



Selected Acquisition Report (SAR)

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



Multifunctional Information Distribution System (MIDS)

As of FY 2011 President's Budget

Defense Acquisition Management
Information Retrieval
(DAMIR)

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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)

Program Information

Program Name

Multifunctional Information Distribution System (MIDS) (MIDS)

DoD Component

DOD

Joint Participants

Navy; Air Force; Army

Army is the lead Component per SECDEF Memo dated August 31, 2009.

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References

SAR Baseline (Production Estimate)

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

Approved APB

Defense Acquisition Executive (DAE) Approved Acquisition Program Baseline (APB) dated March 9, 2010

Mission and Description

The Multifunctional Information Distribution System (MIDS) Program is a multinational (U.S., France, Germany, Italy, Spain) cooperative development program with joint service participation (Navy, Army, Air Force). 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. The MIDS Program consists of the MIDS Low Volume Terminal (MIDS-LVT) and the MIDS Joint Tactical Radio System (MIDS JTRS) terminal.

MIDS-LVT provides interoperability with international users significantly increasing force effectiveness and minimizing hostile actions and friend-on-friend engagements. The MIDS-LVT terminal design is smaller, lighter, highly reliable, interoperable with Joint Tactical Information Distribution System (JTIDS) Class 2 terminal, compatible with all the participants' designated platforms, affordable, and re-configurable to individual user needs and budgets. Three principal configurations of the MIDS-LVT terminal are in production and use an open system, modular architecture. MIDS-LVT(1) includes voice, Tactical Air Navigation (TACAN) and variable power transmission with maximum power of 200 watts and provides a Link 16 capability to U.S. Navy and U.S. Air Force platforms. MIDS-LVT(2) is a ground variant and is 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, and a maximum power of 40 watts).

The MIDS JTRS terminal meets JTRS compliance. The technical objective of MIDS JTRS is to transform the current MIDS-LVT into a four-channel, Software Communications Architecture (SCA) compliant Joint Tactical Radio (JTR) set, while maintaining current Link 16 and TACAN functionality. The MIDS JTRS design is plug-and-play interchangeable with U.S. Navy and U.S. Air Force platforms that use MIDS-LVT, and accommodates future technologies and capabilities. The MIDS JTRS design will also add improvements such as Link 16 enhanced throughput, Link 16 frequency re-mapping, and programmable crypto. In addition to the Link 16 and TACAN functionality, MIDS JTRS will provide three additional 2 megahertz (MHz) to 2 gigahertz (GHz) programmable channels to accommodate incremental delivery of the advanced JTRS waveforms through MIDS JTRS Platform Capability Packages (JPCP). The first of these JPCP waveforms will be the Joint Airborne Networking-Tactical Edge (JAN-TE) capability. Total program requirements include terminal development, F/A-18E/F integration, software hosting (Operating Environment/JTRS Waveforms), implementation of National Security Agency (NSA) guidelines and production transition .

Executive Summary

The U.S. continues to benefit from cost sharing with the European Nations for the Multifunctional Information Distribution System Low Volume Terminal (MIDS-LVT) software and hardware sustainment. A special MIDS Steering Committee meeting was held February 25-26, 2009 to focus on international participation in Link 16 enhancement development.

Enhancements include crypto-modernization (CM), frequency re-mapping (FR) and enhanced throughput (ET) for Link 16. The Department of Defense (DoD) funding to maintain multinational Link 16 interoperability and affordability fulfills the U.S. international obligations in the extension to Supplement 3 of the MIDS-LVT Program Memorandum of Understanding (PMOU) with France, Germany, Italy, Spain, and the U.S. The PMOU extension to Supplement 3 was signed September 30, 2009. The U.S. benefits from Supplement 3 of the MIDS PMOU by maintaining multinational Link 16 interoperability and affordability with continued cost sharing with the European Nations for MIDS terminal software and hardware sustainment.

The MIDS Program Manager (PM) has implemented an acquisition strategy that maintains continuous competition between the two U.S. MIDS-LVT production contractors, Data Link Solutions (DLS) and ViaSat, Inc. The MIDS-LVT Production Lot 9 was awarded on June 11, 2008 for procurement of 335 terminals. The Lot 10 buy of 259 terminals was awarded June 23, 2009 and was split between the MIDS-LVT contractors. Lot 11 was awarded in March 10, 2010. To date, 6076 MIDS-LVT terminals are on contract with DLS, ViaSat, and EuroMIDS. This number includes terminals for the US Navy, US Air Force, US Army, and Foreign Military Sales. In June 2008 the MIDS Program Manager and MIDS Joint Tactical Radio System (JTRS) industry developers agreed on a cost cap arrangement that limited the government's financial liability to complete the MIDS JTRS core program. The cost cap was implemented after the program experienced cost growth and continuous schedule delays. The schedule cap negatively incentivized developer schedule slips.

MIDS JTRS Contractor First Article Qualification Testing (CFAQT) was conducted September 2007 to December 2009 to evaluate and qualify MIDS JTRS performance against specifications. MIDS JTRS Government First Article Qualification Testing (GFAQT) was conducted June 2009 to December 2009 to verify system performance against MIDS JTRS specifications and CPD requirements. MIDS JTRS regression testing was conducted following both CFAQT and GFAQT.

The MIDS Program continues to work closely with the F/A-18E/F Program Manager, Commander Operational Test and Evaluation Force (COMOPTEVFOR), National Security Agency (NSA), Director Operational Test & Evaluation (DOT&E), and Developmental Test & Evaluation (DT&E) to satisfy all test requirements. The MIDS JTRS Core Terminal successfully completed its first Link 16 flight on the F/A-18E/F on August 1, 2008. A key test milestone occurred on April 24, 2009 when the first classified flight test of the Link 16 waveform was conducted. A successful Operational Assessment (OA) was completed and a report provided by COMOPTEVFOR in October 2009. Developmental testing is ongoing and operational testing is scheduled to commence in May 2010. NSA Certification of MIDS JTRS terminals was achieved in March 2010.

The MIDS JTRS Capability Production Document (CPD) was approved on May 29, 2008, and the Test and Evaluation Master Plan (TEMP) was approved on October 1, 2008. An Overarching Integrated Product Team (OIPT) meeting was co-chaired by representatives from USD (A&T) and ASD (NII) on August 5, 2009. Positive endorsement of MIDS JTRS as a vital product for the warfighter was expressed by the OIPT participants and the OIPT recommended proceeding to a Milestone (MS) C low rate initial production (LRIP) decision. Office of Under Secretary of Defense, Acquisition, Technology and Logistics (OUSD (AT&L)) Cost Analysis and Program Evaluation (CA&PE) representatives concurred that the independent cost assessment was in line with the program office estimates.

A decision was made by OUSD (AT&L) in early December 2009 that a MS C LRIP decision was not required for MIDS JTRS since the MIDS program had a successful Milestone III decision in September 2003. The Milestone Decision Authority (MDA) chaired a Defense Acquisition Board (DAB) on December 18, 2009 for approval of MIDS JTRS Limited Production and Fielding (LP&F). During the DAB, the MIDS program demonstrated that MIDS JTRS is an affordable and scalable solution while achieving the Department of Defense's vision for advanced networking waveforms. The program office also demonstrated that the Contractor and Government First Article Qualification Testing was complete, that NSA Certification was nearing completion, and that the Technical Data Package for the MIDS participant nations (France, Germany, Italy, and Spain) was in progress. Additionally, the Navy and Air Force fielding plans for MIDS JTRS were clearly defined and funded to the Independent Cost Estimate (ICE) level.

The result of the DAB was Acquisition Decision Memorandum I signed on December 23, 2009 approving procurement of 41 MIDS JTRS variant terminals to support the F/A-18E/F production schedule and the Joint Surveillance and Target Attack Radar System (JSTARS) integration and testing requirements. The production contract was awarded to ViaSat, Inc on January 14, 2010. Acquisition Decision Memorandum II, which fully addresses the findings and guidance of the DAB, was signed on March 9, 2010. A DAB review will be held prior to a production and fielding decision for additional MIDS JTRS terminals.

There are no significant software issues with this program.

Threshold Breaches

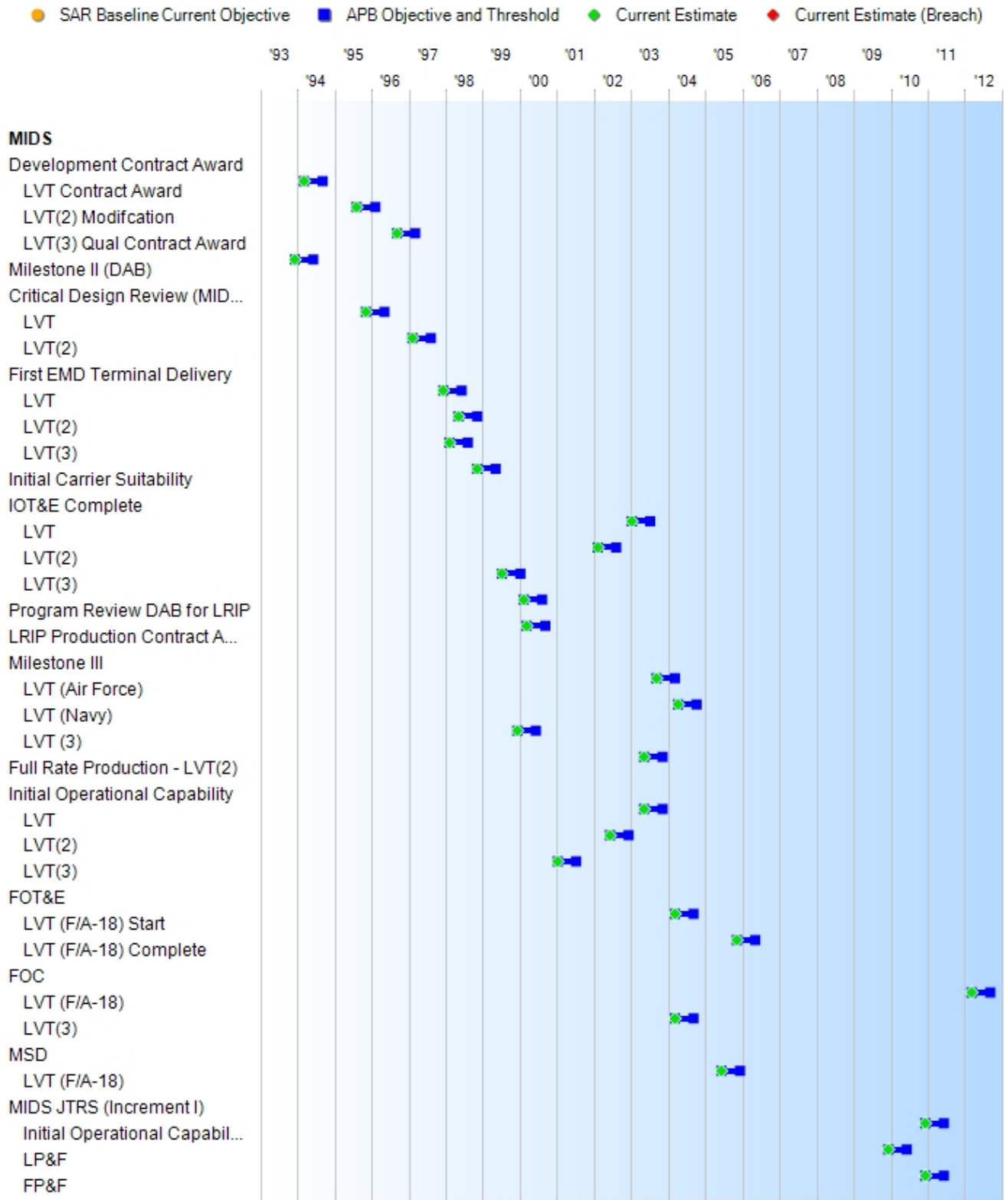
APB Breaches

- 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



Schedule Events				
Events	SAR Baseline Production Estimate	Current APB Production Objective/Threshold	Current Estimate	
Development Contract Award				
LVT Contract Award	Mar 1994	Mar 1994	Sep 1994	Mar 1994
LVT(2) Modification	Aug 1995	Aug 1995	Feb 1996	Aug 1995
LVT(3) Qual Contract Award	Sep 1996	Sep 1996	Mar 1997	Sep 1996
Milestone II (DAB)	Dec 1993	Dec 1993	Jun 1994	Dec 1993
Critical Design Review (MIDS Terminal)				
LVT	Nov 1995	Nov 1995	May 1996	Nov 1995
LVT(2)	Feb 1997	Feb 1997	Aug 1997	Feb 1997
First EMD Terminal Delivery				
LVT	Dec 1997	Dec 1997	Jun 1998	Dec 1997
LVT(2)	May 1998	May 1998	Nov 1998	May 1998
LVT(3)	Feb 1998	Feb 1998	Aug 1998	Feb 1998
Initial Carrier Suitability	Nov 1998	Nov 1998	May 1999	Nov 1998
IOT&E Complete				
LVT	Jan 2003	Jan 2003	Jul 2003	Jan 2003
LVT(2)	Feb 2002	Feb 2002	Aug 2002	Feb 2002
LVT(3)	Jul 1999	Jul 1999	Jan 2000	Jul 1999
Program Review DAB for LRIP	Feb 2000	Feb 2000	Aug 2000	Feb 2000
LRIP Production Contract Award	Mar 2000	Mar 2000	Sep 2000	Mar 2000
Milestone III				
LVT (Air Force)	Sep 2003	Sep 2003	Mar 2004	Sep 2003
LVT (Navy)	Apr 2004	Apr 2004	Oct 2004	Apr 2004
LVT (3)	Dec 1999	Dec 1999	Jun 2000	Dec 1999
Full Rate Production - LVT(2)	May 2003	May 2003	Nov 2003	May 2003
Initial Operational Capability				
LVT	May 2003	May 2003	Nov 2003	May 2003
LVT(2)	Jun 2002	Jun 2002	Dec 2002	Jun 2002
LVT(3)	Jan 2001	Jan 2001	Jul 2001	Jan 2001
FOT&E				
LVT (F/A-18) Start	Mar 2004	Mar 2004	Sep 2004	Mar 2004
LVT (F/A-18) Complete	Nov 2005	Nov 2005	May 2006	Nov 2005
FOC				
LVT (F/A-18)	Mar 2012	Mar 2012	Sep 2012	Mar 2012
LVT(3)	Mar 2004	Mar 2004	Sep 2004	Mar 2004

MSD				
LVT (F/A-18)	Jun 2005	Jun 2005	Dec 2005	Jun 2005
MIDS JTRS (Increment I)				
Initial Operational Capability (IOC)	N/A	Dec 2010	Jun 2011	Dec 2010
LP&F	N/A	Dec 2009	Jun 2010	Dec 2009
FP&F	N/A	Dec 2010	Jun 2011	Dec 2010

Change Explanations

None

Notes

Office of the Secretary of Defense (OSD) decision was made in December 2009 that MIDS JTRS (Increment I) did not require a Milestone (MS) C decision since the MIDS Program had a MS C decision in September 2003.

Acronyms and Abbreviations

APB - Acquisition Program Baseline
 DAB - Defense Acquisition Board
 EMD - Engineering and Manufacturing Development
 FOC - Full Operational Capability
 FOT&E - Follow-On Test and Evaluation
 FP&F - Full Production and Fielding
 FRP - Full Rate Production
 IOC - Initial Operational Capability
 IOT&E - Initial Operational Test and Evaluation
 IRT - Integration Readiness Test
 JTRS - Joint Tactical radio System
 LP&F - Limited Production and Fielding
 LRIP - Low Rate Initial Production
 LVT - Low Volumn Terminal
 MIDS - Multifunctional Information Distribution System
 MS - Milestone
 MSD - Material Support Date
 OPEVAL - Operational Evaluation
 Qual - Qualification

Performance

Performance Characteristics				
SAR Baseline Production Estimate	Current APB Production Objective/Threshold		Demonstrated Performance	Current Estimate
Interoperability				
All top level IERs in SMORD	All top level IERs in SMORD	All critical top level IERs in SMORD	100% Demonstrated	All top level IERs in SMORD
Waveform Compatibility				
STANAG 4175 & JTIDS SSS	STANAG 4175 & JTIDS SSS	STANAG 4175 & JTIDS SSS	JITC Certified	STANAG 4175 & JTIDS SSS
Message Standard				
STANAG 5516 (& 5616 for Data Fwds) & MIL-STD-6016B	STANAG 5516 (& 5616 for Data Fwds) & MIL-STD-6016B	STANAG 5516 (& 5616 for Data Fwds) & MIL-STD-6016B	JITC Certified	STANAG 5516 (& 5616 for Data Fwds) & MIL-STD-6016B
Maximum Power Transmission (w)				
LVT				
Multiple selectable levels	Multiple selectable levels	>=200 with IF for 1000	200 Watts with IF	Multiple selectable levels
LVT(2)				
Multiple selectable levels	Multiple selectable levels	>=200 or 25 selectable	200/25	Multiple selectable levels
LVT(3)				
Multiple selectable levels	Multiple selectable levels	>=50	50	Multiple selectable levels
Information Exchange Rate (Kbps)				
1000	>=1000	28.8 -115.2	1100 Kbps	>=1000
Paired Time Slot Relay Capability				
Integral and automated	Integral and automated	Integral and automated	Yes	Integral and automated
Paired Time Slot Relay Range (nm) (USN Only)				
1200	>=1200	>=500	520 nm	>=1200
Repromulgation Relay (nm) MIDS-LVT(2)				

4 hop	4 hop	3 hop	4 hops	4 hop
Communication Range				
LVT (USN: C2 to C2)				
300	>=300	>=300	350	>=300
LVT (USN: Non-C2 to C2)				
240	>=240	>=220	240	>=240
LVT (USN: Non-C2 to Non-C2)				
200	>=200	>=180	220	>=200
LVT (USN: Surface Platforms)				
LOS up to 300	LOS >=300	LOS >=300	300	LOS >=300
LVT (F-16: Non-C2 to C2)				
300	>=300	>=200	200	>=300
LVT (F-16: Non-C2 to Non-C2)				
150	>=150	>=100	150	>=150
LVT(2)				
Up to 300 with LOS at 200 w	Up to 300 with LOS at 200 w	Up to 300 with LOS at 200 w	300	Up to 300 with LOS at 200 w
LVT(3) (Non-C2 to C2)				
300	>=300	>=200	300	>=300
LVT(3) (Non-C2 to Non-C2)				
150	>=150	>=100	170	>=150
Voice Channels: LVT (USN)				
Capable of 2	Capable of 2	1	2	Capable of 2
Coded Message Error Probability (%)				
LVT				
1	<=1	<=2	Passed - measured results classified	<=1
LVT(2)				
1	<=1	<=2	Passed - measured results classified	<=1
LVT(3)				
< 1 detected	<= 1 detected	<=2	Passed - measured results classified	<= 1 detected
Jam Resistance				
LVT (USN) (db)				

MJCS-194 - 89	MJCS-194-89	MJCS-194-89	Compliant	MJCS-194-89
LVT (F-16) (%)				
< 1 detected error	<=1 detected error	<= 1 detected error	Passed - measured results classified	<=1 detected error
LVT(2) (%)				
< 1 detected error	<= 1 detected error	<= 5	Passed - measured results classified	<= 1 detected error
LVT(3) (%)				
< 1 detected error	<= 1 detected error	<= 1 detected error	Passed - measured results classified	<= 1 detected error
Ao				
LVT				
.90	>=.90	>=.90	.91	>=.90
LVT(2) (Terminal)				
.94	>=.94	>=.90	.94	>=.94
LVT(3)				
.97	>=.97	>=.95	.965	>=.97
MTBF (hr)(lab)				
USN				
1000	>=1000	>=1000	1850	>=1000
USA				
1800	>=1800	>=1000	1850	>=1800
USAF				
1500	>=1500	>=1000	1850	>=1500
MFHBOMF/MTBOMF (hr)				
System				
25	>=25	>=25	32	>=25
LVT (Aircraft) (Terminal)				
300	>=300	>=220	240	>=300
LVT (Ships) (Terminal)				
350	>=350	>=257	275	>=350
LVT(2) (Terminal)				
393	>=393	>=393	425	>=393
MTTR (O-level) (min)				
LVT(2) (Terminal)				
30	<=30	<=30	25	<=30

MCMTOMF				
LVT (USN Aircraft)				
60	<=60	<=90	75	<=60
LVT (USN Ships)				
60	<=60	<=90	80	<=60
LVT (USAF)				
MRT < 20	MRT < 20	MRT < 30	25	MRT < 20
LVT(3)				
MRT < 20	MRT < 20	MRT < 30	28	MRT < 20
Volume (Cubic Feet)				
LVT				
< .6	<= .6	<= .6	.58	<= .6
LVT(2)				
< 1.4	<=1.4	<=1.4	1.32	<=1.4
LVT(3)				
< .6	<= .6	<= .6	.56	<= .6
Weight (lbs)				
LVT				
< 65	<=65	<=65	63.8	<=65
LVT(2)				
< 88	<=88	<=88	87.9	<=88
LVT(3)				
< 65	<=65	<=65	63.8	<=65
MIDS-LVT Enhancement ECPs				
Message Standards				
N/A	STANAG 5516 (& 5616 for Data Fwds) & MIL-STD-6016C	STANAG 5516 (& 5516 for Data Fwds) & MIL-STD-6016B	Enhancement not Implemented.	Enhancement not Implemented.
Communications Range				
N/A	see notes	see notes	Enhancement not Implemented.	Enhancement not Implemented.
Information Exchange Rate (Kbps)				
LET 0				
N/A	>=358	>=107	Enhancement not Implemented.	Enhancement not Implemented.
LET 1				
N/A	>=546	>=358	Enhancement	Enhancement

			not Implemented.	not Implemented.
LET 2				
N/A	>=833	>=546	Enhancement not Implemented.	Enhancement not Implemented.
LET 3				
N/A	>=968	>=833	Enhancement not Implemented.	Enhancement not Implemented.
LET 4				
N/A	>=1100	>=968	Enhancement not Implemented.	Enhancement not Implemented.
Coded Message Error Probability (%)				
LET 0				
N/A	<=1%	<=2%	Enhancement not Implemented.	Enhancement not Implemented.
LET 1				
N/A	<=1%	<=2%	Enhancement not Implemented.	Enhancement not Implemented.
LET 2				
N/A	<=1%	<=2%	Enhancement not Implemented.	Enhancement not Implemented.
LET 3				
N/A	<=1%	<=2%	Enhancement not Implemented.	Enhancement not Implemented.
LET 4				
N/A	<=1%	<=2%	Enhancement not Implemented.	Enhancement not Implemented.
Jam Resistance				
N/A	MJCS-194-89	MJCS-194-89	Enhancement not Implemented.	Enhancement not Implemented.
MIDS JTRS Performance Parameters				
Link-16 Waveform compatibility				
N/A	STANAG 4175 and MIDS LVT SSS	STANAG 4175 and MIDS LVT SSS	Passed JITC waveform conformance	Passed JITC waveform conformance

			test.	test.
Link-16 Message Standard				
N/A	MIL-STD-6016C and STANAG 5516	MIL-STD-6016C and STANAG 5516	Passed JITC waveform conformance test.	Passed JITC waveform conformance test.
Link-16 Information Exchange Rate				
Normal Operations with JTRS				
N/A	>=1100 Kbps	>=28-115.2 Kbps	128	128
LET 0				
N/A	>=358	>=107	107	107
LET 1				
N/A	>=546	>=358	358	358
LET 2				
N/A	>=833	>=546	546	546
LET 3				
N/A	>=968	>=833	837	837
LET 4				
N/A	>=1100	>=968	968	968
Interoperability: All top level IERs will be satisfied to the standards specified in the threshold (T) and objective (O) values.				
N/A	All top-level Information exchange Requirements (IERs) are met.	All top-level Information Exchange Requirements (IERs) are met.	All top-level Information Exchange Requirements (IERs) transferred.	All top-level Information Exchange Requirements (IERs) transferred.
Link-16 Coded Message Error Probability (CMEP)				
LET 0				
N/A	<=1%	<=2%	Threshold met - results classified.	<=1%
LET 1				
N/A	<=1%	<=2%	Threshold met - results classified.	<=1%
LET 2				
N/A	<=1%	<=2%	Threshold met - results classified.	<=1%
LET 3				
N/A	<=1%	<=2%	Threshold met - results	<=1%

			classified.	
LET 4				
N/A	<=1%	<=2%	Threshold met - results classified.	<=1%
Weight/Volume				
N/A	<=65 lbs, <=.6 cu.ft.	<=65 lbs, <=.6 cu.ft.	Measured 54.7 lbs; measured .573 cu. ft.	<=65 lbs, <=.6 cu.ft.
Link-16 Jam Resistance				
JTRS (USN) (db)				
N/A	MJCS-194-89	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.
All Others				
N/A	<=1% Detected message error rate	<=1% Detected message error rate	.98%	.98%
Link-16 J-Voice Channels				
N/A	2	2	2	2
Link-16 Communications Range Data				
N/A	see notes	see notes	>=250 nm	>=250 nm.
Link-16 Communications Range J-Voice				
N/A	>=220nm (C2-C2 w/HPA); >=140nm (C2-non-C2); >=90nm (non-C2-nonC2/non C2-C2)	>=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.
Link-16 Relay				
N/A	>=1200nm	>=500nm	Not tested yet.	>=500 nm
Link-16 Operating Frequency Range				
N/A	Operate 2-2000 MHz	Operate 2-2000 MHz	2-2000 MHz	2-2000 MHz
Multi-Channels/Networks				
N/A	4 Channels simultaneously with TACAN/multi-net (single network) Link-16 fixed operation	4 Channels simultaneously with TACAN/multi-net (single network) Link-16 fixed operation	4 Channels passed.	4 Channels passed.

	on Channel 1	on Channel 1*		
Scan Frequencies				
N/A	Scan a minimum of 10 frequencies or presets	Scan a minimum of 10 frequencies or presets	FOT&E: No MIDS JTRS waveforms require presets.	FOT&E: No MIDS JTRS waveforms require presets.
Terminal Start-up/Restart (Link-16 only)				
N/A	<=2.0 min	<=3.5 min	3.2 minutes	3.2 minutes
IBIT Performance (Link-16 only)				
N/A	<=30seconds	<=70 seconds	29 seconds	29 seconds
Link-16 Net Entry/Synchronization				
N/A	<=30 seconds	Not to exceed 4 min from time that course sync is initiated	30 sec - 2.5 minutes	30 sec - 2.5 minutes
Crypto-Rekeying				
N/A	Over the Air Rekeying (OTAR) through electronic media, or common reprogramming hardware / software	At O-level	Not implemented in Core Terminal.	Not implemented in Core Terminal.
Link-16 Transmission of Unit Position and Status Reports				
N/A	<=100 ft accuracy	<=300 ft accuracy	78 ft	78 ft
TACAN Performance Start-up/Restart				
N/A	<=14 seconds	<=30 seconds	15 seconds	15 seconds
MFHBOMF (System/Single Channel)				
N/A	>=36 hrs (Other Platforms)	>=25 hrs (F/A-18E/F, EA-18G, TACAIR)	36.5 hrs.	36.5 hrs
MTBF Lab (Ch. 1(Link-16))				
N/A	>=1800 hrs	>= 1200 hrs	1285 hrs	1285 hrs
MTBF Lab (Ch. 2, 3 & 4)				
N/A	>=1800 hrs	>=1550 hrs	1550 hrs	1550 hrs
MFHBOMF (Terminal/Single Channel)				
N/A	>=300 hrs	>=220 hrs	724 (includes lab data)	220 hrs
MCMTOMF (Single Channel)				
N/A	<= 60 min	<=120 min; <= 90 min (F/A-18 E/F, EA-18G, NAVAIR)	60 min	60 min (Single channel)
MRT				
N/A	<= 20 min	<= 45 min	20 min	45 min
BIT PCD				
N/A	PCD>= 98%	PCD>= 95%	97%	97%
BIT MFHBFA				
N/A	MFHBFA: >= 451 hrs	MFHBFA: >= 113 hrs	80 hrs	120 hrs

Start-Up (Terminal/Single Channel)				
N/A	<=2min (OE, crypto and waveform); <=2min (fine sync)	<=3.5min (OE, Crypto and waveform); <=4min (fine sync)	3.2 min	3.2 min
Start-Up (Waveform/Link-16 only)				
N/A	<=2min (OE, crypto and waveform); <=2min (fine sync)	<=4min (OE, Crypto and waveform); <=4min (fine sync)	.5 - 2.5 min	.5 - 2.5 min
Restart < 50 milliseconds (Core configuration only)				
N/A	Operates through	Operates through	Operates through	Operates through
Restart <10 seconds (Terminal)				
N/A	<=2min	<=3.5min	2.5 min	2.5 min
Restart <10 seconds (Link-16 waveform)				
N/A	<=10sec	<=10sec	9 sec	9 sec
Restart >=10 seconds and <2min (Terminal)				
N/A	<=2min	<=3.5min	3.2 min	3.2 min
Restart >=10 seconds and <2min (Link-16)				
N/A	<=2min	<=4min	3.2 min	3.2 min
Restart >= 2 minutes (Terminal)				
N/A	<=2min	<=3.5min	3.2 min	3.2 min
Restart >=2 minutes (Link-16 Waveform)				
N/A	<=2min	<=4min	3.2 min	3.2 min
TACAN Start-up/Restart				
N/A	<=14sec	<=30sec	15 sec	15 sec
IBIT Performance				
N/A	<=30sec	<=70sec	30 sec	30 sec
MIDS JTRS Capability				
N/A	F3I for MIDS-LVT and meet the performance measures in MIDS JTRS Core Terminal KPP 1 (SMORD) Performance Measures in addition to TACAN and J-Voice.	F3I for MIDS-LVT and meet the performance measures in MIDS JTRS Core Terminal KPP 1 (SMORD) Performance Measures 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.
Functionality				
N/A	MIDS JTRS Core Terminal will meet connectivity requirements of ALL Airborne (MIDS JTRS) Domain Waveforms.	The MIDS JTRS Core Terminal shall be capable of supporting secure and non-secure voice, video, and data communications by porting narrowband and wideband JTRS developed waveforms in compliance with the Software Communications Architecture. MIDS JTRS Core Terminal will	15 OF 15 Performance measures have been achieved.	15 OF 15 Performance measures have been achieved.

		meet connectivity requirements of ported Waveforms.		
Number of Channels				
N/A	Threshold same as Objective (One TACAN/Link-16 plus three additional channels for JTRS Waveforms).	One TACAN/Link-16 plus three additional channels for JTRS Waveforms. Navy Initial Implementation - TACAN/Link-16 plus 3 additional channels. USAF Initial Implementation - Link-16 for B-1.	1 of 1 Performance measures have been achieved.	1 of 1 Performance measures have been achieved.
Net Ready				
N/A	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 TV1, 2) DISR mandated GIG KIPs identified in the KIP declaration (Table 31), 3) NCOW RM Enterprise Services 4) Information assurance requirements including availability, integrity, authentication, confidentiality, and non-repudiation, and issuance of an ATO 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.	The system must fully support execution of joint critical operational activities identified in the applicable joint and system 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 identified in the TV-1, 2) DISR mandated GIG KIPs identified in the KIP declaration (Table 31), 3) NCOW RM Enterprise Services 4) Information assurance 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.	5 of 5 Performance measures have been achieved. System certified by NSA in March 2010.	5 of 5 Performance measures have been achieved. System certified by NSA in March 2010.
Operational Availability (Ao)				
N/A	Each MIDS JTRS Core Terminal shall demonstrate an operational availability Ao of >0.99 for all channels.	Each MIDS JTRS Core Terminal shall demonstrate an operational Availability Ao of >0.90 for Link-16 / TACAN Channel and >0.96 for the remaining channels.	96.8%.	96.8
Software Configurable				
N/A	Each MIDS JTRS Core	Each MIDS JTRS Core	1 of 1	1 of 1

	Terminal shall provide any designated operator with the ability to load and reconfigure its modes/capabilities via software while in the operational environment. (Note: This capability does not apply to F/A-18E/F, EA-18G or B-1)	Terminal shall provide any designated operator with the ability to load and reconfigure its modes/capabilities via software while in the operational environment. (Note: This capability does not apply to F/A-18E/F, EA-18G or B-1)	Performance measures have been achieved.	Performance measures have been achieved.
Growth				
N/A	The MIDS JTRS Core 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.	The MIDS JTRS Core 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.	2 of 2 Performance measures achieved.	2 of 2 Performance measures achieved.

Requirements Reference

Requirements for MIDS are derived from the Single MIDS Operational Requirements Document (ORD) (MIDS-LVT) approved July 25, 2004 and the MIDS JTRS Capability Production Document (CPD) (MIDS JTRS) approved May 29, 2008.

Change Explanations

None

Notes

Note:

- For LET 0 there is a 5 db loss in jam resistance and 44% loss in range over PAC4 Single Pulse. The 1% error rate will be calculated based on the decrease in jamming resistance.
- For LET 1 there is a 7 db loss in jam resistance and 56% loss in range over PAC4 Single Pulse. The 1% error rate will be calculated based on the decrease in jamming resistance.
- For LET 2 there is a 9 db loss in jam resistance and 65% loss in range over PAC4 Single Pulse. The 1% error rate will be calculated based on the decrease in jamming resistance.
- For LET 3 there is a 10 db loss in jam resistance and 67% loss in range over PAC4 Single Pulse. The 1% error rate will be calculated based on the decrease in jamming resistance.
- For LET 4 there is an 11 db loss in jam resistance and 72% loss in range over PAC4 Single Pulse. The 1% error rate will be calculated based on the decrease in jamming resistance.
- For Frequency Remap, there will be a db loss for the number of frequencies remapped based on the formula $10 \log(51/51-NR)$ where NR = the number of frequencies remapped. There is a corresponding decrease in range of approximately 1% for each frequency that is remapped.
- MIDS-LVT Enhancement ECPs and MIDS JTRS are Engineering Change Proposals to the MIDS-LVT Program and performance characteristics have been added for them in this SAR.

Acronyms and Abbreviations

Ao - Operational Availability
APB - Acquisition Program Baseline
BIT - Built in Test
C2 - Command and Control
db - Decibels
dm3 - Decimeters cubed
DP - Double Pulse
hr - Hour
IBIT - Integrated Built in Test
IER - Information exchange requirement
IF - Interface
JAN-TE - Joint Airborne Network-Tactical Edge
JPCP - JTRS Platform Capability Package
JTIDS - Joint Tactical Information Distribution System
kbps - Kilobits per second
Kg - Kilograms
KM - Kilometers
lbs - Pounds
LOS - Line of sight
LVT - Low Volume Terminal
MCMTOMF - Mean Corrective Maintenance Time for Operational Mission Failures
MFHBFA - Mean Flight Hours Between False Alarms
MFHBMCF - Mean Flight Hours Between Mission Critical Failures
MFHBOMF - Mean Flight Hours Between Operational Mission Failures
MIDS - Multifunctional Information Distribution System
Mil-Std - Military Standard
min - Minute
MJCS - Memorandum Joint Chiefs of Staff
MLDT - Mean Logistics Delay Time
MROC - Multiple Required Operational Capabilities
MRT - Mean Repair Time
MTBCF - Mean Time Between Critical Failures
MTBF - Mean Time Between Failure
MTBOMF - Mean Time Between Operational Mission Failures
MTTR - Mean Time to Repair
nm, nmi - Nautical mile
OE - Operational Environment
O-Level - Organization Level
ORD - Operational Requirements Document
OTAR - Over the Air Re-keying
PCD - Percent Correct Detect
SCA - Software Communications Architecture
SMORD - Single MIDS ORD
SSS - System Segment Specification
STANAG - Standardization Agreement
TACAN - Tactical Air Navigation
TC - Period of Calendar Time
TO - Operating Time
TTNT - Tactical Targeting Network Technology
VDC - Volt Direct Current
w - Watts

Track to Budget

RDT&E			
Appn	BA	PE	
Navy	1319	05	0205604N
	Project	Name	
	2126	Navy/Multifunctional Information Distribution System	(Shared)
Air Force	3600	05	0207130F
	Project	Name	
	F15	Air Force MIDS/F-15C/D	(Shared) (Sunk)
		Air Force MIDS/F-15C/D	(Shared) (Sunk)
Air Force	3600	05	0207133F
	Project	Name	
	672671	Air Force MIDS/F-16	(Shared)
		Air Force MIDS/F-16	(Shared)
Air Force	3600	05	0207134F
	Project	Name	
	674703	Air Force MIDS/F-15E	(Shared)
		Air Force MIDS/F-15E	(Shared)
Army	2040	05	0603713A
	Project	Name	
	D370	Army MIDS/Army MIDS	(Shared)
Defense-Wide	0400	05	0603883C
	Project	Name	
	0010	DOD	(Shared) (Sunk)
		DOD	(Shared) (Sunk)
Air Force	3600	05	0604240F
	Project	Name	
	11B002	Air Force MIDS	(Shared)
		Air Force MIDS	(Shared)
Navy	1319	05	0604270N
	Project	Name	
	E0556	Navy EA-6B Integration/EA-6B	(Shared)
	E2781	Navy EA-6B Integration/EA-6B	(Shared)
Army	2040	05	0604280A
	Project	Name	
	162	Army (Shared)/JTRS	(Shared)
Air Force	3600	05	0604280F
	Project	Name	
	655068	Air Force (Shared)/JTRS	(Shared)

Navy	1319	05	0604280N
	Project	Name	
	3020	Navy (Shared)/JTRS (Shared)	
	3073	Navy (Shared)/MIDS SCA (Shared)	

Defense-Wide	0400	05	0604771D
	Project	Name	
	P771	OSD, DA/JTRS (Shared)	
	Notes:	MIDS	
	P773	OSD, DA/Multifunctional Information Distribution System (Shared)	
	Notes:	MIDS	

Procurement

Appn	BA	PE	
Navy	1506	01	0204163N
	Line Item	Name	
	0145	F-18 Series (Shared)	
Defense-Wide	0300	02	0208861C
	Line Item	Name	
	2260	DA, THAAD (Shared) (Sunk)	
Defense-Wide	0300	02	0208865C
	Line Item	Name	
	2257	DA, Patriot (Shared) (Sunk)	
Navy	1506	05	0204154N
	Line Item	Name	
	0511	EW Development: EA-6B (Shared)	
Navy	1506	05	0204136N
	Line Item	Name	
	0525	F/A-18 (Shared)	
Defense-Wide	0300	02	
	Line Item	Name	
	10	DOD (Shared) (Sunk)	
Navy	1611	02	0204112N
	Line Item	Name	
	2001	Navy (Shared)	
	2086	Multi-Purpose CVNs (Shared)	
Navy	1611	02	0204222N
	Line Item	Name	
	2122	DDG-51 (Shared)	
Navy	1611	02	0204230N
	Line Item	Name	
	2127	Navy (Shared)	

Navy	1810	02	0205604N
	Line Item	Name	
	2614	Advanced Tactical Data Link System (Shared)	
Defense-Wide	0300	02	
	Line Item	Name	
	30	DOD (Shared) (Sunk)	
Navy	1611	03	0204411N
	Line Item	Name	
	3035	Amphibious Assault Ships (Shared)	
	3036	LPD-17 (Shared)	
Air Force	3010	02	
	Line Item	Name	
	B00200	ABL (Shared)	
Army	2035	02	0214400A
	Line Item	Name	
	B22603	Short-Range Air Defense	
Air Force	3010	05	
	Line Item	Name	
	F01500	F-15 (Shared)	
	F01600	F-16 (Shared)	
Air Force	3080	02	
	Line Item	Name	
	F01600	F-16 (Shared)	
Air Force	3010	05	0207423F
	Line Item	Name	
	MN9860	Joint Tactical Radio System	

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	1326.0	1458.6	1325.8	825.8	1345.9	1345.9
Procurement	955.4	1149.5	1264.5	1171.2	993.1	1246.6	1273.4
Flyaway	--	--	--	983.1	--	--	1067.1
Recurring	--	--	--	910.5	--	--	995.6
Non Recurring	--	--	--	72.6	--	--	71.5
Support	--	--	--	188.1	--	--	206.3
Other Support	--	--	--	46.4	--	--	52.6
Initial Spares	--	--	--	141.7	--	--	153.7
MILCON	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
Total	1824.8	2475.5	N/A	2497.0	1818.9	2592.5	2619.3

Cost Notes

RDT&E costs include MIDS-LVT and MIDS JTRS terminal development, terminal acquisition, integration and test on the U.S. Navy platforms. Procurement costs are for the MIDS terminals. Costs of platform installation and platform kits, and Air Force and 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.

APB cost estimate is at the 50% confidence level. The program was directed by the December 2009 ADM to use the OSD Independent Cost Estimate, which is at the 50% confidence level, for the APB.

Total Quantity			
Quantity	SAR Baseline Production Estimate	Current APB Production	Current Estimate
RDT&E	143	403	403
Procurement	2821	4150	4227
Total	2964	4553	4630

Quantity Notes

Note: Procurement quantities include MIDS terminals for Navy ships, F/A-18s and EA-6Bs; Air Force F-15s and F-16s; and other Navy, Air Force and Army platforms. The current estimate includes MIDS JTRS procurement quantities for the Phase 2B Core Terminals.

Note: Unit of Measure is terminals.

Cost and Funding

Funding Summary

Appropriation Summary									
FY 2011 President's Budget / December 2009 SAR (TY\$ M)									
Appropriation	Prior	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	To Complete	Total
RDT&E	1248.1	12.5	20.6	31.1	26.1	5.5	2.0	0.0	1345.9
Procurement	1021.3	66.4	55.9	51.9	36.2	23.0	16.4	2.3	1273.4
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 2011 Total	2269.4	78.9	76.5	83.0	62.3	28.5	18.4	2.3	2619.3
PB 2009 Total	2197.3	65.6	37.0	31.1	17.4	12.9	6.2	5.2	2372.7
Delta	72.1	13.3	39.5	51.9	44.9	15.6	12.2	-2.9	246.6

Quantity Summary										
FY 2011 President's Budget / December 2009 SAR (TY\$ M)										
Quantity	Undistributed	Prior	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	To Complete	Total
Development	403	0	0	0	0	0	0	0	0	403
Production	0	3422	214	177	169	124	73	45	3	4227
PB 2011 Total	403	3422	214	177	169	124	73	45	3	4630
PB 2009 Total	359	3117	106	76	62	36	27	13	11	3807
Delta	44	305	108	101	107	88	46	32	-8	823

Cost and Funding

Annual Funding By Appropriation

Annual Funding							
0400 RDT&E Research, Development, Test, and Evaluation, 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
1990	--	--	--	--	--	--	9.0
1991	--	--	--	--	--	--	5.0
1992	--	--	--	--	--	--	16.6
1993	--	--	--	--	--	--	23.9
1994	--	--	--	--	--	--	23.3
1995	--	--	--	--	--	--	49.5
1996	--	--	--	--	--	--	42.7
1997	--	--	--	--	--	--	36.9
1998	--	--	--	--	--	--	45.2
1999	--	--	--	--	--	--	27.9
2000	--	--	--	--	--	--	39.0
2001	--	--	--	--	--	--	12.1
2002	--	--	--	--	--	--	13.1
2003	--	--	--	--	--	--	7.7
2004	--	--	--	--	--	--	7.0
2005	--	--	--	--	--	--	9.6
2006	--	--	--	--	--	--	1.0
2007	--	--	--	--	--	--	2.0
2008	--	--	--	--	--	--	--
2009	--	--	--	--	--	--	0.6
Subtotal	68	--	--	--	--	--	372.1

Annual Funding							
0400 RDT&E Research, Development, Test, and Evaluation, 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
1990	--	--	--	--	--	--	11.1
1991	--	--	--	--	--	--	5.9
1992	--	--	--	--	--	--	19.2
1993	--	--	--	--	--	--	27.2
1994	--	--	--	--	--	--	26.0
1995	--	--	--	--	--	--	54.2
1996	--	--	--	--	--	--	45.9
1997	--	--	--	--	--	--	39.2
1998	--	--	--	--	--	--	47.6
1999	--	--	--	--	--	--	29.0
2000	--	--	--	--	--	--	40.0
2001	--	--	--	--	--	--	12.2
2002	--	--	--	--	--	--	13.1
2003	--	--	--	--	--	--	7.6
2004	--	--	--	--	--	--	6.7
2005	--	--	--	--	--	--	9.0
2006	--	--	--	--	--	--	0.9
2007	--	--	--	--	--	--	1.8
2008	--	--	--	--	--	--	--
2009	--	--	--	--	--	--	0.5
Subtotal	68	--	--	--	--	--	397.1

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	--	--	--	--	--	--	27.7
2006	--	--	--	--	--	--	98.3
2007	--	--	--	--	--	--	162.5
2008	--	--	--	--	--	--	77.2
2009	--	--	--	--	--	--	26.6
2010	--	--	--	--	--	--	12.5
2011	--	--	--	--	--	--	20.6
2012	--	--	--	--	--	--	7.8
2013	--	--	--	--	--	--	7.8
2014	--	--	--	--	--	--	2.4
2015	--	--	--	--	--	--	0.8
Subtotal	92	--	--	--	--	--	825.4

Annual Funding 1319 RDT&E Research, Development, Test, and Evaluation, 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
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	--	--	--	--	--	--	25.9
2006	--	--	--	--	--	--	89.3
2007	--	--	--	--	--	--	144.0
2008	--	--	--	--	--	--	67.2
2009	--	--	--	--	--	--	22.9
2010	--	--	--	--	--	--	10.6
2011	--	--	--	--	--	--	17.3
2012	--	--	--	--	--	--	6.4
2013	--	--	--	--	--	--	6.3
2014	--	--	--	--	--	--	1.9
2015	--	--	--	--	--	--	0.6
Subtotal	92	--	--	--	--	--	792.0

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	--	--	--	--	--	--	3.2
2003	--	--	--	--	--	--	0.6
2004	--	--	--	--	--	--	3.1
2005	--	--	--	--	--	--	4.4
2006	--	--	--	--	--	--	--
2007	--	--	--	--	--	--	1.5
2008	--	--	--	--	--	--	1.9
2009	--	--	--	--	--	--	3.3
2010	--	--	--	--	--	--	--
2011	--	--	--	--	--	--	--
2012	--	--	--	--	--	--	5.3
2013	--	--	--	--	--	--	4.7
2014	--	--	--	--	--	--	0.7
2015	--	--	--	--	--	--	0.3
Subtotal	73	--	--	--	--	--	37.2

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	--	--	--	--	--	--	3.2
2003	--	--	--	--	--	--	0.6
2004	--	--	--	--	--	--	3.0
2005	--	--	--	--	--	--	4.1
2006	--	--	--	--	--	--	--
2007	--	--	--	--	--	--	1.3
2008	--	--	--	--	--	--	1.6
2009	--	--	--	--	--	--	2.8
2010	--	--	--	--	--	--	--
2011	--	--	--	--	--	--	--
2012	--	--	--	--	--	--	4.4
2013	--	--	--	--	--	--	3.8
2014	--	--	--	--	--	--	0.6
2015	--	--	--	--	--	--	0.2
Subtotal	73	--	--	--	--	--	34.1

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	--	--	--	--	--	--	4.8
2010	--	--	--	--	--	--	--
2011	--	--	--	--	--	--	--
2012	--	--	--	--	--	--	18.0
2013	--	--	--	--	--	--	13.6
2014	--	--	--	--	--	--	2.4
2015	--	--	--	--	--	--	0.9
Subtotal	170	--	--	--	--	--	111.2

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	--	--	--	--	--	--	4.1
2010	--	--	--	--	--	--	--
2011	--	--	--	--	--	--	--
2012	--	--	--	--	--	--	14.9
2013	--	--	--	--	--	--	11.1
2014	--	--	--	--	--	--	1.9
2015	--	--	--	--	--	--	0.7
Subtotal	170	--	--	--	--	--	102.6

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	0.7	8.0	
2000	--	--	--	--	--	--	--	
2001	19	4.8	--	--	4.8	1.0	5.8	
2002	--	--	--	--	--	0.3	0.3	
2003	10	2.5	--	--	2.5	0.1	2.6	
2004	--	--	--	--	--	--	--	
2005	4	1.0	--	--	1.0	--	1.0	
Subtotal	44	11.0	0.1	4.5	15.6	2.1	17.7	

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	0.7	8.3	
2000	--	--	--	--	--	--	--	
2001	19	4.8	--	--	4.8	1.0	5.8	
2002	--	--	--	--	--	0.3	0.3	
2003	10	2.4	--	--	2.4	0.1	2.5	
2004	--	--	--	--	--	--	--	
2005	4	0.9	--	--	0.9	--	0.9	
Subtotal	44	10.9	0.1	4.7	15.7	2.1	17.8	

Note: This appropriation provides for the procurement of the Army unique MIDS-LVT(2) variant for the Patriot Air Defense System.

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	2.4	26.5
2002	103	23.9	0.5	--	24.4	10.6	35.0
2003	116	22.7	3.6	--	26.3	10.3	36.6
2004	138	27.8	3.2	--	31.0	8.4	39.4
2005	124	25.7	2.9	--	28.6	13.8	42.4
2006	165	31.0	2.9	0.1	34.0	1.8	35.8
2007	159	35.0	3.0	--	38.0	5.2	43.2
2008	165	38.0	2.9	--	40.9	10.3	51.2
2009	144	35.6	2.9	--	38.5	2.0	40.5
2010	164	43.7	0.2	--	43.9	7.2	51.1
2011	119	30.3	--	--	30.3	6.4	36.7
2012	115	28.5	--	--	28.5	6.5	35.0
2013	81	16.6	--	--	16.6	5.7	22.3
2014	43	8.2	--	--	8.2	5.9	14.1
2015	28	5.4	--	--	5.4	5.9	11.3
Subtotal	1802	413.6	28.9	36.3	478.8	111.0	589.8

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	2.4	26.6
2002	103	23.7	0.5	--	24.2	10.4	34.6
2003	116	22.0	3.5	--	25.5	10.0	35.5
2004	138	26.3	3.0	--	29.3	8.0	37.3
2005	124	23.6	2.7	--	26.3	12.7	39.0
2006	165	27.7	2.6	0.1	30.4	1.6	32.0
2007	159	30.6	2.6	--	33.2	4.6	37.8
2008	165	32.8	2.5	--	35.3	8.9	44.2
2009	144	30.3	2.4	--	32.7	1.8	34.5
2010	164	36.8	0.2	--	37.0	6.0	43.0
2011	119	25.1	--	--	25.1	5.3	30.4
2012	115	23.2	--	--	23.2	5.3	28.5
2013	81	13.3	--	--	13.3	4.6	17.9
2014	43	6.5	--	--	6.5	4.6	11.1
2015	28	4.2	--	--	4.2	4.6	8.8
Subtotal	1802	367.7	26.9	36.9	431.5	99.5	531.0

NOTE: This appropriation identifies the MIDS-LVT and MIDS JTRS core terminals that are planned for the F/A-18C/D/E/F, E/A-18G, MH-60R/S and the EA-6B.

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	--	--	--	--	--	--	--	
2010	5	0.9	--	--	0.9	--	0.9	
2011	5	0.8	--	--	0.8	--	0.8	
Subtotal	32	7.8	--	--	7.8	--	7.8	

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	--	--	--	--	--	--	--
2010	5	0.7	--	--	0.7	--	0.7
2011	5	0.6	--	--	0.6	--	0.6
Subtotal	32	6.8	--	--	6.8	--	6.8

Note: This appropriation identifies the MIDS on ship variant for new construction surface ships.

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	0.6	--	--	0.6	--	0.6	
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	3.0	--	--	3.0	0.6	3.6	
2008	26	6.6	--	--	6.6	--	6.6	
2009	6	2.4	--	--	2.4	--	2.4	
Subtotal	76	19.1	--	0.1	19.2	0.7	19.9	

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	0.6	--	--	0.6	--	0.6	
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	2.6	--	--	2.6	0.6	3.2	
2008	26	5.7	--	--	5.7	--	5.7	
2009	6	2.0	--	--	2.0	--	2.0	
Subtotal	76	17.1	--	0.1	17.2	0.7	17.9	

Note: This appropriation identifies the MIDS on ship variant for Amphibious Assault Ships and shore stations.

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	1.2	10.6	
2008	144	33.5	--	--	33.5	--	33.5	
2009	28	6.4	--	--	6.4	2.1	8.5	
2010	29	7.0	--	--	7.0	1.5	8.5	
2011	15	3.7	--	--	3.7	2.1	5.8	
2012	17	4.2	--	--	4.2	0.8	5.0	
2013	13	3.2	--	--	3.2	0.8	4.0	
2014	17	4.2	--	--	4.2	0.9	5.1	
2015	17	4.2	--	--	4.2	0.9	5.1	
Subtotal	459	110.4	--	--	110.4	12.4	122.8	

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	1.0	9.3	
2008	144	29.0	--	--	29.0	--	29.0	
2009	28	5.5	--	--	5.5	1.8	7.3	
2010	29	5.9	--	--	5.9	1.3	7.2	
2011	15	3.1	--	--	3.1	1.7	4.8	
2012	17	3.4	--	--	3.4	0.7	4.1	
2013	13	2.6	--	--	2.6	0.6	3.2	
2014	17	3.3	--	--	3.3	0.7	4.0	
2015	17	3.3	--	--	3.3	0.7	4.0	
Subtotal	459	96.1	--	--	96.1	10.5	106.6	

Note: This appropriation provides for the procurement of the Army unique MIDS-LVT(2) variant.

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	29	8.5	--	4.4	12.9	6.9	19.8	
2002	118	32.5	--	--	32.5	10.2	42.7	
2003	154	36.8	--	--	36.8	10.5	47.3	
2004	107	24.4	--	--	24.4	13.8	38.2	
2005	162	35.5	--	0.1	35.6	4.4	40.0	
2006	129	25.2	--	--	25.2	1.7	26.9	
2007	152	31.1	--	--	31.1	3.4	34.5	
2008	46	15.0	--	--	15.0	4.4	19.4	
2009	23	6.7	--	--	6.7	1.9	8.6	
2010	16	4.3	--	--	4.3	1.6	5.9	
2011	38	10.3	--	--	10.3	2.3	12.6	
2012	37	9.6	--	--	9.6	2.3	11.9	
2013	30	8.1	--	--	8.1	1.8	9.9	
2014	13	2.7	--	--	2.7	1.1	3.8	
2015	--	--	--	--	--	--	--	
2016	3	1.6	--	--	1.6	0.7	2.3	
Subtotal	1057	252.3	--	4.5	256.8	67.0	323.8	

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	29	8.5	--	4.4	12.9	7.0	19.9	
2002	118	32.2	--	--	32.2	10.1	42.3	
2003	154	35.9	--	--	35.9	10.2	46.1	
2004	107	23.2	--	--	23.2	13.1	36.3	
2005	162	32.8	--	0.1	32.9	4.0	36.9	
2006	129	22.7	--	--	22.7	1.5	24.2	
2007	152	27.2	--	--	27.2	3.0	30.2	
2008	46	12.9	--	--	12.9	3.8	16.7	
2009	23	5.7	--	--	5.7	1.6	7.3	
2010	16	3.6	--	--	3.6	1.3	4.9	
2011	38	8.5	--	--	8.5	1.9	10.4	
2012	37	7.8	--	--	7.8	1.8	9.6	
2013	30	6.5	--	--	6.5	1.4	7.9	
2014	13	2.1	--	--	2.1	0.9	3.0	
2015	--	--	--	--	--	--	--	
2016	3	1.2	--	--	1.2	0.5	1.7	
Subtotal	1057	230.8	--	4.5	235.3	62.1	297.4	

NOTE: This appropriation identifies the MIDS-LVT and MIDS JTRS core terminals that are planned for the F-16, B-2, AC-130, JSTARS, the Airborne Laser and US Air Force shore sites.

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	73	18.6	--	15.2	33.8	1.0	34.8
1999	162	33.1	0.3	--	33.4	2.1	35.5
2000	274	49.9	0.7	0.5	51.1	3.8	54.9
2001	143	26.9	0.6	4.5	32.0	1.0	33.0
2002	97	18.9	--	5.6	24.5	--	24.5
2003	2	0.4	--	--	0.4	5.2	5.6
Subtotal	757	150.8	1.6	26.1	178.5	13.1	191.6

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	73	19.3	--	15.8	35.1	1.0	36.1
1999	162	33.9	0.3	--	34.2	2.2	36.4
2000	274	50.4	0.7	0.5	51.6	3.9	55.5
2001	143	26.8	0.6	4.4	31.8	1.0	32.8
2002	97	18.5	--	5.4	23.9	--	23.9
2003	2	0.4	--	--	0.4	5.1	5.5
Subtotal	757	152.5	1.6	26.4	180.5	13.2	193.7

NOTE: This appropriation identifies the MIDS FDL terminals for the F-15C/D/E that are being procured on a separate contract. The FY96 funding (\$3.0M) identified above, reports the Air Force funds contributed to the qualification and build of six FDL terminals. Additional funds in excess of \$8M were contributed by the contractor, Data Link Solutions, for completion of the full qualification program requirements.

Low Rate Initial Production

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

NOTE: The Milestone Decision Authority authorized Low Rate Initial Production (LRIP) on May 11, 2000 for 70 MIDS-LVT. Three additional LRIP decisions were authorized for a cumulative total of 544 MIDS-LVT and MIDS-LVT(2) variants, which was 25 percent of the then planned procurement of 2,145 terminals.

Foreign Military Sales

Country	Date of Sale	Quantity	Total Cost \$M	Description
Australia		142	34.3	
Austria		24		
Belgium		82	17.7	
Canada		106	25.7	
Denmark		3	0.9	
Finland		21	4.0	
Germany		10	6.4	
Greece		40	6.9	
Hungary		18	3.4	
Japan		48	13.5	
Morocco		30	4.8	
Netherlands		5	4.2	
New Zealand		3	0.7	
Norway		77	22.9	
Pakistan		27	4.7	
Poland		71	15.1	
Portugal		44	8.1	
Saudi Arabia		165		
Singapore		24		
South Korea		16	5.9	
Sweden		28	4.9	
Switzerland		55	11.9	
Taiwan		135	49.0	
Turkey		232	44.5	

Notes

Foreign Military Sales (FMS) total costs not releasable for Saudi Arabia, Singapore and Austria. Total Costs are cumulative over multiple years and FMS cases.

Direct Commercial Sales:

Direct commercial sales totaling 554 MIDS terminals have been implemented to date with Australia (2), Belgium (1), Denmark (77), Greece (4), Iceland (3), Japan (2), Korea (45), NACMA (3), Netherlands (147), NATO EF2000 and Tornado Management Agency (36), Norway (31), Turkey (6), and the United Kingdom (197). (Note: cost information for direct commercial sales is not available.)

Other Foreign Sales:

Other foreign sales for 14 MIDS terminals at a cost of \$6.4M were implemented through Calendar Year 2009 with the European Participating Air Force (EPAF)(3) and a German competitive buy (22).

Nuclear Costs

None

Unit Cost

Unit Cost Report

Item	BY 2003 \$M	BY 2003 \$M	% Change
	Current UCR Baseline (Mar 2010 APB)	Current Estimate (Dec 2009 SAR)	
Program Acquisition Unit Cost			
Cost	2475.5	2497.0	
Quantity	4553	4630	
Unit Cost	0.544	0.539	-0.92
Average Procurement Unit Cost			
Cost	1149.5	1171.2	
Quantity	4150	4227	
Unit Cost	0.277	0.277	0.00

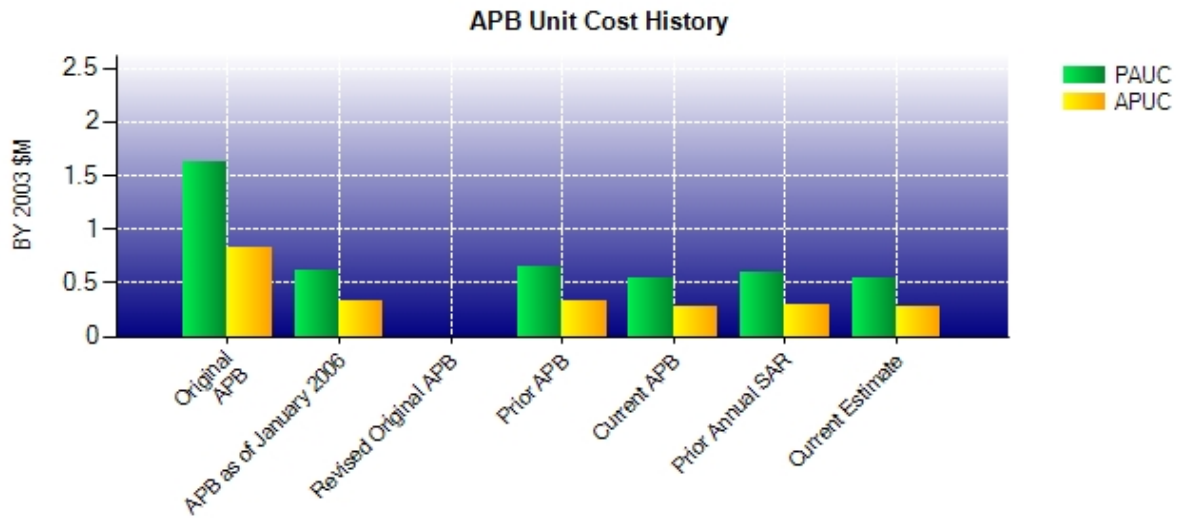
Item	BY 2003 \$M	BY 2003 \$M	% Change
	Original UCR Baseline (Mar 1994 APB)	Current Estimate (Dec 2009 SAR)	
Program Acquisition Unit Cost			
Cost	1091.4	2497.0	
Quantity	672	4630	
Unit Cost	1.624	0.539	-66.81
Average Procurement Unit Cost			
Cost	523.7	1171.2	
Quantity	630	4227	
Unit Cost	0.831	0.277	-66.67

	MIDS-LVT Objective/Threshold		MIDS JTRS Objective/Threshold		MIDS Total Objective/Threshold	
Then-Year \$M						
RDT&E *	891.8	N/A	453.7	N/A	1345.5	N/A
Procurement	1103.0	N/A	143.0	N/A	1246.0	N/A
MILCON	0.0	N/A	0.0	N/A	0.0	N/A
Acq O&M	0.0	N/A	0.0	N/A	0.0	N/A
Total Acquisition Cost	1994.8	N/A	596.7	N/A	2591.5	N/A
O&S	859.9	N/A	475.1	N/A	1335.0	N/A
Total Life Cycle Cost	2854.7	N/A	1071.8	N/A	3926.5	N/A
Prog Acq Unit Cost (\$M)	0.474	N/A	1.715	N/A	0.569	N/A
Avg Proc Unit Cost (\$M)	0.287	N/A	0.466	N/A	0.300	N/A
Base-Year \$M (BY 2003)						
RDT&E*	919.8	1011.8	405.6	446.2	1325.4	1457.9

Procurement	1028.9	1131.8	120.0	132.0	1148.9	1263.8
MILCON	0.0	N/A	0.0	N/A	0.0	N/A
Acq O&M	0.0	N/A	0.0	N/A	0.0	N/A
Total Acquisition Cost	1948.7	2143.6	525.6	578.2	2474.3	2721.7
O&S	655.6	721.2	320.1	352.1	975.7	1073.3
Total Life Cycle Cost	2604.3	2864.7	845.7	930.3	3450.0	3795.0
Prog Acq Unit Cost (\$M)	0.463	0.510	1.510	1.661	0.543	0.598
Avg Proc Unit Cost (\$M)	0.268	0.295	0.391	0.430	0.277	0.305
Quantity						
RDT&E	362	N/A	41	N/A	403	N/A
Procurement **	3843	N/A	307	N/A	4150	

* RTD&E does not include European Funding (\$40M [TY] / \$33.2M [BY03])

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	Mar 2006	0.656	0.339	0.661	0.352
Current APB	Mar 2010	0.544	0.277	0.569	0.300
Prior Annual SAR	Dec 2007	0.601	0.303	0.623	0.327
Current Estimate	Dec 2009	0.539	0.277	0.566	0.301

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	0.005	-0.105	-0.003	0.075	-0.032	0.000	0.012	-0.048	0.566

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	0.004	-0.009	-0.003	-0.011	-0.045	0.000	0.013	-0.051	0.301

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	Apr 2004
IOC	N/A	Dec 2000	May 2003	May 2003
Total Cost (TY \$M)	N/A	1119.5	1818.9	2619.3
Total Quantity	N/A	672	2964	4630
PAUC	N/A	1.666	0.614	0.566

Note: The baseline includes separate Milestone (MS) III decisions for the Low Volume Terminal (LVT) (1) and LVT(3) and a separate Initial Operational Capability (IOC) for each MIDS variant. A MS III decision was originally planned for the Army unique LVT(2) variant but it was replaced by a Full Rate Production decision approved by ASN(RD&A) in the Acquisition Decision Memorandum 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	+7.7	+19.7	--	+27.4
Quantity	+71.9	+189.9	--	+261.8
Schedule	-0.2	-5.8	--	-6.0
Engineering	+296.7	--	--	+296.7
Estimating	+44.6	-47.6	--	-3.0
Other	--	--	--	--
Support	--	-23.1	--	-23.1
Subtotal	+420.7	+133.1	--	+553.8
Current Changes				
Economic	+0.3	-2.5	--	-2.2
Quantity	+2.3	+266.1	--	+268.4
Schedule	--	-6.1	--	-6.1
Engineering	+97.2	-46.6	--	+50.6
Estimating	-0.4	-143.3	--	-143.7
Other	--	--	--	--
Support	--	+79.6	--	+79.6
Subtotal	+99.4	+147.2	--	+246.6
Total Changes	+520.1	+280.3	--	+800.4
Current Estimate	1345.9	1273.4	--	2619.3

Summary BY 2003 \$M				
Item	RDT&E	Procurement	MILCON	Total
SAR Baseline (Production Estimate)	869.4	955.4	--	1824.8
Previous Changes				
Economic	--	--	--	--
Quantity	+67.5	+156.6	--	+224.1
Schedule	-0.2	--	--	-0.2
Engineering	+267.0	--	--	+267.0
Estimating	+40.2	-45.5	--	-5.3
Other	--	--	--	--
Support	--	-21.3	--	-21.3
Subtotal	+374.5	+89.8	--	+464.3
Current Changes				
Economic	--	--	--	--
Quantity	+1.9	+219.7	--	+221.6
Schedule	--	--	--	--
Engineering	+80.2	-37.3	--	+42.9
Estimating	-0.2	-124.4	--	-124.6
Other	--	--	--	--
Support	--	+68.0	--	+68.0
Subtotal	+81.9	+126.0	--	+207.9
Total Changes	+456.4	+215.8	--	+672.2
Current Estimate	1325.8	1171.2	--	2497.0

Previous Estimate: December 2007

RDT&E	\$M	
Current Change Explanations	Base Year	Then Year
Revised escalation indices. (Economic)	N/A	+0.3
Decrease due to reduced RDT&E terminal quantities. (Quantity)	-2.5	-2.9
Increase due to procurement of additional MIDS-LVT (2) terminals. (Quantity)	+4.4	+5.2
Adjustment for current and prior escalation. (Subtotal)	-1.4	-1.7
Adjustment for current and prior escalation. (Estimating)	(-0.3)	(-0.3)
Adjustment for current and prior escalation. (DoD) (Estimating)	(-1.7)	(-2.0)
Adjustment for current and prior escalation. (Army) (Estimating)	(+0.3)	(+0.3)
Adjustment for current and prior escalation. (Air Force) (Estimating)	(+0.5)	(+0.6)
Adjustment for current and prior escalation. (Navy) (Estimating)	(-0.2)	(-0.3)
Increased funding for Enhanced Link-16. (Engineering)	+11.5	+14.0
Increased funding for Navy Crypto Modernization. (Engineering)	+40.5	+48.9
Increased for Platform Integration Engineering. (Engineering)	+2.2	+2.4
Decrease due to removal of Phase 2C Spec Development. (Engineering)	-2.6	-3.0
Increase for AF Crypto Modernization. (Engineering)	+28.6	+34.9
Increase due to estimating change/allocation for misc. engineering costs. (Estimating)	+2.9	+3.3
Funding reduced from \$27.4M to \$26.6M. (Estimating)	-0.7	-0.8
Increase due to increased quantity of terminals procured at a higher Average Unit Cost than baseline terminal configuration. (Estimating)	+4.1	+4.8
Decrease resulting from 2 year delay in the start of Enhanced Link 16. (Estimating)	-5.1	-6.0
RDT&E Subtotal	+81.9	+99.4

Procurement	\$M	
Current Change Explanations	Base Year	Then Year
Revised escalation indices. (Economic)	N/A	-2.5
Quantity variance resulting from an increase of 608 units from 1194 to 1802 (Navy). (Quantity)	+171.4	+208.5
Quantity variance resulting from a decrease of 6 units from 38 to 32 (Navy). (Quantity)	-1.7	-2.3
Quantity variance resulting from an increase of 30 terminals from 46 to 76 (Navy). (Quantity)	+8.5	+9.9
Quantity variance resulting from an increase of 155 units from 304 to 459 (Army). (Quantity)	+43.8	+53.0
Quantity variance resulting from a decrease of 8 units from 1065 to 1057 (Air Force). (Quantity)	-2.3	-3.0
Acceleration of procurement buy profile (Air Force). (Schedule)	0.0	-1.3
Acceleration of procurement buy profile (Army). (Schedule)	0.0	-0.1
Acceleration of procurement buy profile (Navy). (Schedule)	0.0	-4.7
Correction to align support and flyaway. (Subtotal)	0.0	0.0
(Estimating)	(-0.4)	(-0.4)
(Support)	(+0.4)	(+0.4)
Adjustment for current and prior escalation. (Subtotal)	-7.1	-8.7
Adjustment for current and prior escalation. (Estimating)	(-0.7)	(-0.2)
Adjustment for current and prior escalation. (DoD) (Estimating)	(+0.2)	(+0.2)
Adjustment for current and prior escalation. (Navy) (Estimating)	(-0.3)	(-0.5)

Adjustment for current and prior escalation. (Navy) (Estimating)	(+0.2)	(+0.2)
Adjustment for current and prior escalation. (Navy) (Estimating)	(+0.1)	(+0.1)
Adjustment for current and prior escalation. (Army) (Estimating)	(-7.4)	(-9.1)
Adjustment for current and prior escalation. (Air Force) (Estimating)	(-0.2)	(-0.2)
Adjustment for current and prior escalation. (Air Force) (Estimating)	(+0.8)	(+0.8)
Adjustment for current and prior escalation. (Support)	(+0.2)	(0.0)
Increase due to Platform Integration Misc. Engineering. (Engineering)	+3.0	+3.0
Changes in estimating assumptions for cost model. (Subtotal)	-41.0	-43.4
Changes in estimating assumptions for cost model. (Army) (Estimating)	(-8.7)	(-10.2)
Changes in estimating assumptions for cost model. (Navy) (Estimating)	(-2.3)	(-2.6)
Changes in estimating assumptions for cost model. (Navy) (Estimating)	(+0.2)	(+0.3)
Changes in estimating assumptions for cost model. (Navy) (Estimating)	(-30.2)	(-30.9)
Changes in estimating assumptions for cost model. (Air Force) (Estimating)	(0.0)	(0.0)
Decrease resulting from replacement of 2X2 transceiver with blank-off plates. (Engineering)	-40.3	-49.6
Increase in estimated other support costs (SW Maintenance). (Estimating)	+8.7	+10.8
Adjustment for difference between MIDS-LVT and MIDS JTRS Average Unit Cost. (Estimating)	-84.4	-101.6
Increase in Other Support (DoD). (Support)	+0.8	+0.8
Increase in Other Support (Navy). (Support)	+5.3	+5.9
Increase due to inclusion of Initial Spares (Navy). (Support)	+28.6	+34.5
Increase in Other Support (Navy). (Support)	+0.7	+0.7
Increase in Other Support (Army). (Support)	+9.6	+11.4
Increase in Other Support (Air Force). (Support)	+17.9	+20.5
Increase due to inclusion of Initial Spares (Air Force). (Support)	+4.6	+5.4
Increase in Other Support (Air Force). (Support)	+0.1	+0.1
Decrease in Initial Spares (Air Force). (Support)	-0.2	-0.1
Procurement Subtotal	+126.0	+147.2

Contracts

Contract Identification

Appropriation: Procurement
Contract Name: MIDS Production Contract
Contractor: BAE SYSTEMS/ROCKWELL COLLINS DATA LINK SOLUTIONS L.L.C.
Contractor Location: CEDAR RAPIDS, IA 52498
Contract Number: N00039-00-D-2100
Contract Type: Firm Fixed Price (FFP)
Award Date: January 20, 2000
Definitization Date: June 07, 2000

Contract Price							
Initial Contract Price (\$M)			Current Contract Price (\$M)			Estimated Price At Completion (\$M)	
Target	Ceiling	Qty	Target	Ceiling	Qty	Contractor	Program Manager
16.1	N/A	27	342.5	N/A	1130	342.5	342.5

Target Price Change Explanation

The difference between the Initial Contract Price Target and the Current Contract Price Target is due to

Cost and Schedule Variance Explanations

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

Notes

This production contract includes First Article Qualification Test (FAQT), nonrecurring engineering, supportability, and the manufacture of MIDS-Low Volume Terminal (LVT)(1) 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. Increase from Initial Contract Target Price to Current Contract Target Price reflects orders awarded to this vendor.

Contract is over 90% complete and will no longer be reported.

Contract Identification

Appropriation: Procurement
Contract Name: MIDS Production Contract
Contractor: VIASAT, INC
Contractor Location: CARLSBAD, CA 92009
Contract Number: N00039-00-D-2101
Contract Type: Firm Fixed Price (FFP)
Award Date: January 20, 2000
Definitization Date: July 12, 2000

Contract Price							
Initial Contract Price (\$M)			Current Contract Price (\$M)			Estimated Price At Completion (\$M)	
Target	Ceiling	Qty	Target	Ceiling	Qty	Contractor	Program Manager
23.4	N/A	27	461.1	N/A	1573	461.1	461.1

Target Price Change Explanation

The difference between the Initial Contract Price Target and the Current Contract Price Target is due to

Cost and Schedule Variance Explanations

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

Notes

This production contract includes First Article Qualification Test (FAQT), nonrecurring engineering, supportability, and the manufacture of MIDS-LVT(1), MIDS-LVT(2) 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 the two vendors, DLS and ViaSat. Increase from Initial Contract Target Price to Current Contract Target Price reflects orders awarded to this vendor.

Contract is over 90% complete and will no longer be reported.

Contract Identification

Appropriation: Acq O&M
Contract Name: SE&I
Contractor: BAE SYSTEMS INFORMATION AND ELECTRONIC SYSTEMS INTEGRATION I
Contractor Location: WAYNE, NJ 07470
Contract Number: N00039-00-D-2102
Contract Type: Firm Fixed Price (FFP), Time and Materials (TM)
Award Date: June 19, 2000
Definitization Date: June 19, 2000

Contract Price								
Initial Contract Price (\$M)			Current Contract Price (\$M)			Estimated Price At Completion (\$M)		
Target	Ceiling	Qty	Target	Ceiling	Qty	Contractor	Program Manager	
1.7	N/A	0	56.4	N/A	0	56.4	56.4	

Target Price Change Explanation

The difference between the Initial Contract Price Target and the Current Contract Price Target is due to

Cost and Schedule Variance Explanations

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

Notes

This Systems Engineering and Integration (SE&I) contract was awarded to BAE Systems North America on June 19, 2000 in preparation for the transition of the Engineering and Manufacturing Development (EMD) responsibilities from the cooperative international development contract with MIDSCO on June 30, 2000. The initial target cost of \$1.7M included funding for the first delivery order. By the agreement of the MIDS International Steering Committee (SC), the SE&I contract to BAE Systems was extended on June 30, 2005 and included one base year and three option years for continued core software support.

This is a Firm Fixed Price (FFP) Time & Material (TM) contract. Increase from Initial Contract Target Price to Current Contract Target Price is attributable to the contract extension awarded on June 30, 2005.

This contract is over 90% complete and will no longer be submitted.

Contract Identification

Appropriation: RDT&E
Contract Name: MJ Dev. CLIN 3000/3005
Contractor: BAE SYSTEMS/ROCKWELL COLLINS DATA LINK SOLUTIONS L.L.C.
Contractor Location: CEDAR RAPIDS, IA 52498
Contract Number: N00039-00-D-21J0
Contract Type: Cost Plus Incentive Fee (CPIF)
Award Date: December 23, 2004
Definitization Date: May 06, 2005

Contract Price							
Initial Contract Price (\$M)			Current Contract Price (\$M)			Estimated Price At Completion (\$M)	
Target	Ceiling	Qty	Target	Ceiling	Qty	Contractor	Program Manager
82.1	N/A	10	86.4	N/A	10	136.6	136.6

Target Price Change Explanation

The difference between the Initial Contract Price Target and the Current Contract Price Target is due to

Contract Variance		
Item	Cost Variance	Schedule Variance
Cumulative Variances To Date (9/30/2009)	-35.1	-1.8
Previous Cumulative Variances	-3.6	-5.3
Net Change	-31.5	+3.5

Cost and Schedule Variance Explanations**General Contract Variance Explanation**

The ordering period for this contract ended on January 19, 2010. There are no earned value metrics past September 30, 2009 since all costs were 100% contractor costs after that date as a result of a cost cap agreement between the Program Office and the vendor.

Notes

DLS' re-baseline of EVM data in accordance with the June 2007 contract modification allowed the vendor Over Target Budget (OTB) and Over Target Schedule (OTS) Earned Value Management adjustments. As part of those negotiations, contract Target Cost was not adjusted so that DLS only earned minimum fee on the contract. In April 2008 after additional contract schedule delays and cost overruns were incurred, the PM negotiated with DLS a final government cost cap to complete the program that transferred cost of any further delays to industry. No adjustment was made to contract Target Cost in the April 2008 contract modification.

Changes from Initial Contract Target Price to Current Contract Target Price are due to minor scope increases via incorporation of Engineering Change Proposals throughout the life of the contract.

Contract is over 90% complete and will no longer be reported.

Contract Identification

Appropriation: RDT&E
Contract Name: MJ Dev. CLIN 3000
Contractor: VIASAT, INC
Contractor Location: CARLSBAD, CA 92009
Contract Number: N00039-00-D-21J1
Contract Type: Cost Plus Incentive Fee (CPIF)
Award Date: December 23, 2004
Definitization Date: June 01, 2005

Contract Price								
Initial Contract Price (\$M)			Current Contract Price (\$M)			Estimated Price At Completion (\$M)		
Target	Ceiling	Qty	Target	Ceiling	Qty	Contractor	Program Manager	
60.8	N/A	10	65.1	N/A	10	139.9	139.9	

Target Price Change Explanation

The difference between the Initial Contract Price Target and the Current Contract Price Target is due to

Contract Variance		
Item	Cost Variance	Schedule Variance
Cumulative Variances To Date (10/31/2009)	-39.5	-1.3
Previous Cumulative Variances	-6.9	-4.6
Net Change	-32.6	+3.3

Cost and Schedule Variance Explanations**General Contract Variance Explanation**

The ordering period for this contract ended on January 19, 2010. There are no earned value metrics past September 30, 2009 since all costs are 100% contractor costs after that date as a result of a cost cap agreement between the Program Office and the vendor.

Notes

ViaSat's re-baseline of EVM data in accordance with the June 2007 contract modification allowed the vendor Over Target Budget (OTB) and Over Target Schedule (OTS) Earned Value Management adjustments. As part of those negotiations, contract Target Cost was not adjusted so that ViaSat only earned minimum fee on the contract. In April 2008 after additional contract schedule delays and cost overruns were incurred, the PM negotiated with ViaSat a final government cost cap to complete the program that transferred cost of any further delays to industry. No adjustment was made to contract Target Cost in the April 2008 contract modification.

Increase in Initial Contract Target Price to Current Contract Target Price is due to minor scope increases via incorporation of Engineering Change Proposals throughout the life of the contract.

Contract is over 90% complete and will no longer be reported.

Deliveries and Expenditures

Deliveries				
Delivered to Date	Planned to Date	Actual to Date	Total Quantity	Percent Delivered
Development	335	321	403	79.65%
Production	2917	3212	4227	75.99%
Total Program Quantity Delivered	3252	3533	4630	76.31%

Expended and Appropriated (TY \$M)			
Total Acquisition Cost	2619.3	Years Appropriated	21
Expended to Date	2184.2	Percent Years Appropriated	77.78%
Percent Expended	83.39%	Appropriated to Date	2348.3
Total Funding Years	27	Percent Appropriated	89.65%

Operating and Support Cost

Assumptions and Ground Rules

The Operating & Support Cost portion of the Independent Cost Estimate (ICE), updated December 2009 depicts 4150 MIDS terminals which have a 20-year operational life. This period includes a phase-in, steady state, and phase-down profile for a total 33-year support period. The annual operating hours per aircraft for peacetime deployment are estimated to be approximately 400. The annual operating hours per ship for peacetime deployment are estimated to be 3977. The annual operating hours per Army Ground Air Defense station are estimated to be 2212. For Navy aircraft and Army platforms O&S 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 Operational Requirements Document (ORD). Other pertinent cost estimates include use of values experienced by analogous systems including the Joint Tactical Information and Distribution System (JTIDS) and the AN/ARC-182 radio. The MIDS-LVT terminal does not replace an existing DOD system in that it provides Link 16 capability to platforms that were unable to employ JTIDS due to space and weight constraints; there is no antecedent system.

Cost Estimate Reference:

None

Sustainment Strategy:

None

Antecedent Information:

None

Unitized O&S Costs BY2003 \$K		
Cost Element	MIDS Avg Annual Cost Per Terminal	Antecedent System (Antecedent)
Mission Pay & Allowance	--	--
Unit Level Consumption	0.300	--
Intermediate Maintenance	--	--
Depot Maintenance	0.500	--
Contractor Support	5.700	--
Sustaining Support	5.200	--
Indirect	0.000	--
Other	0.000	--
Total	11.700	--

Unitized Cost Comments:

None

Item	Total O&S Cost \$M			
	MIDS			Antecedent System (Antecedent)
	Current Production APB Objective/Threshold		Current Estimate	
Base Year	975.7	1073.3	975.7	N/A
Then Year	1335.0	N/A	1335.0	N/A

Total O&S Cost Comment
None

Disposal Estimate Details

Date of Estimate:

Source of Estimate:

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