Other	0.000	--
Total	10.240	--

Item	Total O&S Cost $M			
	MIDS			No Antecedent (Antecedent)
	Current Production APB Objective/Threshold		Current Estimate	
Base Year	1734.5	1908.0	1849.1	N/A
Then Year	1865.5	N/A	3178.8	N/A

Equation to Translate Annual Cost to Total Cost

The calculation of total O&S costs is based on total quantities of 9029 multiplied by an economic life of 20 years multiplied by a unit cost of $10.24K per year. The increase in O&S is directly due to the increased quantities. No change to the economic life of 20 years. 780 development terminals have no sustainment costs.

O&S Cost Variance		
Category	**BY 2003 $M**	**Change Explanations**
Prior SAR Total O&S Estimates - Dec 2017 SAR	1830.7	
Programmatic/Planning Factors	18.4	Increased quantity
Cost Estimating Methodology	0.0	
Cost Data Update	0.0	
Labor Rate	0.0	
Energy Rate	0.0	
Technical Input	0.0	
Other	0.0	
Total Changes	18.4	
Current Estimate	1849.1	

Disposal Estimate Details

Date of Estimate:

Source of Estimate:

Disposal/Demilitarization Total Cost (BY 2003 $M):

Disposal costs are not identified at this time. MIDS expects the disposal estimate to be included in the 2019 SAR.