



# Selected Acquisition Report (SAR)

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



## Standard Missile-6 (SM-6)

As of FY 2015 President's Budget

Defense Acquisition Management  
Information Retrieval  
(DAMIR)

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## Common Acronyms and Abbreviations

Acq O&M - Acquisition-Related Operations and Maintenance  
APB - Acquisition Program Baseline  
APPN - Appropriation  
APUC - Average Procurement Unit Cost  
BA - Budget Authority/Budget Activity  
BY - Base Year  
DAMIR - Defense Acquisition Management Information Retrieval  
Dev Est - Development Estimate  
DoD - Department of Defense  
DSN - Defense Switched Network  
Econ - Economic  
Eng - Engineering  
Est - Estimating  
FMS - Foreign Military Sales  
FY - Fiscal Year  
IOC - Initial Operational Capability  
\$K - Thousands of Dollars  
LRIP - Low Rate Initial Production  
\$M - Millions of Dollars  
MILCON - Military Construction  
N/A - Not Applicable  
O&S - Operating and Support  
Oth - Other  
PAUC - Program Acquisition Unit Cost  
PB - President's Budget  
PE - Program Element  
Proc - Procurement  
Prod Est - Production Estimate  
QR - Quantity Related  
Qty - Quantity  
RDT&E - Research, Development, Test, and Evaluation  
SAR - Selected Acquisition Report  
Sch - Schedule  
Spt - Support  
TBD - To Be Determined  
TY - Then Year  
UCR - Unit Cost Reporting

## Program Information

**Program Name**

Standard Missile-6 (SM-6)

**DoD Component**

Navy

## Responsible Office

**Responsible Office**

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**Date Assigned** May 3, 2013

## 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 August 9, 2013

## 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 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 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" 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 Family of Systems to provide continuous protection to forward deployed maneuver forces as well as theater rear assets.

## Executive Summary

The Navy completed supplemental testing to inform the Full Rate Production (FRP) decision held on May 13, 2013. The program was granted authority to enter FRP and the test community found SM-6 to be operationally effective and suitable as documented in the SM-6 FRP Acquisition Decision Memorandum dated July 15, 2013.

IOC was achieved on November 26, 2013.

The program commenced Follow-On Operational Test and Evaluation in November 2013.

The SM-6 LRIP Lot 4 FY 2012 production contract was definitized on July 5, 2013.

The SM-6 FRP FY 2013 production contract was definitized on September 26, 2013.

The SM-6 program received authorization to increase the procurement profile from 1200 missiles to 1800 missiles as documented in the Navy Electronic Resources and Requirements Review Board memorandum, dated March 18, 2013.

There are no significant software-related issues with 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

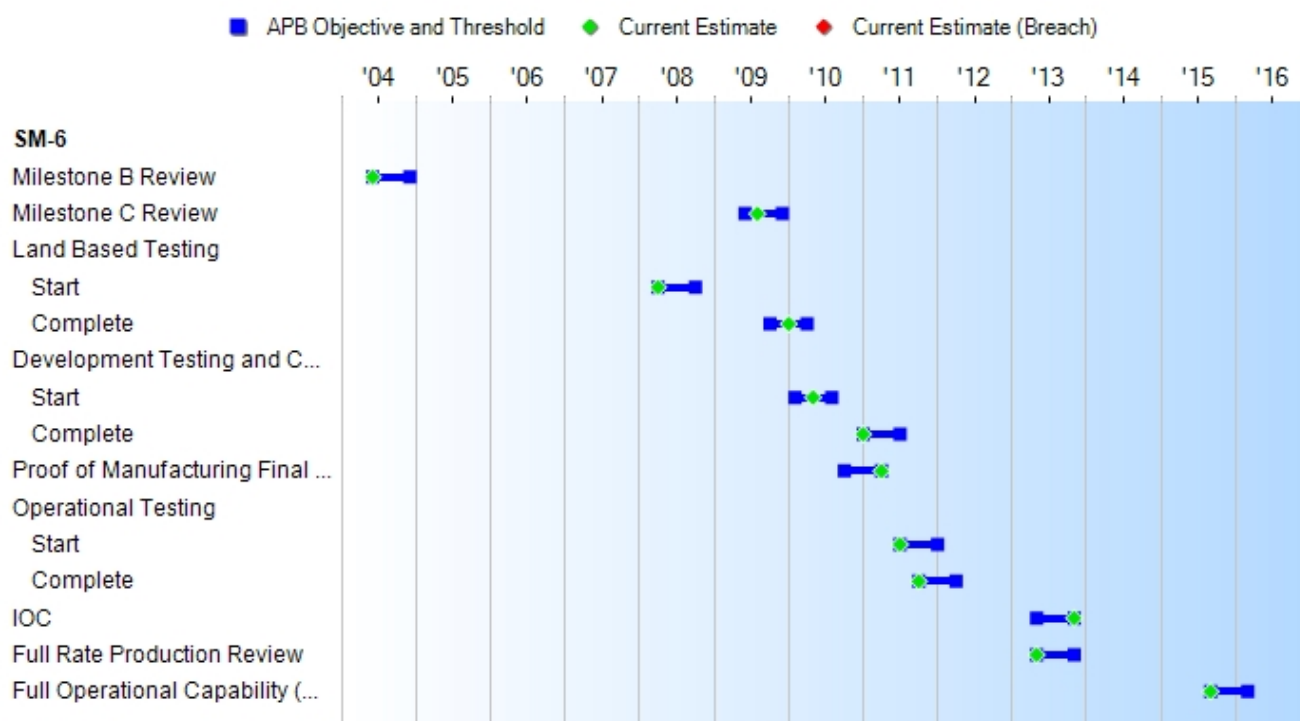
APUC None

#### Original UCR Baseline

PAUC None

APUC None

## Schedule



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	JAN 2011	JUL 2011	JAN 2011
Proof of Manufacturing Final Review	OCT 2010	OCT 2010	APR 2011	APR 2011
Operational Testing				
Start	AUG 2010	JUL 2011	JAN 2012	JUL 2011
Complete	SEP 2010	OCT 2011	APR 2012	OCT 2011
IOC	MAR 2011	MAY 2013	NOV 2013	NOV 2013
Full Rate Production Review	JUN 2011	MAY 2013	NOV 2013	MAY 2013
Full Operational Capability (FOC)	SEP 2015	SEP 2015	MAR 2016	SEP 2015

(Ch-1)

**Change Explanations**

(Ch-1) The IOC current estimate changed from May 2013 to November 2013 to reflect the actual achievement date.

**Memo**

The extended threshold for FOC is defined in the SM-6 Capability Production Document.

## Performance

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

## Track to Budget

### General Memo

The SM-6 Development was funded under Program Element (PE) 0604366N - Project 3092.

The FY 2015 PB includes RDT&E funding for other STANDARD Missile improvements, none of which are included in the SM-6 development program baseline: Insensitive Munitions, Portable All-Up Round Built In Test Tester, Naval Integrated Fire Control - Counter Air, and Future Capability Demonstration.

The FY 2015 PB for SM-6 procurement (APPN 1507, PE 0204228N) includes Line Item 223400 and 612000. Both are shared with SM-2 through FY 2011. 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)	
	Notes:	FY 2012 is the last year of SM-6 RDT&E funding related to the Baseline Program of Record as reported in the SAR.	

### Procurement

Appn	BA	PE	
Navy	1507	02	0204228N
	<b>Line Item</b>	<b>Name</b>	
	223400	STANDARD Missile	
	<b>Notes:</b>	Shared with SM-2 through FY 2011.	
Navy	1507	06	0204228N
	<b>Line Item</b>	<b>Name</b>	
	612000	Spares and Repair Parts (Shared)	
	<b>Notes:</b>	Shared with SM-2 in Standard Missile Replenishment Spares line through FY 2011 and continues to be shared with other Navy programs.	

## 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	834.5	918.0	834.7	963.2	933.4	933.4
Procurement	4419.5	6854.1	7539.5	6585.8	5634.0	9623.8	9207.0
Flyaway	--	--	--	5771.7	--	--	8086.6
Recurring	--	--	--	5747.6	--	--	8058.5
Non Recurring	--	--	--	24.1	--	--	28.1
Support	--	--	--	814.1	--	--	1120.4
Other Support	--	--	--	577.8	--	--	788.1
Initial Spares	--	--	--	236.3	--	--	332.3
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	5281.1	7688.6	N/A	7420.5	6597.2	10557.2	10140.4

Confidence Level for Current APB Cost 50% -

The Independent Cost Estimate (ICE) to support SM-6 Full Rate Production 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.

Quantity	SAR Baseline Prod Est	Current APB Production	Current Estimate
RDT&E	0	0	0
Procurement	1200	1800	1800
Total	1200	1800	1800

SM-6 received authorization to increase the procurement profile from 1200 missiles to 1800 missiles as documented in the Navy Electronic Resources and Requirements Review Board memorandum, dated March 18, 2013.

## Cost and Funding

### Funding Summary

#### Appropriation and Quantity Summary FY2015 President's Budget / December 2013 SAR (TY\$ M)

Appropriation	Prior	FY2014	FY2015	FY2016	FY2017	FY2018	FY2019	To Complete	Total
RDT&E	933.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	933.4
Procurement	1162.3	386.9	462.2	529.9	545.9	600.1	614.6	4905.1	9207.0
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 2015 Total	2095.7	386.9	462.2	529.9	545.9	600.1	614.6	4905.1	10140.4
PB 2014 Total	2183.9	386.9	571.3	589.3	741.1	836.5	744.1	3722.4	9775.5
Delta	-88.2	0.0	-109.1	-59.4	-195.2	-236.4	-129.5	1182.7	364.9

Quantity	Undistributed	Prior	FY2014	FY2015	FY2016	FY2017	FY2018	FY2019	To Complete	Total
Development	0	0	0	0	0	0	0	0	0	0
Production	0	267	81	110	125	125	125	125	842	1800
PB 2015 Total	0	267	81	110	125	125	125	125	842	1800
PB 2014 Total	0	272	81	125	127	160	174	150	711	1800
Delta	0	-5	0	-15	-2	-35	-49	-25	131	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	--	--	--	--	--	--	17.7
<b>Subtotal</b>	--	--	--	--	--	--	<b>933.4</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	--	--	--	--	--	--	51.4
2012	--	--	--	--	--	--	14.7
<b>Subtotal</b>	--	--	--	--	--	--	<b>834.7</b>

## Annual Funding TY\$

## 1507 | Procurement | Weapons Procurement, 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
2009	19	92.4	--	17.6	110.0	12.4	122.4
2010	11	54.5	--	10.5	65.0	32.7	97.7
2011	59	210.5	--	--	210.5	32.5	243.0
2012	89	272.2	--	--	272.2	80.0	352.2
2013	89	264.6	--	--	264.6	82.4	347.0
2014	81	328.9	--	--	328.9	58.0	386.9
2015	110	405.6	--	--	405.6	56.6	462.2
2016	125	475.3	--	--	475.3	54.6	529.9
2017	125	493.8	--	--	493.8	52.1	545.9
2018	125	541.5	--	--	541.5	58.6	600.1
2019	125	554.7	--	--	554.7	59.9	614.6
2020	125	585.6	--	--	585.6	70.8	656.4
2021	125	598.9	--	--	598.9	74.8	673.7
2022	125	625.3	--	--	625.3	76.9	702.2
2023	125	635.9	--	--	635.9	78.3	714.2
2024	125	653.5	--	--	653.5	80.0	733.5
2025	125	665.1	--	--	665.1	81.6	746.7
2026	92	600.2	--	--	600.2	78.2	678.4
<b>Subtotal</b>	<b>1800</b>	<b>8058.5</b>	<b>--</b>	<b>28.1</b>	<b>8086.6</b>	<b>1120.4</b>	<b>9207.0</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	80.0	--	15.2	95.2	10.8	106.0
2010	11	46.4	--	8.9	55.3	27.9	83.2
2011	59	175.7	--	--	175.7	27.1	202.8
2012	89	223.6	--	--	223.6	65.7	289.3
2013	89	213.8	--	--	213.8	66.6	280.4
2014	81	261.1	--	--	261.1	46.0	307.1
2015	110	315.9	--	--	315.9	44.1	360.0
2016	125	363.0	--	--	363.0	41.7	404.7
2017	125	369.8	--	--	369.8	39.0	408.8
2018	125	397.5	--	--	397.5	43.0	440.5
2019	125	399.2	--	--	399.2	43.1	442.3
2020	125	413.2	--	--	413.2	50.0	463.2
2021	125	414.3	--	--	414.3	51.7	466.0
2022	125	424.1	--	--	424.1	52.1	476.2
2023	125	422.8	--	--	422.8	52.1	474.9
2024	125	426.0	--	--	426.0	52.1	478.1
2025	125	425.1	--	--	425.1	52.1	477.2
2026	92	376.1	--	--	376.1	49.0	425.1
<b>Subtotal</b>	<b>1800</b>	<b>5747.6</b>	<b>--</b>	<b>24.1</b>	<b>5771.7</b>	<b>814.1</b>	<b>6585.8</b>

## Low Rate Initial Production

	Initial LRIP Decision	Current Total LRIP
Approval Date	7/12/2004	4/5/2012
Approved Quantity	120	178
Reference	Milestone B ADM	LRIP Lot 4 ADM
Start Year	2009	2009
End Year	2011	2012

The SM-6 program received authorization to enter into a fourth year of LRIP as documented in the Acquisition Decision Memorandum (ADM) dated April 5, 2012. This ADM authorized the increase in the total LRIP Qty from 120 (10 percent) to 178 (15 percent) and deferred the Full Rate Production decision to FY 2013. The current authorized LRIP Qty is 19 missiles for FY 2009, 11 missiles for FY 2010, 59 missiles for FY 2011, and 89 missiles for FY 2012.

The SM-6 program built up 25 non-LRIP rounds to be test fired during the System Development and Demonstration phase of the program. All 25 missiles were expended prior to IOC.

## Foreign Military Sales

None

## Nuclear Costs

None

## Unit Cost

### Unit Cost Report

	BY2004 \$M	BY2004 \$M	
Unit Cost	Current UCR Baseline (AUG 2013 APB)	Current Estimate (DEC 2013 SAR)	BY % Change

#### Program Acquisition Unit Cost (PAUC)

Cost	7688.6	7420.5	
Quantity	1800	1800	
Unit Cost	4.271	4.122	-3.49

#### Average Procurement Unit Cost (APUC)

Cost	6854.1	6585.8	
Quantity	1800	1800	
Unit Cost	3.808	3.659	-3.91

	BY2004 \$M	BY2004 \$M	
Unit Cost	Original UCR Baseline (JUL 2004 APB)	Current Estimate (DEC 2013 SAR)	BY % Change

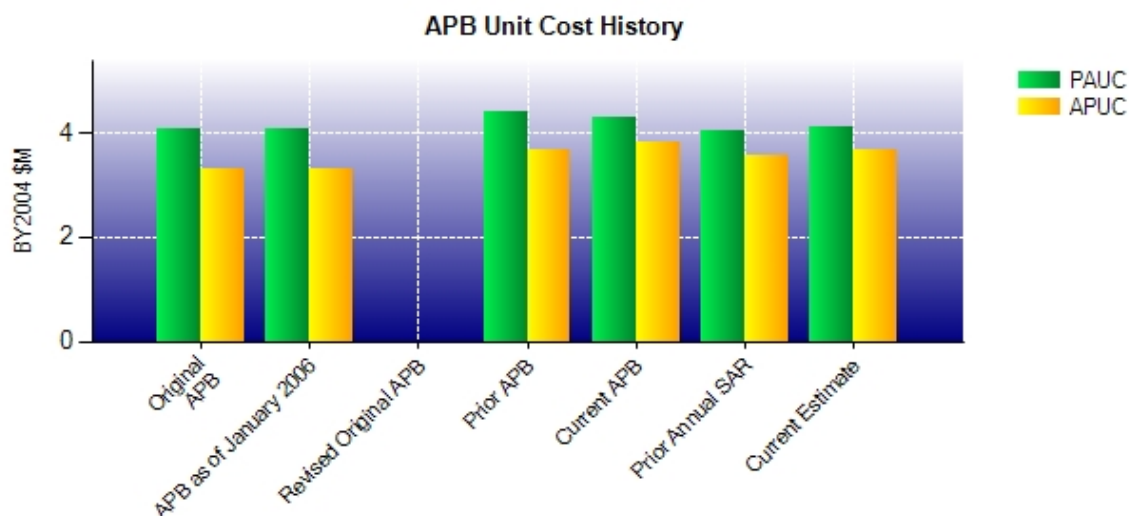
#### Program Acquisition Unit Cost (PAUC)

Cost	4866.3	7420.5	
Quantity	1200	1800	
Unit Cost	4.055	4.122	+1.65

#### Average Procurement Unit Cost (APUC)

Cost	3949.6	6585.8	
Quantity	1200	1800	
Unit Cost	3.291	3.659	+11.18

## Unit Cost History



	Date	BY2004 \$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	MAR 2010	4.401	3.683	5.498	4.695
Current APB	AUG 2013	4.271	3.808	5.865	5.347
Prior Annual SAR	DEC 2012	4.033	3.569	5.431	4.912
Current Estimate	DEC 2013	4.122	3.659	5.634	5.115

## 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	0.020	-0.376	0.137	0.000	0.154	0.000	0.201	0.136	5.634

**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	0.019	-0.109	0.137	0.000	0.172	0.000	0.201	0.420	5.115

**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	NOV 2013
Total Cost (TY \$M)	N/A	5983.3	6597.2	10140.4
Total Quantity	N/A	1200	1200	1800
Prog. Acq. Unit Cost (PAUC)	N/A	4.986	5.498	5.634

**Cost Variance**

Summary Then Year \$M				
	RDT&E	Proc	MILCON	Total
SAR Baseline (Prod Est)	963.2	5634.0	--	6597.2
Previous Changes				
Economic	+1.4	+93.9	--	+95.3
Quantity	--	+2619.6	--	+2619.6
Schedule	--	+123.0	--	+123.0
Engineering	--	--	--	--
Estimating	-31.2	-20.5	--	-51.7
Other	--	--	--	--
Support	--	+392.1	--	+392.1
Subtotal	-29.8	+3208.1	--	+3178.3
Current Changes				
Economic	-0.2	-59.0	--	-59.2
Quantity	--	--	--	--
Schedule	--	+124.3	--	+124.3
Engineering	--	--	--	--
Estimating	+0.2	+329.4	--	+329.6
Other	--	--	--	--
Support	--	-29.8	--	-29.8
Subtotal	--	+364.9	--	+364.9
Total Changes	-29.8	+3573.0	--	+3543.2
CE - Cost Variance	933.4	9207.0	--	10140.4
CE - Cost & Funding	933.4	9207.0	--	10140.4

Summary Base Year 2004 \$M				
	RDT&E	Proc	MILCON	Total
SAR Baseline (Prod Est)	861.6	4419.5	--	5281.1
Previous Changes				
Economic	--	--	--	--
Quantity	--	+1761.1	--	+1761.1
Schedule	--	+20.4	--	+20.4
Engineering	--	--	--	--
Estimating	-27.1	-29.2	--	-56.3
Other	--	--	--	--
Support	--	+252.8	--	+252.8
Subtotal	-27.1	+2005.1	--	+1978.0
Current Changes				
Economic	--	--	--	--
Quantity	--	--	--	--
Schedule	--	--	--	--
Engineering	--	--	--	--
Estimating	+0.2	+186.6	--	+186.8
Other	--	--	--	--
Support	--	-25.4	--	-25.4
Subtotal	+0.2	+161.2	--	+161.4
Total Changes	-26.9	+2166.3	--	+2139.4
CE - Cost Variance	834.7	6585.8	--	7420.5
CE - Cost & Funding	834.7	6585.8	--	7420.5

Previous Estimate: December 2012

<b>RDT&amp;E</b>	<b>\$M</b>	
	<b>Base Year</b>	<b>Then Year</b>
<b>Current Change Explanations</b>		
Revised escalation indices. (Economic)	N/A	-0.2
Adjustment for current and prior escalation. (Estimating)	+0.2	+0.2
<b>RDT&amp;E Subtotal</b>	<b>+0.2</b>	<b>0.0</b>

<b>Procurement</b>	<b>\$M</b>	
	<b>Base Year</b>	<b>Then Year</b>
<b>Current Change Explanations</b>		
Revised escalation indices. (Economic)	N/A	-59.0
Stretch-out of procurement buy profile from FY 2024 to FY 2026. (Schedule)	0.0	+124.3
Adjustment for current and prior escalation. (Estimating)	+8.5	+10.5
Decrease in FY 2012 due to contract negotiations being lower than previously estimated. (Estimating)	-11.8	-14.4
Revised estimate due to Congressional reduction in FY 2013 which resulted in a reduction in quantity to the FY 2012 procurement level. (Estimating)	-13.7	-17.0
Revised estimate due to Sequestration reductions in FY 2013, which resulted in a reduction of Round Design Agent, Navy Activity and Program Office professional services support efforts. (Estimating)	-39.3	-48.7
Increase due to production cut-in decision for the Engineering Change Proposal (ECP) for the SM-6 Block IA which resulted in a realignment of Other Support funding to Recurring Flyaway starting in FY 2018. (Estimating)	+135.2	+194.9
Decrease in Future Year Defense Plan (FYDP) for SM-6 Block I unit cost efficiencies consistent with FY 2013 contract negotiation and reprioritization of higher Navy priorities. (Estimating)	-137.9	-183.7
Revised estimate to reflect application of new outyear escalation indices. (Estimating)	-33.5	-45.1
Revised estimate for SM-6 Block I and Block IA to align with approved FRP cost estimate. (Estimating)	+279.1	+432.9
Adjustment for current and prior escalation. (Support)	+1.4	+1.8
Net decrease in Other Support due realignment of funds and extending the procurement profile to FY 2026. (Support)	-5.4	-11.8
Net decrease in Initial Spares due to realignment of spares funding to the rephased procurement profile and under funded spares requirements in the FYDP. (Support)	-21.4	-19.8
<b>Procurement Subtotal</b>	<b>+161.2</b>	<b>+364.9</b>

## Contracts

### Appropriation: Procurement

Contract Name	<b>SM-6 LRIP Contract</b>
Contractor	Raytheon Missile Systems (RMS)
Contractor Location	1151 East Hermans Road 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
368.0	397.4	89	377.2	407.5	92	377.2	377.2

### Target Price Change Explanation

The difference between the Initial Contract Price Target and the Current Contract Price Target is due to contract modification P00015 which added three additional FY 2012 All Up Round missiles in support of the Missile Defense Agency Sea Based Terminal efforts.

Variance	Cost Variance	Schedule Variance
Cumulative Variances To Date (1/24/2014)	+12.9	-13.4
Previous Cumulative Variances	+11.4	+18.7
Net Change	+1.5	-32.1

### Cost and Schedule Variance Explanations

The favorable net change in the cost variance is due to Raytheon labor performing more efficiently than planned in the Manufacturing, Program Management and Systems Engineering Teams. Labor expenditures are expected to increase as the monthly quantities of LRIP lot 3 All Up Rounds are built, tested and delivered.

The unfavorable net change in the schedule variance is due to Raytheon work that is behind schedule but being recovered due to early delivery of material. Major subcontract delivery challenges in Supply Chain management related to the Thrust Vector Assembly and Steering Control Sections are also contributing to this negative schedule variance.

**Contract Comments**

This contract is more than 90% complete; therefore, this is the final report for this contract.

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 and a follow-on IBR for FY 2011 lot 3 was successfully conducted in January 2012.

**Appropriation: Procurement**

Contract Name **SM-6 LRIP 4 Contract**  
 Contractor Raytheon Missile Systems (RMS)  
 Contractor Location 1151 East Hermans Road  
 Tucson, AZ 85756  
 Contract Number, Type N00024-12-C-5401/1, FPIF  
 Award Date May 10, 2012  
 Definitization Date July 05, 2013

Initial Contract Price (\$M)			Current Contract Price (\$M)			Estimated Price at Completion (\$M)	
Target	Ceiling	Qty	Target	Ceiling	Qty	Contractor	Program Manager
266.4	279.2	89	266.4	279.2	89	266.4	266.4

Variance	Cost Variance	Schedule Variance
Cumulative Variances To Date (1/24/2014)	-2.9	+39.9
Previous Cumulative Variances	--	--
Net Change	-2.9	+39.9

**Cost and Schedule Variance Explanations**

The unfavorable cumulative cost variance is due to Raytheon manufacturing team experiencing unfavorable costs for SM-6 unique Circuit Card Assemblies coming in higher than the budgeted cost. Alternatively, Raytheon experienced a favorable cost variance due to the average unit price in the warhead account being less than the budgeted unit price.

The favorable cumulative schedule variance is due to Raytheon manufacturing and configuration management teams being ahead of plan due to the early receipt of material.

**Contract Comments**

This is the first time this contract is being reported.

On May 10, 2013, RMS was awarded a letter contract to establish Not To Exceed prices for the LRIP lot 4 Contract Line Item Numbers. The contract was definitized on July 5, 2013.

The SM-6 program received authorization to enter into a fourth year of LRIP in FY 2012 as documented in the Acquisition Decision Memorandum dated April 5, 2012.

An Integrated Baseline Review for FY 2014 lot 4 was successfully conducted in November 2013.

**Appropriation: Procurement**

Contract Name **SM-6 FRP Contract**  
 Contractor RMS Missile Systems (RMS)  
 Contractor Location 1151 Hermans Road  
 Tucson, AZ 85756  
 Contract Number, Type N00024-13-C-5407/0, FFP  
 Award Date January 31, 2013  
 Definitization Date September 26, 2013

Initial Contract Price (\$M)			Current Contract Price (\$M)			Estimated Price at Completion (\$M)	
Target	Ceiling	Qty	Target	Ceiling	Qty	Contractor	Program Manager
276.8	N/A	89	276.8	N/A	89	276.8	276.8

**Cost and Schedule Variance Explanations**

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

**Contract Comments**

This is the first time this contract is being reported.

On January 31, 2013, RMS was awarded a contract for LLM for the FY 2013 Full Rate Production (FRP) contract. The base contract (FY 2013) was definitized on September 26, 2013.

The SM-6 FRP Acquisition Decision Memorandum dated July 15, 2013 authorized the program to enter into FRP.

## Deliveries and Expenditures

Delivered to Date	Plan to Date	Actual to Date	Total Quantity	Percent Delivered
Development	0	0	0	--
Production	69	69	1800	3.83%
Total Program Quantity Delivered	69	69	1800	3.83%

Expended and Appropriated (TY \$M)			
Total Acquisition Cost	10140.4	Years Appropriated	11
Expended to Date	1310.3	Percent Years Appropriated	47.83%
Percent Expended	12.92%	Appropriated to Date	2482.6
Total Funding Years	23	Percent Appropriated	24.48%

The above data is current as of 2/21/2014.

## Operating and Support Cost

### SM-6

#### Assumptions and Ground Rules

##### Cost Estimate Reference:

Estimate based on the Office of the Secretary of Defense, Cost Assessment and Program Evaluation (OSD, CAPE) Independent Cost Estimate (ICE) dated May 13, 2013.

##### Sustainment Strategy:

- 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) The average annual cost per missile assumes 1800 All Up Rounds over a 30 year life cycle.
- 3) Unit Level Consumption includes Range and Target Costs, as well as Post Flight Analysis.
- 4) Intermediate Maintenance consists of Intermediate Level Maintenance facility costs.
- 5) Depot Maintenance includes Depot Maintenance and Refurbishment.
- 6) Sustaining Support includes Sustaining Investment and Software Maintenance.
- 7) Indirect Costs includes Installation and Personnel Support.

##### Antecedent Information:

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.

Unitized O&S Costs BY2004 \$K		
Cost Element	SM-6 Avg Annual Cost per Missile	No Antecedent (Antecedent)
Unit-Level Manpower	0.000	--
Unit Operations	3.000	--
Maintenance	3.200	--
Sustaining Support	2.100	--
Continuing System Improvements	0.000	--
Indirect Support	0.200	--
Other	0.000	--
Total	8.500	--

##### Unitized Cost Comments:

Cost/Missile/Year based on a 30 year life cycle for 1800 missiles. Differences in Annual Cost per Missile and Total O&S Cost are due to rounding issues.

Total O&S Cost \$M				
Current Production APB Objective/Threshold		Current Estimate		
SM-6		SM-6	No Antecedent (Antecedent)	
<b>Base Year</b>	443.0	487.3	460.3	N/A
<b>Then Year</b>	863.9	N/A	845.9	N/A

Total O&S Costs Comments:

The current APB was approved August 9, 2013. O&S is not included in the PAUC calculation.

**Disposal 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. Disposal costs are not identified at this time.