UNCLASSIFIED

EXHIBIT R-2, RDT&E Budget Item Justification					DATE:		
						February 2006	
APPROPRIATION/BUDGET ACTIVITY			R-1 ITEM NOMEN	CLATURE			
RESEARCH DEVELOPMENT TEST & EVALUATION, NAVY /BA-5 0604366N/STAN				ARD MISSILE IMP	ROVEMENTS		
COST (\$ in Millions)	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY2011
Total PE Cost	110.568	148.532	186.144	221.751	237.271	159.471	67.458
0439/Standard Missile Improvements	56.329	24.551	8.039	15.762	7.887	0.290	0.390
3092/Standard Missile 6 Program	49.890	118.881	178.105	205.989	229.384	159.181	67.068
9559/MK-41 Open Architecture Upgrades	2.866	0.000	0.000	0.000	0.000	0.000	0.000
9560/Real Time Image Processing - Silicon Brain	1.483	0.000	0.000	0.000	0.000	0.000	0.000
9999/Congressional Adds	0.000	5.100	0.000	0.000	0.000	0.000	0.000

A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

Standard Missile-2 (SM-2) Block IIIB is the Navy's premier Anti-Air Warfare (AAW) missile, providing both area air defense for the fleet and self defense for individual Aegis CGs and DDGs, as required by the Joint TAMD MNS, DPG, QDR, and Ship Class AAW Self Defense Capstone Requirements Document. Minor agility, fuzing, and computer modifications to SM-2 Block IIIB are under development to restore performance in the near term against a specific existing proliferated ASCM threat. Continuous analysis of missile capabilities vs. ever-evolving and proliferating aircraft and anti-ship cruise missiles and long-range planning are required to keep pace with the threat. In FY04 a new program started to develop a family of advanced surface missile systems. These new missile systems will leverage the Navy investment in the Aegis Weapon System, CEC, and airborne early warning systems, which will be upgraded in concert with missile development to support a fully integrated extended range detect-to-engage capability. Funding for those upgrades are also included in this line. Together, this family of systems will provide the air superiority and the umbrella of protection against the full spectrum of projected future cruise missile (anti-ship and land attack) and manned aircraft threats discussed in the Joint TAMD MNS, DPG, QDR, and TAMD Capstone Requirements Document.

R-1 SHOPPING LIST - Item No.

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EXHIBIT R-2a, RDT&E Project Justification							DATE:	
							Februai	y 2006
APPROPRIATION/BUDGET ACTIVITY PROGRAM ELEMENT NUMBER AND NAME PROJECT NUMBER AND NAME								
RDT&E, N / BA-5	BE, N / BA-5 0604366N/STANDARD MISSILE IMPROVEMENTS 0439 Standard Missile Improvement				nt			
COST (\$ in Millions)	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	
Project Cost	56.329	24.551	8.039	15.762	7.887	0.290	0.390	
RDT&E Articles Qty								

A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

Funding Includes FY05 Congressional Add; \$3.5M Advanced Missile data link.

Minor modifications to SM-2 Block IIIB will restore performance in the near term against a specific existing proliferated ASCM threat. These include modifications to the MK45 Target Detection Device (TDD) to improve the lethal radius at low altitudes, guidance software to improve missile agility, and a new digital signal processor. Funding for the MK 45 Mod 14 TDD advanced technology development has been provided under Conventional Munitions, P.E. 0603609N, Project 1821, and the complementary engineering and transition to production efforts is funded in this line. Continuous analysis of missile capabilities vs. evolving and proliferating aircraft and anti-ship cruise missiles and long-range planning are required to keep pace with the threat. In FY04 a new program started to develop a family of advanced surface missile systems. The Aegis Weapon System, CEC, and airborne early warning systems also will be upgraded in concert with missile development to support a fully integrated extended range detect-to-engage capability.

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DATE:	
Fe	bruary 2006
RAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME
66N/STANDARD MISSILE IMPROVEMENTS	0439 Standard Missile Improvement
	Fe GRAM ELEMENT NUMBER AND NAME

B. Accomplishments/Planned Program

	FY 05	FY 06	FY 07
Accomplishments/Effort/Subtotal Cost	0.150	0.150	0.293
RDT&E Articles Quantity			

Studies:

FY05/FY06/FY07: Failure analyses, technology assessments, analyses of missile capablity vs. threat, and long-range planning to keep pace with the evolving and proliferating threat.

	FY 05	FY 06	FY 07
Accomplishments/Effort/Subtotal Cost	32.339	11.125	0.000
RDT&E Articles Quantity			

Advanced Surface Missile Demonstration.

FY05 - Continue transition of advanced technology, risk reduction, mitigation activities, and preparation for feasibility demo.

FY06 - Complete transition of advanced technology, risk reduction, mitigation activities, and preparation for execution of feasibility demo.

	FY 05	FY 06	FY 07
Accomplishments/Effort/Subtotal Cost	11.342	10.776	0.000
RDT&E Articles Quantity			

Replacement of obsolete digital signal processor for SM-2 Block IIIB.

FY 05: Round level integration. FY06: Critical Design Review.

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EXHIBIT R-2a, RDT&E Project Justification		DATE:	
			February 2006
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUM	IBER AND NAME	PROJECT NUMBER AND NAME
RDT&E, N / BA-5	0604366N/STANDARD MIS	SILE IMPROVEMENTS	0439 Standard Missile Improvements

B. Accomplishments/Planned Program (Cont.)

	FY 05	FY 06	FY 07
Accomplishments/Effort/Subtotal Cost	0.000	2.500	7.746
RDT&E Articles Quantity			

Interrupted Continuous Wave Illumination (ICWI)

FY:06/07: To integrate (ICWI) functionality into the DD (X) ship combat system.

	FY 05	FY 06	FY 07
Accomplishments/Effort/Subtotal Cost	3.500	0.000	0.000
RDT&E Articles Quantity			

Advance Missile Data Link: FY05- Improving the link to evaluate interrupted continuous wave illumination for application to DDX.

	FY 05	FY 06	FY 07
Accomplishments/Effort/Subtotal Cost	8.998	0.000	0.000
RDT&E Articles Quantity			

Sea Base Terminal: FY05 - Conduct a demonstration of a capability to engage and intercept unitary short range ballistic missiles using an Aegis ship with a modified Linebacker Computer Program and modified SM-2 BLK IV missile against a Lance BM target. The FY05 major tasks to be completed are modification of and firing authorization for the Linebacker Computer Program and the modification and build-up of 2 modified SM-2 BLK IV missile rounds for an FY06 test.

R-1 SHOPPING LIST - Item No. 106

Exhibit R-2, RDTEN Budget Item Justification (Exhibit R-2, page 4 of 19)

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EXHIBIT R-2a, RDT&E Project Justification			DATE	Ξ:
-				February 2006
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUM	IBER AND NAME	
RDT&E, N / BA-5	0604366N/STANDARD MISSILE IMPROVEMENT	0439 Standard	Missile Improve	ments
C. PROGRAM CHANGE SUMMARY:				
Funding:	FY 2009	5 FY 2006	FY 2007	
Presidents Budget (PB06)	52.780		8.047	
Presidents Budget (PB07)	56.329		8.039	
Total Adjustments	3.549		-0.008	
Summary of Adjustments				
Other General Provisions	-1.449	-0.375		
BTR	4.998			
Other misc. changes			-0.008	
PBD 606 CIVPERS Pay Raise Rate				
Subtotal	3.54	-0.375	-0.008	
Schedule:				
Not Applicable				
Technical:				
Not Applicable				
Not Applicable				

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EXHIBIT R-2a, RDT&E	Project Justification		DA	NTE:
	•			February 2006
APPROPRIATION/BUDGET	ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAM	E
RDT&E, N /	BA-5	0604366N/STANDARD MISSILE IMPROVEMENTS	0439 Standard Missile Impro	vements
D OTHER PROCES	.M FUNDING SUMMARY: Not Ap	nlicable		
D. OTHER PROGRA	IM FONDING SOMMAKT. NOT AP	plicable		
E. ACQUISITION STRA	ATEGY: *			
Not Applicable				
F. MAJOR PERFORME	ERS: **			
Commencing in	FY04 Raytheon Missile Systems,	Tucson, AZ is the Prime contractor for a live fire demonstration	for Advanced Surface Missile Syster	n (09/04).
* Not required for B	udget Activities 1,2,3, and 6			
** Required for DON a				

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Exhibit R-3 RDT&E, N Project PPROPRIATION/BUDGET ACTI			PROGRAM ELEM	ENT NILIMBER	AND NAME		February 2006 PROJECT NUMBER AND NAME							
RDT&E, N / BA-5	VIII		0604366N/STANE	_		NTS			nprovements					
Cost Categories	Contract Method & Type	Performing Activity & Location	Tot PY Co:	al s	FY 05 Cost	FY 05 Award Date	FY 06 Cost	FY 06 Award Date		FY 07 Award Date			Target Value	
Design and Analysis	и турс	Location	00.	<u>, , , , , , , , , , , , , , , , , , , </u>	0031	Date	0031	Date	OUST	Date	Complete	0031	or contract	
,	SS/CPAF	Raytheon		54.026	52.574	1 11/04	14.153	11/05	5.094	11/06	Continuing	Continuing		
	PR	JHU/APL		1.640	1		1.625		0.245	11/06	Continuing	Continuing		
	MP	MIT		0.050	1						Continuing			
	WX	NSWC Dahlgre	en	785.794	1	11/04	2.500	11/05	1.350	11/06	Continuing			
	WX	NSWC/IH		0.250	1						Continuing	Continuing		
	WX	NAWC China L	.ake	0.510	1						Continuing	Continuing		
	WX	NSWC /PHD		0.220	1	12/04					Continuing	Continuing		
	PR	Lockheed Marti	n		3.000		2.500	11/05	1.350	11/06	Continuing	Continuing		
	WX	CNO		0.010										
	PD	CMDP		4.795										
	PR	CAN		0.000										
	WX	NSWC/CRANE		0.050	1									
	WX	ONR		0.000	1									
	WX	NWS EARLE		0.000	1									
	WX	COMPTEVFOR	₹	0.100										
	WX	CARDEROCK		0.050	1									
	WX	WMSR					2.548	11/05			Continuing	Continuing		
	PR	BAE			0.025	01/05	0.075	11/05			Continuing	Continuing		
	WX	JSPO					0.200	t			Continuing	Continuing		
							0.200	.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,				g		
Subtotal Product Development				847.495	56.329	9	23.601		8.039		0.000	Continuing		

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										DATE:					
Exhibit R-3 RDT&E F	Project Cos	t Analys	sis (page 2)					February 2006							
APPROPRIATION/BUDG	GET ACTIVIT			PROGRAM E	LEMENT NUM	BER AND NAM	ΙΕ	PROJECT NU							
	BA-5			0604366N/ST		SILE IMPROVE		0439 Standa							
Cost Categories	ļ.	Method	Performing Activity & Location			FY 05	FY 05 Award Date	FY 06	FY 06 Award Date	FY 07			Total Cost	Target Value of Contract	
Development Support													0.000		
Software Development													0.000		
Integrated Logistics Suppor	t												0.000		
Configuration Management													0.000		
Technical Data													0.000		
Studies & Analyses													0.000		
GFE													0.000		
Award Fees													0.000		
													0.000		
													0.000		
													0.000		
													0.000		
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													0.000		
													0.000		
													0.000		
Subtotal Support					0.000	0.000		0.000		0.000		0.000	0.000		
Remarks:															

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									DATE:				
Exhibit R-3 RDT&E Project C		sis (page 3)									February 20	06	
APPROPRIATION/BUDGET ACTIV	/ITY				MBER AND NA			UMBER AND					
RDT&E, N / BA-5			0604366N/STANDARD MISSILE IMPROVEMENTS				0439 Standard Missile Improvements						
Cost Categories	Method	Performing Activity & Location		Total PY s Cost	FY 05 Cost	FY 05 Award Date	FY 06 Cost	FY 06 Award Date	FY 07 Cost	FY 07 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Developmental Test & Evaluation	WX	NSWC Port F	Hueneme	0.14	5		0.175	11/05				Continuing	
	WX	WSMR		0.00	0							Continuing	Continuir
Operational Test & Evaluation													
Live Fire Test & Evaluation													
Test Assets													
Fooling													
GFE													
Award Fees													
Subtotal T&E				0.14	5 0.00	0	0.17	5	0.000)	0.000	Continuing	1
Remarks:													
	Tarasa	1 .			.1				T				T
Contractor Engineering Support	C/CPAF	various		1.21	2		0.750	11/05				Continuing	Continuir
Contractor Engineering Support Government Engineering Support							0.750	11/05					
Contractor Engineering Support Government Engineering Support Program Management Support		various various		1.82	4			11/05				Continuing	g Continuir
Contractor Engineering Support Government Engineering Support Program Management Support Travel					4		0.750	11/05					g Continuir
Contractor Engineering Support Government Engineering Support Program Management Support Travel Transportation				1.82	4			11/05				Continuing	g Continuir
Contractor Engineering Support Government Engineering Support Program Management Support Travel Transportation SBIR Assessment				1.82	4 8		0.025		0.000		0.000	Continuing Continuing	g Continuir Continuir
Contractor Engineering Support Government Engineering Support Program Management Support Travel Transportation				1.82	4 8	0			0.000		0.000	Continuing Continuing	g Continuir G Continuir
Contractor Engineering Support Government Engineering Support Program Management Support Fravel Fransportation SBIR Assessment				1.82	4 8	0	0.025		0.000		0.000	Continuing Continuing	Continui Continui
Contractor Engineering Support Government Engineering Support Program Management Support Fravel Fransportation SBIR Assessment Subtotal Management				1.82	4 8	0	0.025		0.000		0.000	Continuing Continuing	Continui Continui
Contractor Engineering Support Government Engineering Support Program Management Support Travel Transportation SBIR Assessment Subtotal Management				1.82	4 8	0	0.025		0.000		0.000	Continuing Continuing	g Continuing Continuin
Contractor Engineering Support Government Engineering Support Program Management Support Fravel Fransportation SBIR Assessment Subtotal Management				1.82	4 8	0	0.025		0.000		0.000	Continuing Continuing	g Continuir G Continuir
Contractor Engineering Support Government Engineering Support Program Management Support Fravel Fransportation SBIR Assessment Subtotal Management				1.82	4 8 0.00		0.025	5	0.000		0.000	Continuing Continuing Continuing	Continuir Continuir
Contractor Engineering Support Government Engineering Support Program Management Support Fravel Fransportation SBIR Assessment Subtotal Management Remarks:				1.82 0.04	4 8 0.00		0.025	5				Continuing Continuing Continuing	Continuir Continuir
Contractor Engineering Support Government Engineering Support Program Management Support Travel Transportation SBIR Assessment Subtotal Management Remarks:				1.82 0.04	4 8 0.00		0.025	5				Continuing Continuing Continuing	Continuir Continuir

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EXHIBIT R-2a, RDT&E Project Justification					DATE:				
						February 2006			
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEM	ENT NUMBER AND	O NAME	ME PROJECT NUMBER AND NAME			
RESEARCH DEVELOPMENT TEST & EVALUATI	ON, NAVY /		0604366N/STAND	ARD MISSILE IMP	ROVEMENTS	3092/Standard M	issile 6 Program		
COST (\$ in Millions)	FY 2005	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011			
Total PE Cost	49.890	118.881	178.105	205.989	229.384	159.181	67.068		
3092/Standard Missile 6 Program	49.890	118.881	178.105	205.989	229.384	159.181	67.068		

A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

Funding includes FY05 Congressional Add: \$5.0M Insensitive munition improvements.

This project addresses the Navy's requirement for an extended range shipboard air defense missile. The SM-6 Extended Range Active Missile (ERAM) is the Navy's transformational enabler for the Sea Shield Operational Concept and enables the opportunity for Sea Basing Sea Strike. This effort includes risk reduction, and SD&D design, development, insensitive munitions improvement, transition to production and operational test of the latest STANDARD Missile with the kinematic performance to defeat current and projected threats that possess low altitude, high velocity and maneuver characteristics at the max kinematic range of the missile.

This program leverages existing missile technology and advanced missile technology. It aligns missile technology roadmaps across the Services (NAVSEA, NAVAIR, USAF, USMC and USA) and missile variants within the Services, taking advantage of the Navy's investment in the Aegis Weapon System, CEC, and airborne early warning systems. This missile will provide an extended range engagement capability to provide the air superiority and the umbrella of protection for joint U.S. forces and allies against the full spectrum of manned-fixed and rotary-wing aircraft, unmanned aerial vehicles, and land attack and anti-ship cruise missiles in flight, thereby contributing to the continuous protection of forward deployed ground maneuver forces as well as theater rear assets as discussed in the Joint TAMD MNS, DPG, QDR, TAMD Capstone Requirements Document, Forward From the Sea, Joint Vision 2010/2020, the 2002/2003 Naval Transformational Roadmap and the Operational Requirements Document for SM-6 Extended Range Active Missile (ERAM).

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EXHIBIT R-2a, RDT&E Project Justification		DATE:	
		Fel	oruary 2006
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUM	IBER AND NAME	PROJECT NUMBER AND NAME
RDT&E, N / BA-5	0604366N/STANDARD MIS	SILE IMPROVEMENTS	3092/Standard Missile 6 Program

B. Accomplishments/Planned Program

	FY05	FY06	FY 07
Accomplishments/Effort/Subtotal Cost	7.234	11.960	9.900
RDT&E Articles Quantity			

SM-6/AWS & VLS Integration

FY05/FY06/FY07:Aegis Weapon System and MK 41 Vertical Launch System integration.

	FY 05	FY 06	FY 07
Accomplishments/Effort/Subtotal Cost	37.656	100.021	149.205
RDT&E Articles Quantity			

Missile development.

FY 05: Preliminary Design Review

FY 06: Design Readiness Review (Critical Design Review)

FY07: Ground Integration and Test/Environmental Tests/Flight Test Round Integration and Round Level Test

* This effort is also integrated with and funded from the Advanced Surface Missile System element of Project 0439

	FY05	FY06	FY 07
Accomplishments/Effort/Subtotal Cost	5.000	6.900	19.000
RDT&E Articles Quantity			

SM-6 Insensitive Munitions. FY05 - Analyze and conduct tests utilizing COTS.

FY06 - Conduct feasibility studies utilizing COTS.

FY07 - Funding used for Research and Development of new technologies to solve high-end problems with data provided from analysis of COTS.

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EXHIBIT R-2a, RDT&E Project Justification				DATE:
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME		DDO IECT NII	February 2006 JMBER AND NAME
		ITC	3092/SM-6	DIVIDER AND NAME
RDT&E, N / BA-5	0604366N/STANDARD MISSILE IMPROVEME	NIS	3092/3101-6	
C. PROGRAM CHANGE SUMMARY:				
Funding:	FY 2005	FY 2006	FY 2007	
Presidents Budget (PB06)	53.574	120.708		
Presidents Budget (PB07)	49.890	118.881		<u>-</u>
Total Adjustments	-3.684	-1.827	-2.471	
Summary of Adjustments				
Other General Provisions PBD 604 Inflation	-1.289	-1.827		
Other misc. changes			0.029	
Programmatic changes			-2.500	
ATR	-2.395			_
Subtotal	-3.684	-1.827	-2.471	
Schedule: SSD CONTRACT AWARDED IN	SEPTEMBER 2004. MS B DAB WAS HELD JUN	€ 2004.		
Technical: TBD.				

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ariibir K-za, KDT&	E Project Justification							DATE:	Februa	ry 2006
PROPRIATION/BUDGE	T ACTIVITY	PROGRAM E	EMENT NUM	IBER AND NAM	ИΕ	PROJECT NU	MBER AND N	AME		,
)T&E, N /	BA-5	0604366N/ST	ANDARD MISS	SILE IMPROVE	EMENTS	3092/SM6				
D. OTHER PROGR	AAM FUNDING SUMMARY:									
Line Item No. & N WPN 2234 QTY	lam <u>e</u>	<u>FY 2005</u> 0.000	<u>FY 2006</u> 0.000	<u>FY 2007</u> 0.000	<u>FY 2008</u> 0.000	<u>FY 2009</u> 99.974 15	FY 2010 133.769 25	FY 2011 145.600 30	To <u>Complete</u> CONT.	Total <u>Cost</u> CONT.
E. ACQUISITION ST	RATEGY: *									
SM-6 Acquisition	on Strategy signed by OSD AT&	L 3 March 2004								
F. MAJOR PERFOR	MERS: ** ssile Systems, Tucson, Arizona.:	SM-6 SD&D Contract award	ded Septembei	r 2004						
·	•		·							
	Budget Activities 1,2,3, and 6									

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Exhibit R-3 RDT&E Project Cost Analysis (page 1)							DATE: February 2006						
APPROPRIATION/BUDGET ACTIV		PROGRAM EI	EMENT NUME	BER AND NAM	IE	PROJECT NUMBER AND NAME							
RDT&E, N / BA-5		0604366N/ST/	_			3092/SM-6							
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 05 Cost	FY 05 Award Date	FY 06 Cost	FY 06 Award Date	FY 07 Cost	FY 07 Award Date	Cost to Complete	Total Cost	Target Value of Contract	
Primary Hardware Development	- ''									· ·			
Ancillary Hardware Development													
Component Development													
Design and Analysis	PR	RAYTHEON	25.115	32.966	11/04	98.239	11/05	152.727	11/06				
	PR	JHU/APL, Laurel MD	2.200	4.090		3.500	11/05	4.000	11/06	Continuing	Continuing		
	PR	MIT Lincoln Lab, Lexington, N	0.050	0.300	11/04	0.100	11/05	0.100	11/06	Continuing	Continuing		
	WX	NAWC WD China Lake, CA	0.100	0.050	11/04	0.100	11/05	0.100	11/06	Continuing	Continuing		
	WX	NSWC Dahlgren, VA	0.285	1.345	11/04	1.500	11/05	1.210	11/06	Continuing	Continuing		
	WX	NSWC Indian Head, MD	0.038	0.200	11/04	0.000	11/05	0.000	11/06	Continuing	Continuing		
	WX	NSWC Port Hueneme, CA	0.546	0.600	11/04	0.500	11/05	0.500	11/06	Continuing	Continuing		
	WX	NSWC Crane, IN		0.020	11/04	0.025	11/05	0.040	11/06	Continuing	Continuing		
	MP	JSPO/EGLIN	1.868	0.000	11/04	0.000	11/05	0.000	11/06				
	PR	LOCKHEED MARTIN	3.854	0.000	11/04	0.000	11/05	0.000	11/06				
	WX	NSWC Corona	0.020	0.025	11/04	0.032	11/05	0.078	11/06				
	RX	ONR	0.150	0.150	11/04	0.150	11/05	0.150	11/06				
		NRL	0.090	0.000	11/04	0.150	11/05	0.150	11/06				
	WX	COMOPTEVFOR	0.135	0.115	11/04	0.150	11/05	0.150	11/06				
	WX	CARDEROCK		0.150	01/05								
	PR	BAE		0.200	11/05								
	MP	Army, Redstone Arsenal		0.050	04/05								
	WX	NAWCAD, Patuxent River		0.270	11/05								
Ship Integration	PR/WX	various	4.320		01/05	8.000		6.700	11/06	Continuing	Continuing		
011101111111111111111111111111111111111	PR/WX	various	1.230	3.134	01/05	3.360	11/05	3.200	11/06				
Ship Suitability									-				
Systems Engineering	+												
Training Development													
Licenses						1							
Tooling	1									+			
GFE						1		+	+			-	
Award Fees			40.004	47.705		445.000		400 405		Otiv	Onetin in		
Subtotal Product Development		1	40.001	47.765	<u> </u>	115.806	1	169.105	1	Continuing	Continuing	I	

Remarks:

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Exhibit R-3 RDT&E Project Co	st Analys	sis (page 2)					February 2006								
APPROPRIATION/BUDGET ACTIVI	TY		PROGRAM E	LEMENT NUMI	BER AND NAM	ΙE	PROJECT NU	MBER AND N	IAME		-				
RDT&E, N / BA-5			0604366N/ST	ANDARD MISS			3092/SM-6								
Cost Categories	Contract	Performing		Total PY s		FY 05		FY 06		FY 07	0	Tatal	Tanat Value		
	Method & Type	Activity & Location				Award Date		Award Date		Award Date		Total Cost	Target Value of Contract		
Development Support	и туро	Location		0001	0001	Date	0001	Bato	0001	Dato	Complete	0.000			
Software Development												0.000			
Integrated Logistics Support												0.000			
Configuration Management												0.000			
Technical Data												0.000			
Studies & Analyses												0.000			
GFE												0.000			
Award Fees												0.000			
												0.000			
												0.000			
												0.000			
												0.000			
												0.000			
												0.000			
												0.000			
												0.000			
Subtotal Support				0.000	0.000		0.000		0.000		0.000	0.000			
Remarks:															

UNCLASSIFIED

									DATE:								
Exhibit R-3 RDT&E Project Co	st Analys	sis (page 3)											February	2006			
APPROPRIATION/BUDGET ACTIVI			PROGRAM E	LEMEN	T NUM	BER AN	D NAM	IE	PROJE	CT NU	MBER AND N	IAME					
RDT&E, N / BA-5			0604366N/ST		D MISS	SILE IMP	PROVE		3092/S								
Cost Categories	Contract	Performing		Total		E) / 0 =		FY 05	E) / 00		FY 06	E) (07	FY 07				
	Method & Type	Activity & Location		PY s Cost		FY 05 Cost		Award Date	FY 06 Cost		Award Date	FY 07 Cost	Award Date	Cost to Complete	Total Cost		Target Value of Contract
Developmental Test & Evaluation	WX	NSWC Port H	Juanama CA	COSt	0.000		0.200	11/04		1.000	11/05	5.500	11/06	Continuing		Continuing	or Contract
Developmental Test & Evaluation	WX		Missile Range,		0.000		0.050	11/04		0.100	11/05	0.200	11/06	Continuing		Continuing	
	WX	PMRF	wissie Range,		0.000		0.000	11/04		0.400	11/05	1.700	11/06	Continuing	,	Johnnang	
Toracto	VVA	FIVIIXI								0.400	11/05	1.700	11/06				
Targets Operational Test & Evaluation																	
Live Fire Test & Evaluation																	
Test Assets																	
Tooling																	
GFE																	
Award Fees																	
Subtotal T&E					0.000		0.250			1.500		7.400		Continuing		Continuing	
Remarks					0.000		0.230			1.300		7.400	1	Continuing	'	Jonana	
Contractor Engineering Support	CPAF	various			1.300		1.775	11/04		1.500	11/05	1.500	11/06	Continuing	(Continuing	
Government Engineering Support																	
Program Management Support																	
Travel					0.053		0.100			0.075		0.100		Continuing	(Continuing	
Labor (Research Personnel)																	
SBIR Assessment																	
Subtotal Management					1.353		1.875			1.575		1.600		Continuing	(Continuing	
Remarks:																	
Total Cost					41.354	4	19.890		1	18.881		178.105	5	Continuing	(Continuing	
Remarks:	·								· · · · · ·							· · · · · · · · · · · · · · · · · · ·	

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EXHIBIT R4, Schedule																									DATE			Febr	uary	2006		
APPROPRIATION/BUDGET RDT&E, N /	ACTIV BA-5								PROG 06043					R AND			3				PROJ 3092/		NUMBE	ER ANI	D NAM	1E						
Fiscal Year		20	004			20	05			200	06		2007				2008				2009				2010				2011			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Acquisition Milestones			∆ MS B																		 MS	C						2	∆ FRP	,		
Design Reviews/Decisions					SRR/	SFR	PI	_ DR			Е	 RR			F	RR		WS	∆ SESRE		V	∆ VSESF	RВ									
Hardware Design, Prototype & Test						Prototy	pe/POD			Design \	Verif/PC	DM [Flt																			
SW Design/FQT														V-1			GTV	/-2	GTV-	3												
Integration & Test																	Capti	ve Caı		SEDS						∆ wit						
Test & Evaluation Milestones Development Test & Operational Test																				DT-IIB2 EOA	DT- IIB1					DT IIC OT IIA	ОТ	IB				
Production Milestones LRIP I FY 09 LRIPII FY 10 FRP FY 11																				LRIP	Awa	RD		LRIP	AWA	RD		FRP A	LRIP	I DELI	VERY	(
													0/10	PPIN	0 / 12	· ·																

^{*} Not required for Budget Activities 1, 2, 3, and 6

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Exhibit R-4a, Schedule Detail					DATE:		
						ebruary 20	06
APPROPRIATION/BUDGET ACTIVITY					MBER AND NA	AME	
RDT&BA-5	3092/SM-6						
Schedule Profile	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
Acquisition Strategy							
J&A							
Milestone II (MSII)							
Contract Preparation							
SRR	1Q						
SFR	1Q						
Preliminary Design Review (PDR)	4Q						
Design Readiness Review		3Q-4Q					
CSEDS				4Q			
WSESRB				3Q	2Q		
Developmental Testing (DT-IIA1)			1Q-4Q	1Q-4Q			
Developmental Testing (DT-IIA2)					1Q-4Q		
Preproduction Readiness Review (PRR)			4Q				
Milestone C (MS C)					1Q		
Start Low-Rate Initial Production I (LRIP I)					1Q		
Developmental Testing (DT-IIB1)					1Q		
Developmental Testing (DT-IIB2)				2Q-4Q	1Q-2Q		
Start Low-Rate Initial Production II						1Q	
Developmental Testing (DT-IIC/OTIIA)						2Q	
Operational Testing (OT-IIB)						3Q-4Q	
Low-Rate Initial Production I Delivery						4Q	1Q-4Q
Low-Rate Initail Production II Delivery							4Q
IOC						4Q	
Full Rate Production (FRP) Decision							1Q
Full Rate Production Start							1Q
First Deployment							1Q

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EXHIBIT R-2a, RDT&E Project Justification			DATE:	
			February 2006	
PROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NA		
DT&E, N /BA-5	0604366N/STANDARD MISSILE IMPROVEMENTS	9999 / Congressional Adds:	Various	
CONGRESSIONAL PLUS-UPS: \$5.100				
9559C	FY 06			
MK41 Vertical Launcing System Open Architecture	2.800			
MK41 Vertical Lauricing System Open Architecture	2.800			
Initiate the redesign and requirement development	of the MK41 VLS Launch Control System.			
minate the reasong, and requirement development	or the thirty value against defined by the thir			
	FY 06			
9838N				
Alternative Thermal Battery Program	1.000			
	<u> </u>			
Conduct a trade study analysis on an alternative the	ermal battery production capability			
22221	FY 06			
9839N	4.000			
Insensitive munition improvements.	1.300			
Conduct feasibility studies utilizing COTS.				
Conduct rodolomity oldaroo dimening correct				