Selected Acquisition Report (SAR)

RCS: DD-A&T(Q&A)823-391

Standard Missile-6 (SM-6)

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

STANDARD MISSILE-6 (SM-6) Extended Range Active Missile (ERAM) (SM-6)

DoD Component

Navy

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Date Assigned: April 8, 2009

References

SAR Baseline (Development Estimate)

Defense Acquisition Executive (DAE) Approved Acquisition Program Baseline (APB) dated July 12, 2004

Approved APB

Defense Acquisition Executive (DAE) Approved Acquisition Program Baseline (APB) dated March 26, 2010

Mission and Description

The STANDARD Missile-6 (SM-6) ERAM is designed to provide ship self-defense, fleet area defense, and theater air defense for sea and littoral forces. Raytheon Missile Systems (RMS) has been chosen as the sole source contractor for SM -6 ERAM Block I. The SM-6 ERAM is a surface-to-air supersonic missile, launched from Aegis Cruisers and Destroyers, capable of successfully engaging manned and unmanned, fixed or rotary wing aircraft, and land attack or Anti-Ship Cruise Missiles (ASCM) in flight. The SM-6 ERAM program is an evolutionary, capabilities based acquisition program that will use spiral development to produce an initial Block I capability, with follow-on blocks to pace emerging threat systems as required. In addition to an extended range, the initial SM-6 ERAM Block I will have active missile seeker homing for improved flight responsiveness, guidance, sub-clutter visibility, countermeasures resistance over present SM-2 missiles, and will be "Engage-On-Remote" (EOR) intercept capable.

SM-6 will be an effective weapon that will apply timely, precise, accurate and lethal fire power against cruise missile threats and launch platforms in a fleet area defense role and over hostile territory. SM-6 will provide in-flight destruction capabilities over the total flight path. SM-6 may be employed in concert with the developing Joint Theater Air and Missile Defense (TAMD) Family of Systems (FoS) to provide continuous protection to forward deployed maneuver forces as well as theater rear assets.

Executive Summary

SM-6 conducted successful testing of Guided Test Vehicle (GTV)-3 at White Sands Missile Range (WSMR) January 11, 2010. This completes the Land Based testing portion of the program. Operational Testing is scheduled to begin late 2nd quarter FY10 and is scheduled to complete 1st quarter FY11.

GTV-2 was successfully conducted September 5, 2008 at WSMR. GTV-1 was successfully conducted June 24, 2008.

The SM-6 Program received Milestone C approval August 24, 2009 to enter into increment 1 of Low Rate initial Production (LRIP). The revised Acquisition Program Baseline that reflects the MIlestone C decision was approved March 26, 2010.

The SM-6 program completed Desert Ship certification testing with an SM-6 Inert Operational Missile on February 8, 2008 and was granted accreditation for extended range missile firings.

The White Sands Missile Range Desert Ship Upgrade completed an intensive installation and integration period in 2007, culminating in the achievement of formal certification for live missile firings in November. Following certification, the Desert Ship Upgrade legacy missile flight capability was successfully demonstrated via STANDARD Missile firing in Flight Test Round-33 (FTR-33) mission on December 14, 2007.

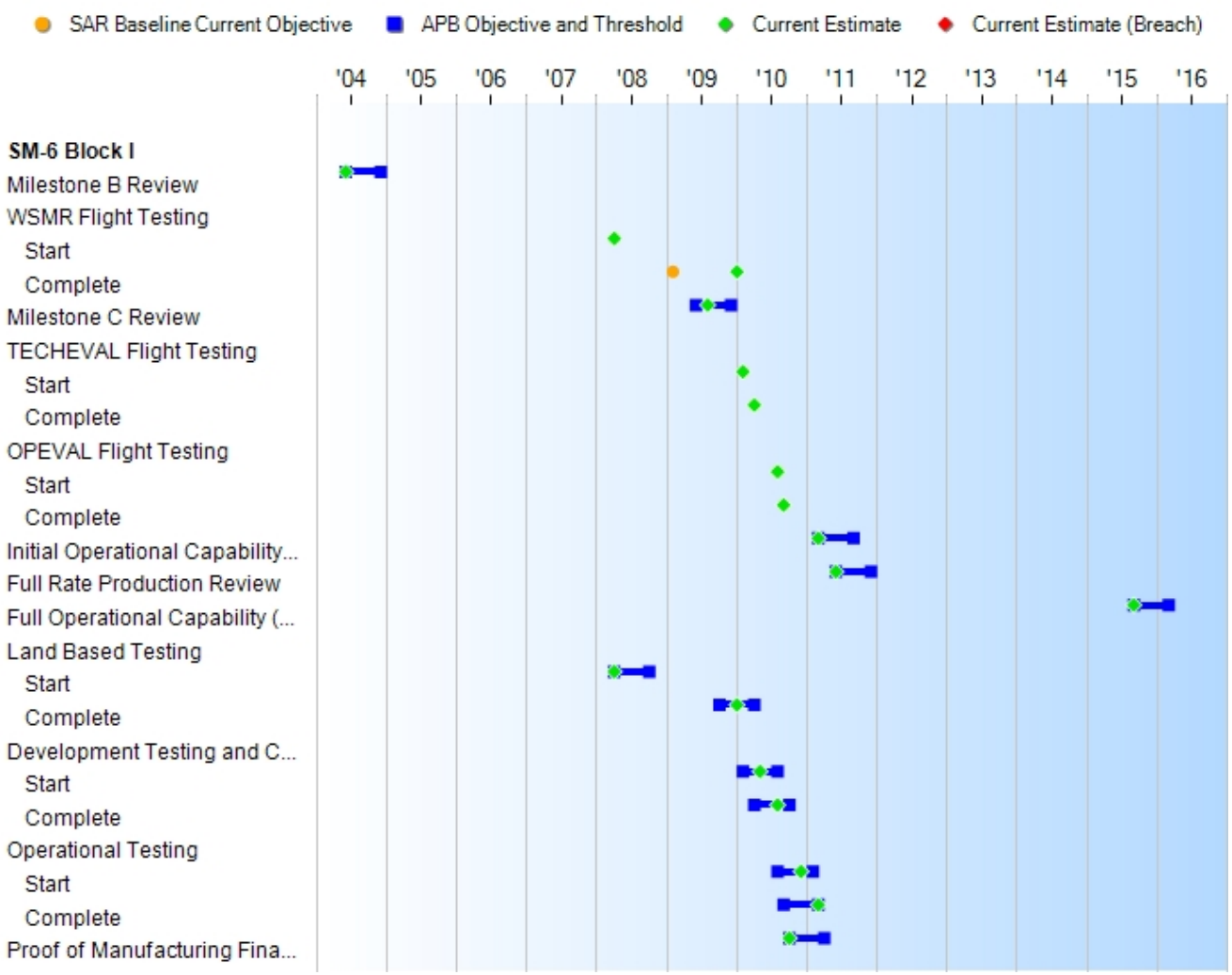
There are no significant software-related issues on this program at this time.

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)
'04
'05
'06
'07
'08
'09
'10
'11
'12
'13
'14
'15
'16
SM-6 Block I
Milestone B Review
WSMR Flight Testing
Start
Complete
Milestone C Review
TECHEVAL Flight Testing
Start
Complete
OPEVAL Flight Testing
Start
Complete
Initial Operational Capability...
Full Rate Production Review
Full Operational Capability (...
Land Based Testing
Start
Complete
Development Testing and C...
Start
Complete
Operational Testing
Start
Complete
Proof of Manufacturing Fina...

Schedule Events					
Events	**SAR Baseline Development Estimate**	**Current APB Production Objective/Threshold**		**Current Estimate**	
Milestone B Review	Jun 2004	Jun 2004	Dec 2004	Jun 2004	
WSMR Flight Testing					
Start	Apr 2008	N/A	N/A	Apr 2008	
Complete	Feb 2009	N/A	N/A	Jan 2010	(Ch-1)
Milestone C Review	Sep 2008	Jun 2009	Dec 2009	Aug 2009	(Ch-1)
TECHEVAL Flight Testing					
Start	Feb 2010	N/A	N/A	Feb 2010	
Complete	Apr 2010	N/A	N/A	Apr 2010	
OPEVAL Flight Testing					
Start	Aug 2010	N/A	N/A	Aug 2010	
Complete	Sep 2010	N/A	N/A	Sep 2010	
Initial Operational Capability (IOC)	Sep 2010	Mar 2011	Sep 2011	Mar 2011	(Ch-1)
Full Rate Production Review	Nov 2010	Jun 2011	Dec 2011	Jun 2011	(Ch-1)
Full Operational Capability (FOC)	Sep 2015	Sep 2015	Mar 2016	Sep 2015	
Land Based Testing					
Start	N/A	Apr 2008	Oct 2008	Apr 2008	(Ch-2)
Complete	N/A	Oct 2009	Apr 2010	Jan 2010	(Ch-2)
Development Testing and Combined Development and Operational Testing					
Start	N/A	Feb 2010	Aug 2010	May 2010	(Ch-2)
Complete	N/A	Apr 2010	Oct 2010	Aug 2010	(Ch-2)
Operational Testing					
Start	N/A	Aug 2010	Feb 2011	Dec 2010	(Ch-2)
Complete	N/A	Sep 2010	Mar 2011	Mar 2011	(Ch-2)
Proof of Manufacturing Final Review	N/A	Oct 2010	Apr 2011	Oct 2010	(Ch-2)

Change Explanations

(Ch-1) As a result of direction by senior Navy leadership, Controlled Test Vehicle (CTV) Land Based Testing was delayed to accommodate Advanced Area Defense Interceptor (AADI) Demo. This has prevented the SM-6 program from meeting its Acquisition Program Baseline (APB) MS C threshold date of Mar 2009 and the completion of Land Based Testing by the APB threshold date of Aug 2009. These impacts have also caused the schedule slip of IOC from Sep 2010 to Mar 2011 and Full Rate Production Review from Nov 2010 to Jun 2011.
(Ch-2) These milestones were added as a result of the Land Based Testing delay.

Notes

The extended threshold for Full Operational Capability (FOC) is defined in the SM-6 Operational Requirements Document (ORD).

Acronyms and Abbreviations

OPEVAL - Operational Evaluation
TECHEVAL - Technical Evaluation
WSMR - White Sands Missile Range

Performance

Classified Performance information is provided in the classified annex to this submission.

Track to Budget

General Notes

The FY2011 President's Budget (PB) exhibits feature FY2009 and beyond. The SM-6 Research & Development Program of Record figures still come from the funding element source: PE 0604366N - Project 3092. There are five planned Program Elements under 3092, of which only three are SM-6 unique: (1) the SM-6/Aegis Weapon System & Vertical Launch System integration efforts, (2) SM-6 missile development efforts, and (3) SM-6 Operational Test & Evaluation Support.

The FY2011 PB includes funding for other STANDARD Missile improvements, none of which are included in the SM-6 development program baseline; (4) SM-6 Insensitive Munitions efforts and (5) Joint Integrated Fire Enhancement is funded in PE 0604366N - Project 3092.

The FY2011 PB for SM-6 procurement (APPN 1507, PE 0204228N) includes ICN 223400 and 612090. Both are shared with SM-2. All up rounds are reflected in Budget Line Item (BLI) 2234 P1-7. Initial Spares are included in BLI 6120 P1-35.

RDT&E

Appn		BA	PE
Navy	1319	05	0604366N

Project	Name	
3092	Standard Missile 6 Program	(Shared)

Procurement

Appn		BA	PE
Navy	1507	02	0204228N

Line Item	Name	
223400	STANDARD Missile	(Shared)
Notes:	Shared with SM-2.	

Appn		BA	PE
Navy	1507	06	0204228N

Line Item	Name	
612090	Spares and Repair Parts	(Shared)
Notes:	Shared with SM-2.	

Cost and Funding

Cost Summary

Total Acquisition Cost							
Appropriation	BY 2004 $M			BY 2004 $M	TY $M		
	SAR Baseline Development Estimate	Current APB Production Objective/Threshold		Current Estimate	SAR Baseline Development Estimate	Current APB Production Objective	Current Estimate
RDT&E	916.7	861.6	947.8	842.2	987.7	963.2	939.6
Procurement	3949.6	4419.5	4861.5	4471.9	4995.6	5634.0	5660.4
Flyaway	--	--	--	4087.6	--	--	5174.0
Recurring	--	--	--	4063.3	--	--	5145.9
Non Recurring	--	--	--	24.3	--	--	28.1
Support	--	--	--	384.3	--	--	486.4
Other Support	--	--	--	206.4	--	--	261.1
Initial Spares	--	--	--	177.9	--	--	225.3
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	4866.3	5281.1	N/A	5314.1	5983.3	6597.2	6600.0

Confidence Level

Confidence Level of cost estimate for current APB: 50%

The Independent Cost Estimate (ICE) to support SM-6 Milestone C decision, like all life-cycle cost estimates previously performed by the Office of the Secretary of Defense, Cost Assessment and Program Evaluation (OSD, CAPE), is built upon a product-oriented work breakdown structure, based on historical actual cost information to the maximum extent possible, and, most importantly, based on conservative assumptions that are consistent with actual demonstrated contractor and government performance for a series of acquisition programs in which the Department has been successful. It is difficult to calculate mathematically the precise confidence levels associated with life-cycle cost estimates prepared for Major Defense Acquisition Programs (MDAPs). Based on the rigor in methods used in building estimates, the strong adherence to the collection and use of historical cost information, and the review of applied assumptions, we project that it is equally likely that the estimate will prove low or too high for execution of the program described. The current SM-6 Acquisition Program Baseline (APB) is based on the OSD CAPE ICE prepared for Milestone C. The confidence level of the SM-6 cost estimates is referenced in the OSD CAPE ICE memorandum for the SM-6 Program dated July 28, 2009.

Total Quantity			
Quantity	SAR Baseline Development Estimate	Current APB Production	Current Estimate
RDT&E	0	0	0
Procurement	1200	1200	1200
Total	1200	1200	1200

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	742.1	124.2	65.6	7.7	0.0	0.0	0.0	0.0	939.6
Procurement	122.4	99.1	294.1	513.4	676.4	685.0	673.9	2596.1	5660.4
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	864.5	223.3	359.7	521.1	676.4	685.0	673.9	2596.1	6600.0
PB 2009 Total	868.0	333.5	331.6	536.0	613.6	603.2	606.0	2062.5	5954.4
Delta	-3.5	-110.2	28.1	-14.9	62.8	81.8	67.9	533.6	645.6

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	0	0	0	0	0	0	0	0	0	0
Production	0	19	11	59	113	154	152	149	543	1200
PB 2011 Total	0	19	11	59	113	154	152	149	543	1200
PB 2009 Total	0	20	40	60	137	158	150	150	485	1200
Delta	0	-1	-29	-1	-24	-4	2	-1	58	0

Cost and Funding

Annual Funding By Appropriation

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
2004	--	--	--	--	--	--	25.5
2005	--	--	--	--	--	--	83.8
2006	--	--	--	--	--	--	114.8
2007	--	--	--	--	--	--	150.0
2008	--	--	--	--	--	--	172.6
2009	--	--	--	--	--	--	195.4
2010	--	--	--	--	--	--	124.2
2011	--	--	--	--	--	--	65.6
2012	--	--	--	--	--	--	7.7
Subtotal	--	--	--	--	--	--	939.6

Annual Funding 1319 | RDT&E | Research, Development, Test, and Evaluation, Navy							
Fiscal Year	Quantity	BY 2004 $M					
		End Item Recurring Flyaway	Non End Item Recurring Flyaway	Non Recurring Flyaway	Total Flyaway	Total Support	Total Program
2004	--	--	--	--	--	--	25.0
2005	--	--	--	--	--	--	80.0
2006	--	--	--	--	--	--	106.3
2007	--	--	--	--	--	--	135.6
2008	--	--	--	--	--	--	153.3
2009	--	--	--	--	--	--	171.5
2010	--	--	--	--	--	--	107.8
2011	--	--	--	--	--	--	56.2
2012	--	--	--	--	--	--	6.5
Subtotal	--	--	--	--	--	--	842.2

Annual Funding 1507 | Procurement | Weapons 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
2009	19	92.3	--	17.6	109.9	12.5	122.4
2010	11	65.1	--	10.5	75.6	23.5	99.1
2011	59	269.1	--	--	269.1	25.0	294.1
2012	113	480.9	--	--	480.9	32.5	513.4
2013	154	631.6	--	--	631.6	44.8	676.4
2014	152	626.4	--	--	626.4	58.6	685.0
2015	149	607.3	--	--	607.3	66.6	673.9
2016	150	629.0	--	--	629.0	55.1	684.1
2017	150	635.2	--	--	635.2	55.4	690.6
2018	150	642.8	--	--	642.8	55.9	698.7
2019	93	466.2	--	--	466.2	56.5	522.7
Subtotal	1200	5145.9	--	28.1	5174.0	486.4	5660.4

Annual Funding 1507 | Procurement | Weapons Procurement, Navy							
Fiscal Year	Quantity	BY 2004 $M					
		End Item Recurring Flyaway	Non End Item Recurring Flyaway	Non Recurring Flyaway	Total Flyaway	Total Support	Total Program
2009	19	80.2	--	15.3	95.5	10.9	106.4
2010	11	55.9	--	9.0	64.9	20.1	85.0
2011	59	227.4	--	--	227.4	21.1	248.5
2012	113	399.7	--	--	399.7	27.0	426.7
2013	154	516.1	--	--	516.1	36.6	552.7
2014	152	503.3	--	--	503.3	47.1	550.4
2015	149	479.8	--	--	479.8	52.6	532.4
2016	150	488.6	--	--	488.6	42.9	531.5
2017	150	485.2	--	--	485.2	42.3	527.5
2018	150	482.8	--	--	482.8	42.0	524.8
2019	93	344.3	--	--	344.3	41.7	386.0
Subtotal	1200	4063.3	--	24.3	4087.6	384.3	4471.9

Low Rate Initial Production

Item	Initial LRIP Decision	Current Total LRIP
Approval Date	7/12/2004	8/24/2009
Approved Quantity	120	120
Reference	Milestone B ADM	Milestone C ADM
Start Year	2009	2009
End Year	2011	2011

SM-6 Low Rate Initial Production (LRIP) quantities are not to exceed 120 missiles per Under Secretary of Defense for Acquisition, Technology and Logistics Acquisition Decision Memorandum (ADM) dated August 24, 2009. The current funded LRIP quantity for FY2009 is 19 missiles.
The SM-6 Program will build-up 25 non-LRIP rounds that will be test fired during the System Development and Demonstration (SDD) phase of the program. All 25 missiles will be expended prior to Initial Operational Capability (IOC).

Foreign Military Sales

None

Nuclear Costs

None

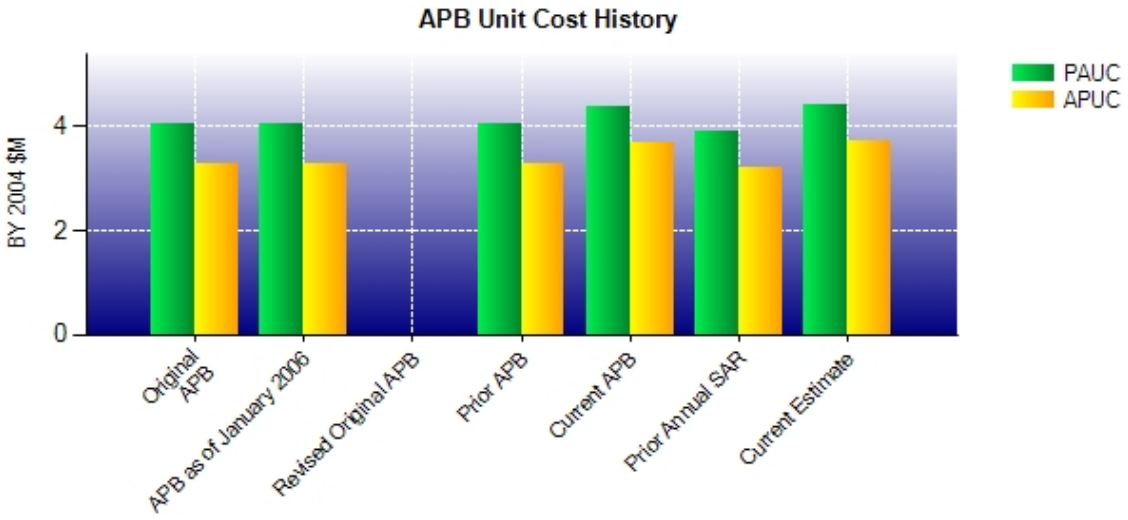
Unit Cost

Unit Cost Report

Item	BY 2004 $M Current UCR Baseline (Mar 2010 APB)	BY 2004 $M Current Estimate (Dec 2009 SAR)	% Change
Program Acquisition Unit Cost			
Cost	5281.1	5314.1	
Quantity	1200	1200	
Item	4.401	4.428	+0.61
Average Procurement Unit Cost			
Cost	4419.5	4471.9	
Quantity	1200	1200	
Unit Cost	3.683	3.727	+1.19

Item	BY 2004 $M Original UCR Baseline (Jul 2004 APB)	BY 2004 $M Current Estimate (Dec 2009 SAR)	% Change
Program Acquisition Unit Cost			
Cost	4866.3	5314.1	
Quantity	1200	1200	
Unit Cost	4.055	4.428	+9.20
Average Procurement Unit Cost			
Cost	3949.6	4471.9	
Quantity	1200	1200	
Unit Cost	3.291	3.727	+13.25

Unit Cost History



Item	Date	BY 2004 $M		TY $M	
		PAUC	APUC	PAUC	APUC
Original APB	Jul 2004	4.055	3.291	4.986	4.163
APB as of January 2006	Jul 2004	4.055	3.291	4.986	4.163
Revised Original APB	N/A	N/A	N/A	N/A	N/A
Prior APB	Jul 2004	4.055	3.291	4.986	4.163
Current APB	Mar 2010	4.401	3.683	5.498	4.695
Prior Annual SAR	Dec 2007	3.910	3.205	4.962	4.171
Current Estimate	Dec 2009	4.428	3.727	5.500	4.717

SAR Unit Cost History

Current SAR Baseline to Current Estimate (TY $M)									
Initial PAUC Development Estimate	Changes								PAUC Current Estimate
	Econ	Qty	Sch	Eng	Est	Oth	Spt	Total	
4.986	0.070	0.000	-0.038	0.000	0.407	0.000	0.075	0.514	5.500

Current SAR Baseline to Current Estimate (TY $M)									
Initial APUC Development Estimate	Changes								APUC Current Estimate
	Econ	Qty	Sch	Eng	Est	Oth	Spt	Total	
4.163	0.042	0.000	-0.038	0.000	0.475	0.000	0.075	0.554	4.717

SAR Baseline History				
Item	SAR Planning Estimate	SAR Development Estimate	SAR Production Estimate	Current Estimate
Milestone A	N/A	N/A	N/A	N/A
Milestone B	N/A	Jun 2004	N/A	Jun 2004
Milestone C	N/A	Sep 2008	N/A	Aug 2009
IOC	N/A	Sep 2010	N/A	Mar 2011
Total Cost (TY $M)	N/A	5983.3	N/A	6600.0
Total Quantity	N/A	1200	N/A	1200
PAUC	N/A	4.986	N/A	5.500

Cost Variance

Summary TY $M				
Item	**RDT&E**	**Procurement**	**MILCON**	**Total**
SAR Baseline (Development Estimate)	987.7	4995.6	--	5983.3
Previous Changes				
Economic	+38.6	+219.8	--	+258.4
Quantity	--	--	--	--
Schedule	--	-75.7	--	-75.7
Engineering	--	--	--	--
Estimating	-77.3	+0.7	--	-76.6
Other	--	--	--	--
Support	--	-135.0	--	-135.0
Subtotal	-38.7	+9.8	--	-28.9
Current Changes				
Economic	-4.6	-169.8	--	-174.4
Quantity	--	--	--	--
Schedule	--	+30.6	--	+30.6
Engineering	--	--	--	--
Estimating	-4.8	+568.7	--	+563.9
Other	--	--	--	--
Support	--	+225.5	--	+225.5
Subtotal	-9.4	+655.0	--	+645.6
Adjustments	--	--	--	--
Total Changes	-48.1	+664.8	--	+616.7
Current Estimate	939.6	5660.4	--	6600.0

Summary BY 2004 $M				
Item	**RDT&E**	**Procurement**	**MILCON**	**Total**
SAR Baseline (Development Estimate)	916.7	3949.6	--	4866.3
Previous Changes				
Economic	--	--	--	--
Quantity	--	--	--	--
Schedule	--	--	--	--
Engineering	--	--	--	--
Estimating	-70.2	-3.3	--	-73.5
Other	--	--	--	--
Support	--	-100.3	--	-100.3
Subtotal	-70.2	-103.6	--	-173.8
Current Changes				
Economic	--	--	--	--
Quantity	--	--	--	--
Schedule	--	--	--	--
Engineering	--	--	--	--
Estimating	-4.3	+447.7	--	+443.4
Other	--	--	--	--
Support	--	+178.2	--	+178.2
Subtotal	-4.3	+625.9	--	+621.6
Adjustments	--	--	--	--
Total Changes	-74.5	+522.3	--	+447.8
Current Estimate	842.2	4471.9	--	5314.1

Previous Estimate: December 2007

RDT&E	$M	
Current Change Explanations	Base Year	Then Year
Revised escalation indices. (Economic)	N/A	-4.6
Adjustment for current and prior escalation. (Estimating)	+2.6	+3.1
Revised estimate based on Cost Assessment and Program Evaluation (CAPE) Independent Cost Estimate (ICE) as approved at the August 2009 Milestone C. (Estimating)	-6.9	-7.9
RDT&E Subtotal	-4.3	-9.4

Procurement	$M	
Current Change Explanations	Base Year	Then Year
Revised escalation indices. (Economic)	N/A	-169.8
Stretch-out of procurement buy profile FY2010 to FY2019. (Schedule)	0.0	+30.6
Adjustment for current and prior escalation. (Estimating)	+4.3	+4.9
Increase due to increase in known missile component costs and refinement of production estimate as reflected in the CAPE ICE for Milestone C, August 2009. (Estimating)	+443.4	+563.8
Adjustment for current and prior escalation. (Support)	+0.3	+0.4
Decrease in Other Support. (Support)	0.0	-0.2
Increase to fully fund Initial Spares. (Support)	+177.9	+225.3
Procurement Subtotal	+625.9	+655.0

Contracts

Contract Identification

Appropriation: RDT&E
Contract Name: SM-6 SDD
Contractor: RAYTHEON (RMS)
Contractor Location: Tucson, AZ 85731
Contract Number: N00024-04-C-5344
Contract Type: Cost Plus Award Fee (CPAF)
Award Date: September 03, 2004
Definitization Date: September 03, 2004

Contract Price							
Initial Contract Price ($M)			Current Contract Price ($M)			Estimated Price At Completion ($M)	
Target	Ceiling	Qty	Target	Ceiling	Qty	Contractor	Program Manager
440.1	N/A	0	450.3	N/A	0	450.3	450.3

Contract Variance		
Item	Cost Variance	Schedule Variance
Cumulative Variances To Date (12/26/2009)	-8.0	-7.4
Previous Cumulative Variances	-3.3	+4.0
Net Change	-4.7	-11.4

Cost and Schedule Variance Explanations

General Contract Variance Explanation

Net cost and schedule variances for this contract are due component integration challenges.

Notes

The change between the initial contract price and current contract price is due to modifications exercised that incrementally fund CLIN3 to provide mission and engineering services.

Deliveries and Expenditures

Deliveries				
Delivered to Date	**Planned to Date**	**Actual to Date**	**Total Quantity**	**Percent Delivered**
Development	0	0	0	--
Production	0	0	1200	0.00%
Total Program Quantity Delivered	0	0	1200	0.00%

Expended and Appropriated (TY $M)			
Total Acquisition Cost	6600.0	Years Appropriated	7
Expended to Date	650.2	Percent Years Appropriated	43.75%
Percent Expended	9.85%	Appropriated to Date	1087.8
Total Funding Years	16	Percent Appropriated	16.48%

Operating and Support Cost

Assumptions and Ground Rules

Since the SM-6 is a wooden round (a concept which pictures a weapon as being completely reliable and, while deployed on board a ship, having an infinite shelf life while at the same time requiring no special handling, storage, surveillance or maintenance by ships force personnel), Personnel Costs are unnecessary for missile operation. Unit Level Consumption includes Range and Target Costs as well as Post Flight Analysis. Intermediate Maintenance consists of Intermediate Level Maintenance facility costs. Depot Maintenance includes Depot Maintenance and Refurbishment. Sustaining Support includes Sustaining Investment and Software Maintenance. Indirect Costs include Demilitarization/Disposal and Other costs. Average annual per missile costs are based on June 2009 Navy Service Cost Position Estimate assuming 1200 All Up Rounds over a 30 year life cycle.

There is no Antecedent System for the STANDARD Missile-6 program. The SM-6 program has a different threat set and different capabilities in comparison to the SM-2 program.

Cost Estimate Reference:
None

Sustainment Strategy:
None
Antecedent Information:
None

Unitized O&S Costs BY2004 $K		
Cost Element	**SM-6 Block I Avg Annual Cost Per Missile**	**No Antecedent (Antecedent)**
Mission Pay & Allowance	0.000	--
Unit Level Consumption	3.000	--
Intermediate Maintenance	0.700	--
Depot Maintenance	0.600	--
Contractor Support	1.800	--
Sustaining Support	1.600	--
Indirect	1.900	--
Other	0.000	--
Total	9.600	--

Unitized Cost Comments:
None

Item	Total O&S Cost $M			
	SM-6 Block I			No Antecedent (Antecedent)
	Current Production APB Objective/Threshold		Current Estimate	
Base Year	344.6	379.1	344.6	N/A
Then Year	558.0	N/A	558.0	N/A

Total O&S Cost Comment
None

Disposal Estimate Details

Date of Estimate:

Source of Estimate:

Disposal/Demilitarization Total Cost (BY 2004 $M):