



# Selected Acquisition Report (SAR)

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



## SM-6

As of December 31, 2011

Defense Acquisition Management  
Information Retrieval  
(DAMIR)

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UNCLASSIFIED

**Table of Contents**

Program Information .....	3
Responsible Office .....	3
References .....	3
Mission and Description .....	4
Executive Summary .....	4
Threshold Breaches .....	5
Schedule .....	6
Performance .....	8
Track To Budget .....	9
Cost and Funding .....	10
Low Rate Initial Production .....	16
Foreign Military Sales .....	16
Nuclear Cost .....	17
Unit Cost .....	18
Cost Variance .....	21
Contracts .....	24
Deliveries and Expenditures .....	25
Operating and Support Cost .....	26

## Program Information

### Designation And Nomenclature (Popular Name)

Standard Missile-6 (SM-6)

### DoD Component

Navy

## Responsible Office

### Responsible Office

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**Date Assigned** April 8, 2009

## References

### SAR Baseline (Production Estimate)

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

### Approved APB

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

## **Mission and Description**

The Standard Missile-6 (SM-6) Extended Range Active Missile (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, and 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 Initial Operational Test and Evaluation (IOT&E) Flight Testing was conducted at Pacific Missile Range Facility (PMRF) between June 2011 and July 2011. Commander Operational Test and Evaluation Force (COTF) issued the Interim Operational Test and Evaluation Assessment Report in August 2011. Final analysis and reporting is pending. The second phase of IOT&E, Runs for the Record, commenced in December 2011 and is scheduled to complete in March 2012.

The SM-6 Program received authorization to enter into increment 3 of LRIP as documented in the Acquisition Decision Memorandum dated May 13, 2011. The LRIP lot 3 production contract option was awarded on June 23, 2011.

The SM-6 Highly Accelerated Life Testing (HALT) completed November 2011. All HALT margins were verified, and no design issues were identified.

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

### Threshold Breaches

APB Breaches		
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<b>Schedule</b>		<input checked="" type="checkbox"/>
<b>Performance</b>		<input type="checkbox"/>
<b>Cost</b>	RDT&E	<input type="checkbox"/>
	Procurement	<input type="checkbox"/>
	MILCON	<input type="checkbox"/>
	Acq O&M	<input type="checkbox"/>
<b>Unit Cost</b>	PAUC	<input type="checkbox"/>
	APUC	<input type="checkbox"/>

#### Explanation of Breach

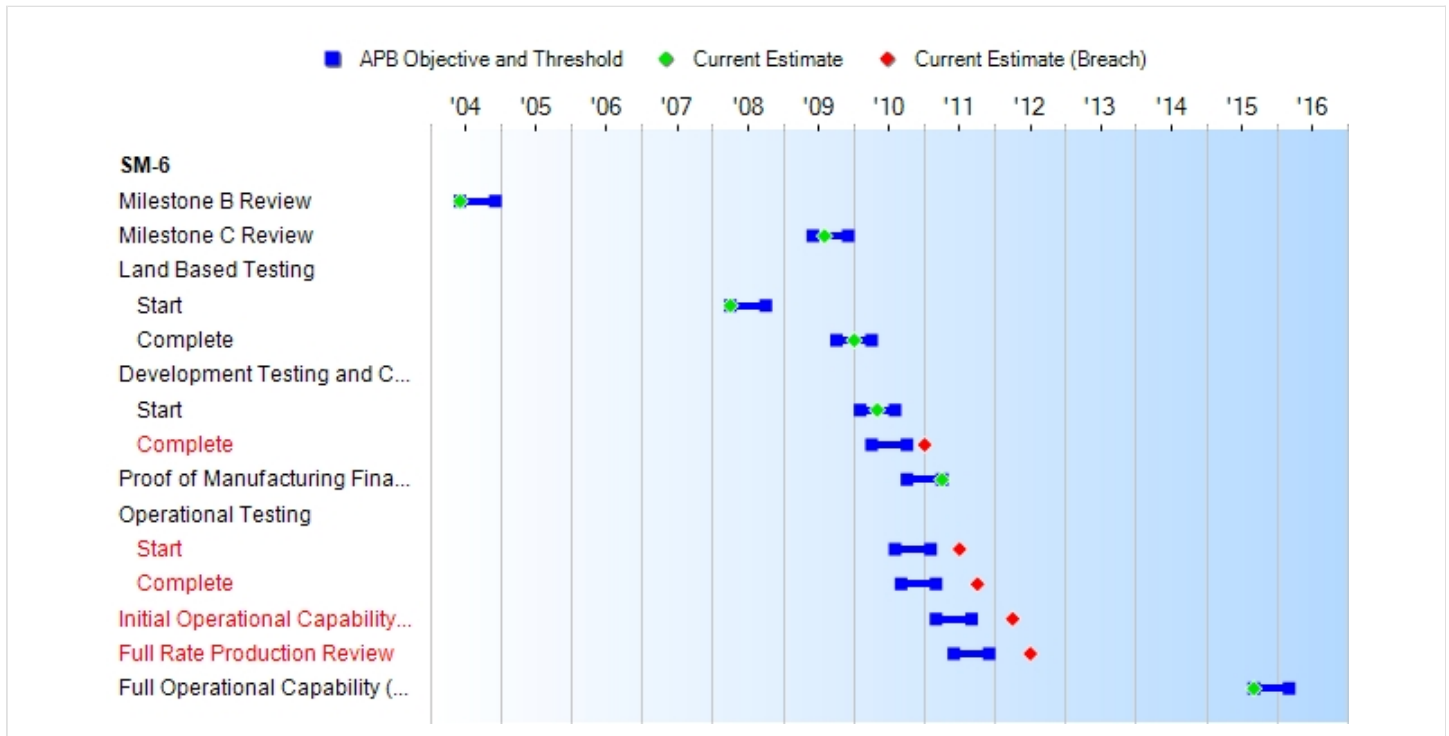
The Schedule Breach was previously reported in the December 31, 2010 SAR.

The Program Manager is working closely with Raytheon to minimize schedule impacts. A Program Deviation Report to address the threshold breach is currently in the approval process. An Acquisition Program Baseline (APB) requesting new dates will be presented at the Full Rate Production (FRP) decision review.

Nunn-McCurdy Breaches		
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<b>Current UCR Baseline</b>		
	PAUC	None
	APUC	None
<b>Original UCR Baseline</b>		
	PAUC	None
	APUC	None

### Schedule



Milestones	SAR Baseline Prod Est	Current APB Production Objective/Threshold		Current Estimate
Milestone B Review	JUN 2004	JUN 2004	DEC 2004	JUN 2004
Milestone C Review	JUN 2009	JUN 2009	DEC 2009	AUG 2009
Land Based Testing				
Start	APR 2008	APR 2008	OCT 2008	APR 2008
Complete	OCT 2009	OCT 2009	APR 2010	JAN 2010
Development Testing and Combined Development and Operational Testing				
Start	FEB 2010	FEB 2010	AUG 2010	MAY 2010
Complete	APR 2010	APR 2010	OCT 2010	<b>JAN 2011</b> <sup>1</sup>
Proof of Manufacturing Final Review	OCT 2010	OCT 2010	APR 2011	APR 2011
Operational Testing				
Start	AUG 2010	AUG 2010	FEB 2011	<b>JUL 2011</b> <sup>1</sup>
Complete	SEP 2010	SEP 2010	MAR 2011	<b>OCT 2011</b> <sup>1</sup>
Initial Operational Capability (IOC)	MAR 2011	MAR 2011	SEP 2011	<b>APR 2012</b> <sup>1</sup>
Full Rate Production Review	JUN 2011	JUN 2011	DEC 2011	<b>JUL 2012</b> <sup>1</sup>
Full Operational Capability (FOC)	SEP 2015	SEP 2015	MAR 2016	SEP 2015

<sup>1</sup>APB Breach

**Change Explanations**

None

**Memo**

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

## Performance

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<b>Memo</b>
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Capability Production Document (CPD), Joint Requirements Oversight Council (JROC) memorandum 249-08 dated December 23, 2008.

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



## Track To Budget

### General Memo

The FY 2013 President's Budget (PB) exhibits feature FY 2011 and beyond. The SM-6 Research & Development Program of Record figures still come from the funding element source: PE 0604366N - Project 3092. There are six 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, and (3) SM-6 Operational Test & Evaluation Support.

The FY 2013 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 (IM), (5) Joint Integrated Fire Enhancement, and (6) Portable All-Up Round Built In Test (BIT) Tester (PABT) are funded in PE 0604366N - Project 3092.

The FY 2013 PB for SM-6 procurement (APPN 1507, PE 0204228N) includes ICN 223400 and 612000. 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 1319	BA 05	PE 0604366N	(Navy)
	Project 3092	Standard Missile 6 Program	(Shared) (Sunk)
	FY 2012 is the last year of SM-6 RDT&E funding related to the Baseline Program of Record as reported in the SAR and DAES.		

### Procurement

APPN 1507	BA 02	PE 0204228N	(Navy)
	ICN 223400	STANDARD Missile	(Shared)
	Shared with SM-2 through FY 2011.		
APPN 1507	BA 06	PE 0204228N	(Navy)
	ICN 612000	Spares and Repair Parts	(Shared)
	Shared with SM-2 through FY 2011.		

## Cost and Funding

### Cost Summary

#### Total Acquisition Cost and Quantity

Appropriation	BY2004 \$M			BY2004 \$M	TY \$M		
	SAR Baseline Prod Est	Current APB Production Objective/Threshold		Current Estimate	SAR Baseline Prod Est	Current APB Production Objective	Current Estimate
RDT&E	861.6	861.6	947.8	826.7	963.2	963.2	923.4
Procurement	4419.5	4419.5	4861.5	4290.1	5634.0	5634.0	5543.6
Flyaway	3832.8	--	--	3723.5	4881.3	--	4812.7
Recurring	3798.9	--	--	3699.4	4842.1	--	4784.6
Non Recurring	33.9	--	--	24.1	39.2	--	28.1
Support	586.7	--	--	566.6	752.7	--	730.9
Other Support	430.8	--	--	387.4	551.9	--	499.3
Initial Spares	155.9	--	--	179.2	200.8	--	231.6
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	5281.1	5281.1	N/A	5116.8	6597.2	6597.2	6467.0

Confidence Level For the Current APB Cost 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 (MDAP). 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 too 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.

<b>Quantity</b>	<b>SAR Baseline Prod Est</b>	<b>Current APB Production</b>	<b>Current Estimate</b>
RDT&E	0	0	0
Procurement	1200	1200	1200
Total	1200	1200	1200

## Cost and Funding

### Funding Summary

#### Appropriation and Quantity Summary FY2013 President's Budget / December 2011 SAR (TY\$ M)

Appropriation	Prior	FY2012	FY2013	FY2014	FY2015	FY2016	FY2017	To Complete	Total
RDT&E	915.7	7.7	0.0	0.0	0.0	0.0	0.0	0.0	923.4
Procurement	463.0	370.8	419.4	516.1	702.7	762.3	926.5	1382.8	5543.6
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 2013 Total	1378.7	378.5	419.4	516.1	702.7	762.3	926.5	1382.8	6467.0
PB 2012 Total	1433.5	444.6	567.2	610.3	690.9	755.5	718.7	1475.2	6695.9
Delta	-54.8	-66.1	-147.8	-94.2	11.8	6.8	207.8	-92.4	-228.9

Quantity	Undistributed	Prior	FY2012	FY2013	FY2014	FY2015	FY2016	FY2017	To Complete	Total
Development	0	0	0	0	0	0	0	0	0	0
Production	0	89	89	94	115	157	168	204	284	1200
PB 2013 Total	0	89	89	94	115	157	168	204	284	1200
PB 2012 Total	0	89	89	121	129	152	168	150	302	1200
Delta	0	0	0	-27	-14	5	0	54	-18	0

## Cost and Funding

### Annual Funding By Appropriation

#### Annual Funding TY\$

#### 1319 | RDT&E | Research, Development, Test, and Evaluation, Navy

Fiscal Year	Quantity	End Item Recurring Flyaway TY \$M	Non End Item Recurring Flyaway TY \$M	Non Recurring Flyaway TY \$M	Total Flyaway TY \$M	Total Support TY \$M	Total Program TY \$M
2004	--	--	--	--	--	--	25.5
2005	--	--	--	--	--	--	83.8
2006	--	--	--	--	--	--	114.8
2007	--	--	--	--	--	--	150.0
2008	--	--	--	--	--	--	172.6
2009	--	--	--	--	--	--	195.4
2010	--	--	--	--	--	--	112.6
2011	--	--	--	--	--	--	61.0
2012	--	--	--	--	--	--	7.7
<b>Subtotal</b>	--	--	--	--	--	--	<b>923.4</b>

**Annual Funding BY\$****1319 | RDT&E | Research, Development, Test, and Evaluation, Navy**

<b>Fiscal Year</b>	<b>Quantity</b>	<b>End Item Recurring Flyaway BY 2004 \$M</b>	<b>Non End Item Recurring Flyaway BY 2004 \$M</b>	<b>Non Recurring Flyaway BY 2004 \$M</b>	<b>Total Flyaway BY 2004 \$M</b>	<b>Total Support BY 2004 \$M</b>	<b>Total Program BY 2004 \$M</b>
2004	--	--	--	--	--	--	25.0
2005	--	--	--	--	--	--	80.0
2006	--	--	--	--	--	--	106.3
2007	--	--	--	--	--	--	135.6
2008	--	--	--	--	--	--	153.2
2009	--	--	--	--	--	--	171.3
2010	--	--	--	--	--	--	97.2
2011	--	--	--	--	--	--	51.7
2012	--	--	--	--	--	--	6.4
<b>Subtotal</b>	--	--	--	--	--	--	<b>826.7</b>

**Annual Funding TY\$****1507 | Procurement | Weapons Procurement, Navy**

<b>Fiscal Year</b>	<b>Quantity</b>	<b>End Item Recurring Flyaway TY \$M</b>	<b>Non End Item Recurring Flyaway TY \$M</b>	<b>Non Recurring Flyaway TY \$M</b>	<b>Total Flyaway TY \$M</b>	<b>Total Support TY \$M</b>	<b>Total Program TY \$M</b>
2009	19	92.5	--	17.6	110.1	12.3	122.4
2010	11	55.0	--	10.5	65.5	32.2	97.7
2011	59	211.0	--	--	211.0	31.9	242.9
2012	89	324.2	--	--	324.2	46.6	370.8
2013	94	362.9	--	--	362.9	56.5	419.4
2014	115	443.4	--	--	443.4	72.7	516.1
2015	157	617.9	--	--	617.9	84.8	702.7
2016	168	672.3	--	--	672.3	90.0	762.3
2017	204	816.2	--	--	816.2	110.3	926.5
2018	150	621.0	--	--	621.0	99.0	720.0
2019	134	568.2	--	--	568.2	94.6	662.8
<b>Subtotal</b>	<b>1200</b>	<b>4784.6</b>	<b>--</b>	<b>28.1</b>	<b>4812.7</b>	<b>730.9</b>	<b>5543.6</b>

**Annual Funding BY\$****1507 | Procurement | Weapons Procurement, Navy**

<b>Fiscal Year</b>	<b>Quantity</b>	<b>End Item Recurring Flyaway BY 2004 \$M</b>	<b>Non End Item Recurring Flyaway BY 2004 \$M</b>	<b>Non Recurring Flyaway BY 2004 \$M</b>	<b>Total Flyaway BY 2004 \$M</b>	<b>Total Support BY 2004 \$M</b>	<b>Total Program BY 2004 \$M</b>
2009	19	80.1	--	15.2	95.3	10.7	106.0
2010	11	46.8	--	8.9	55.7	27.5	83.2
2011	59	176.5	--	--	176.5	26.6	203.1
2012	89	266.5	--	--	266.5	38.3	304.8
2013	94	293.3	--	--	293.3	45.7	339.0
2014	115	352.2	--	--	352.2	57.7	409.9
2015	157	482.1	--	--	482.1	66.2	548.3
2016	168	515.3	--	--	515.3	69.0	584.3
2017	204	614.5	--	--	614.5	83.0	697.5
2018	150	459.3	--	--	459.3	73.2	532.5
2019	134	412.8	--	--	412.8	68.7	481.5
<b>Subtotal</b>	<b>1200</b>	<b>3699.4</b>	<b>--</b>	<b>24.1</b>	<b>3723.5</b>	<b>566.6</b>	<b>4290.1</b>

**Low Rate Initial Production**

	<b>Initial LRIP Decision</b>	<b>Current Total LRIP</b>
<b>Approval Date</b>	7/12/2004	8/24/2009
<b>Approved Quantity</b>	120	120
<b>Reference</b>	Milestone B ADM	Milestone C ADM
<b>Start Year</b>	2009	2009
<b>End Year</b>	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 authorized LRIP quantity is 19 missiles for FY 2009, 11 missiles for FY 2010, and 59 missiles for FY 2011.

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 Cost**

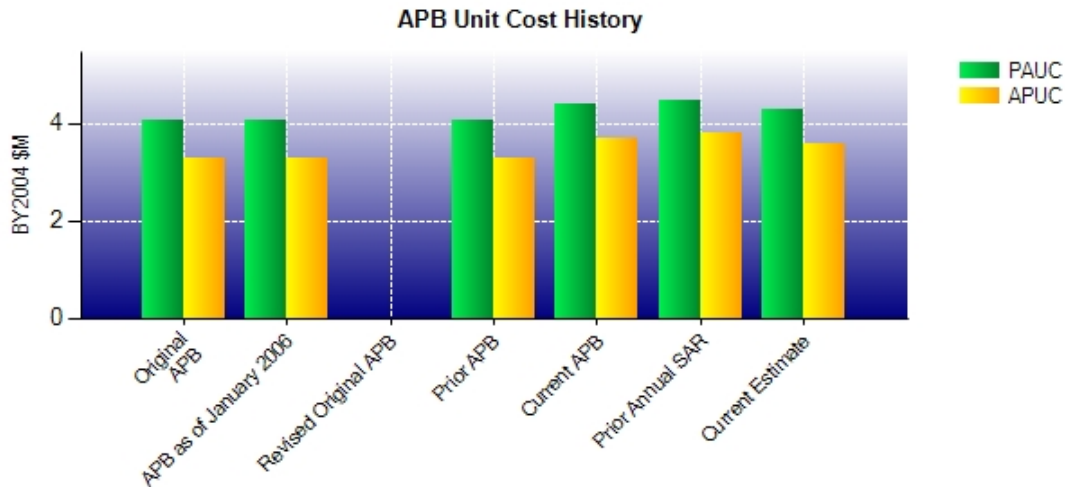
None

**Unit Cost****Unit Cost Report**

	BY2004 \$M	BY2004 \$M	
Unit Cost	Current UCR Baseline (MAR 2010 APB)	Current Estimate (DEC 2011 SAR)	BY % Change
Program Acquisition Unit Cost (PAUC)			
Cost	5281.1	5116.8	
Quantity	1200	1200	
Unit Cost	4.401	4.264	-3.11
Average Procurement Unit Cost (APUC)			
Cost	4419.5	4290.1	
Quantity	1200	1200	
Unit Cost	3.683	3.575	-2.93

	BY2004 \$M	BY2004 \$M	
Unit Cost	Original UCR Baseline (JUL 2004 APB)	Current Estimate (DEC 2011 SAR)	BY % Change
Program Acquisition Unit Cost (PAUC)			
Cost	4866.3	5116.8	
Quantity	1200	1200	
Unit Cost	4.055	4.264	+5.15
Average Procurement Unit Cost (APUC)			
Cost	3949.6	4290.1	
Quantity	1200	1200	
Unit Cost	3.291	3.575	+8.63

### Unit Cost History



	Date	BY2004 \$M		TY \$M	
		PAUC	APUC	PAUC	APUC
<b>Original APB</b>	JUL 2004	4.055	3.291	4.986	4.163
<b>APB as of January 2006</b>	JUL 2004	4.055	3.291	4.986	4.163
<b>Revised Original APB</b>	N/A	N/A	N/A	N/A	N/A
<b>Prior APB</b>	JUL 2004	4.055	3.291	4.986	4.163
<b>Current APB</b>	MAR 2010	4.401	3.683	5.498	4.695
<b>Prior Annual SAR</b>	DEC 2010	4.480	3.787	5.580	4.807
<b>Current Estimate</b>	DEC 2011	4.264	3.575	5.389	4.620

### SAR Unit Cost History

#### Initial SAR Baseline to Current SAR Baseline (TY \$M)

Initial PAUC Dev Est	Changes								PAUC Prod Est
	Econ	Qty	Sch	Eng	Est	Oth	Spt	Total	
4.986	0.114	0.000	-0.046	0.000	0.153	0.000	0.291	0.512	5.498

#### Current SAR Baseline to Current Estimate (TY \$M)

PAUC Prod Est	Changes								PAUC Current Est
	Econ	Qty	Sch	Eng	Est	Oth	Spt	Total	
5.498	0.021	0.000	0.035	0.000	-0.143	0.000	-0.022	-0.109	5.389

## Initial SAR Baseline to Current SAR Baseline (TY \$M)

Initial APUC Dev Est	Changes								APUC Prod Est
	Econ	Qty	Sch	Eng	Est	Oth	Spt	Total	
4.163	0.085	0.000	-0.046	0.000	0.202	0.000	0.291	0.532	4.695

## Current SAR Baseline to Current Estimate (TY \$M)

APUC Prod Est	Changes								APUC Current Est
	Econ	Qty	Sch	Eng	Est	Oth	Spt	Total	
4.695	0.020	0.000	0.035	0.000	-0.108	0.000	-0.022	-0.075	4.620

## SAR Baseline History

Item/Event	SAR Planning Estimate (PE)	SAR Development Estimate (DE)	SAR Production Estimate (PdE)	Current Estimate
Milestone A	N/A	N/A	N/A	N/A
Milestone B	N/A	JUN 2004	JUN 2004	JUN 2004
Milestone C	N/A	SEP 2008	JUN 2009	AUG 2009
IOC	N/A	SEP 2010	MAR 2011	APR 2012
Total Cost (TY \$M)	N/A	5983.3	6597.2	6467.0
Total Quantity	N/A	1200	1200	1200
Prog. Acq. Unit Cost (PAUC)	N/A	4.986	5.498	5.389

**Cost Variance****Cost Variance Summary**

<b>Summary Then Year \$M</b>				
	<b>RDT&amp;E</b>	<b>Proc</b>	<b>MILCON</b>	<b>Total</b>
SAR Baseline (Prod Est)	963.2	5634.0	--	6597.2
Previous Changes				
Economic	-0.8	-62.6	--	-63.4
Quantity	--	--	--	--
Schedule	--	+39.6	--	+39.6
Engineering	--	--	--	--
Estimating	-35.4	+102.8	--	+67.4
Other	--	--	--	--
Support	--	+55.1	--	+55.1
Subtotal	-36.2	+134.9	--	+98.7
Current Changes				
Economic	+1.6	+86.5	--	+88.1
Quantity	--	--	--	--
Schedule	--	+2.4	--	+2.4
Engineering	--	--	--	--
Estimating	-5.2	-233.3	--	-238.5
Other	--	--	--	--
Support	--	-80.9	--	-80.9
Subtotal	-3.6	-225.3	--	-228.9
Total Changes	-39.8	-90.4	--	-130.2
CE - Cost Variance	923.4	5543.6	--	6467.0
CE - Cost & Funding	923.4	5543.6	--	6467.0

<b>Summary Base Year 2004 \$M</b>				
	<b>RDT&amp;E</b>	<b>Proc</b>	<b>MILCON</b>	<b>Total</b>
SAR Baseline (Prod Est)	861.6	4419.5	--	5281.1
Previous Changes				
Economic	--	--	--	--
Quantity	--	--	--	--
Schedule	--	--	--	--
Engineering	--	--	--	--
Estimating	-30.5	+81.8	--	+51.3
Other	--	--	--	--
Support	--	+43.1	--	+43.1
Subtotal	-30.5	+124.9	--	+94.4
Current Changes				
Economic	--	--	--	--
Quantity	--	--	--	--
Schedule	--	-3.5	--	-3.5
Engineering	--	--	--	--
Estimating	-4.4	-187.6	--	-192.0
Other	--	--	--	--
Support	--	-63.2	--	-63.2
Subtotal	-4.4	-254.3	--	-258.7
Total Changes	-34.9	-129.4	--	-164.3
CE - Cost Variance	826.7	4290.1	--	5116.8
CE - Cost & Funding	826.7	4290.1	--	5116.8

Previous Estimate: December 2010

RDT&E	\$M	
	Base Year	Then Year
<b>Current Change Explanations</b>		
Revised escalation indices. (Economic)	N/A	+1.6
Adjustment for current and prior escalation. (Estimating)	-1.4	-1.6
Reduction due to Small Business Innovation Research/Small Business Technology Transfer (SBIR/STTR) Assessment in FY 2011. (Estimating)	-3.0	-3.6
RDT&E Subtotal	-4.4	-3.6

Procurement	\$M	
	Base Year	Then Year
<b>Current Change Explanations</b>		
Revised escalation indices. (Economic)	N/A	+86.5
Increase due to rephasing or SM-6 procurement buy profile to reflect reduction in near term procurement buys and increase in out year procurement buys. (Schedule)	-3.5	+2.4
Adjustment for current and prior escalation. (Estimating)	-7.3	-9.0
Decrease in FY 2011 due to contract negotiations being lower than the President's Budget FY 2012 unit cost for FY 2011. (Estimating)	-35.0	-42.0
Decrease in FY 2012 due to Congressional action for SM-6 unit cost efficiencies based on FY 2011 unit cost. (Estimating)	-47.9	-58.0
Decrease in FY 2013 - FY 2014 for unit cost efficiencies consistent with FY 2012 reduction. (Estimating)	-44.1	-55.0
Decrease due to refined estimates for All Up Round missile hardware and canisters. Out year reductions due to estimate refinement. (Estimating)	-53.3	-69.3
Adjustment for current and prior escalation. (Support)	-1.1	-1.2
Decrease in Other Support due to Department of the Navy management challenge for efficiencies in strategic sourcing and services acquisition across the department. Realignment of support funding requirements to the rephased procurement profile. (Support)	-33.6	-42.4
Decrease in Initial Spares due to decrease in All Up Round missile hardware cost and realignment of spares funding requirements to the rephased procurement profile. (Support)	-28.5	-37.3
Procurement Subtotal	-254.3	-225.3

## Contracts

### Appropriation: Procurement

Contract Name	<b>SM-6 LRIP Contract</b>
Contractor	RAYTHEON (RMS)
Contractor Location	Tucson, AZ 85731-1337
Contract Number, Type	N00024-09-C-5305/0, FPIF
Award Date	September 04, 2009
Definitization Date	July 01, 2010

Initial Contract Price (\$M)			Current Contract Price (\$M)			Estimated Price At Completion (\$M)	
Target	Ceiling	Qty	Target	Ceiling	Qty	Contractor	Program Manager
367.9	397.4	89	367.9	397.4	89	368.0	368.0

Variance	Cost Variance	Schedule Variance
Cumulative Variances To Date (12/31/2011)	+10.7	+20.9
Previous Cumulative Variances	--	--
Net Change	+10.7	+20.9

### Cost And Schedule Variance Explanations

The favorable cumulative cost variance is due to efficiency in forecasting labor overall for Low Rate Initial Production (LRIP) improving performance over original forecasts.

The favorable cumulative schedule variance is due to Raytheon working ahead of the contractual baseline schedule.

### Contract Comments

On September 4, 2009, RMS was awarded a letter contract to establish Not-to-Exceed (NTE) prices for the LRIP Contract Line Item Numbers (CLINs). The contract was definitized on July 1, 2010. Contract Option 2 (FY 2011 lot 3) was awarded on June 23, 2011.

The SM-6 Milestone C Acquisition Decision Memorandum (ADM) dated August 24, 2009 authorized LRIP lot 1 plus Long Lead Material (LLM) for FY 2010 (lot 2). The SM-6 LRIP lot 2 ADM dated June 7, 2010 authorized LRIP lot 2 plus LLM for FY 2011 (lot 3). The SM-6 LRIP lot 3 and LLM ADM dated May 13, 2011 authorized LRIP lot 3 plus LLM for FY 2012.

An Integrated Baseline Review (IBR) for FY 2009 lot 1 was successfully conducted in January 2011. A follow-on IBR for FY 2010 lot 2 was successfully conducted in June 2011. A follow-on IBR for FY 2011 lot 3 will be held in January 2012.



## Deliveries and Expenditures

Deliveries To Date	Plan To Date	Actual To Date	Total Quantity	Percent Delivered
Development	0	0	0	--
Production	12	13	1200	1.08%
Total Program Quantities Delivered	12	13	1200	1.08%

Expenditures and Appropriations (TY \$M)			
Total Acquisition Cost	6467.0	Years Appropriated	9
Expenditures To Date	981.9	Percent Years Appropriated	56.25%
Percent Expended	15.18%	Appropriated to Date	1757.2
Total Funding Years	16	Percent Appropriated	27.17%

Delivery and expenditure information reflects data through January 31, 2012.

## Operating and Support Cost

### Assumptions And Ground Rules

- 1) Since the SM-6 is a wooden round (a concept that 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.
- 2) Unit Level Consumption includes Range and Target Costs, as well as Post Flight Analysis.
- 3) Intermediate Maintenance consists of Intermediate Level Maintenance facility costs.
- 4) Depot Maintenance includes Depot Maintenance and Refurbishment.
- 5) Sustaining Support includes Sustaining Investment and Software Maintenance.
- 6) Indirect Costs include Demilitarization/Disposal and Other costs. The Army is responsible for demilitarization of all Department of Defense missile systems at the end of the missile service life, including the STANDARD missile.
- 7) Average annual per missile costs are based on the April 2010 Navy Service Cost Position and verified by the OSD Cost Assessment and Program Evaluation (CAPE) Independent Cost Estimate (ICE), which assumes 1200 All Up Rounds over a 30 year life cycle. (Cost/Missile/Year based on a 30 year life cycle for 1200 missiles)
- 8) There is no Antecedent System for the SM-6 program. The SM-6 program meets a different threat set and demonstrates enhanced capabilities in comparison to the SM-2 program.

Costs BY2004 \$K		
Cost Element	SM-6 Avg Annual Cost per Missile	No Antecedent
Unit-Level Manpower	0.0	0.0
Unit Operations	3.4	0.0
Maintenance	1.6	0.0
Sustaining Support	3.0	0.0
Continuing System Improvements	1.3	0.0
Indirect Support	0.3	0.0
Other	0.0	0.0
Total Unitized Cost (Base Year 2004 \$)	9.6	--

Total O&S Costs \$M	SM-6	No Antecedent
Base Year	344.6	0.0
Then Year	558.0	0.0