

CLASSIFICATION:**UNCLASSIFIED****EXHIBIT R-2, RDT&E BUDGET ITEM JUSTIFICATION**DATE
May 2009

APPROPRIATION/BUDGET ACTIVITY

RD TEN/BA 5

R-1 ITEM NOMENCLATURE

0604757N/SHIP SELF DEFENSE (ENGAGE: SOFT KILL/EW)

COST (In Millions)

FY 2008

FY 2009

FY 2010

Total PE Cost

36.461

63.780

88.895

0954 / Shipboard EW Improvement Program

27.448

54.380

21.223

2190 / NULKA Decoy

4.313

3.017

4.797

3227 / SEWIP Increment 2

0.000

0.000

62.875

9999 / Congressional Add

4.700

6.383

0.000

A. MISSION DESCRIPTION:

0954 - The Surface Electronic Warfare Improvement Program (SEWIP) provides enhanced Electronic Warfare (EW) capabilities to existing and new ship combat systems to improve Anti Ship Missile Defense (ASMD), counter-targeting and counter-surveillance capabilities, as well as improved battlefield situational awareness. The SEWIP employs an evolutionary acquisition and incremental development strategy to upgrade surface EW capabilities via a series of block upgrades to the AN/SLQ-32(V) system, and field EW improvements to keep pace with the ASMD threat.

2190 - The Offboard Active Decoy (NULKA) is a joint cooperative program between the United States and Australia that developed an active offboard decoy that utilizes a broadband radio frequency repeater mounted atop a hovering rocket. NULKA is designed to counter a wide variety of present and future radar guided Anti-Ship Missiles (ASMs) by radiating a large radar cross section while flying a ship-like trajectory. The United States developed the electronic payload and fire control system, while Australia developed the hovering rocket. In FY08 the program completed the development of DLP Software Version 6_3, tested it at sea and certified it for Fleet use. Future efforts involve development of the capability for high value unit protection.

3227 - SEWIP Block 2 is expected to be a separate ACAT II program to develop an upgraded antenna, receiver, and combat system interface for SLQ-32. The upgrades are necessary in order to pace the threat, improving detection, accuracy, and mitigation of Electromagnetic Interference (EMI). (SEWIP Block 2 has funding in FY08 and FY09 under 0954/Shipboard EW Improvement Program. For FY10 SEWIP Block 2 is a separate project 3227/SEWIP Increment 2.)

FY08 Congressional Adds: 9C24A EW Concept Demonstrator for LCS of \$.773M; 9243A Advanced Radar Absorbing Tile for Surface Ships for \$1.934M; 9C25A Congressional Add for \$1.993M

FY09 Congressional Adds: 2441A NULKA Decoy System and Mk 53 Decoy Launch System for \$1.596M; 9D92A Shipboard Electronic Warfare Sustainment Training for \$3.191M; 9D93A Accelerated Improvement for Active Surface Electronic Warfare Systems for \$1.596M

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EXHIBIT R-2, RDT&E BUDGET ITEM JUSTIFICATION (CONTINUATION)

DATE
May 2009

APPROPRIATION/BUDGET ACTIVITY
RD TEN/BA 5

R-1 ITEM NOMENCLATURE
0604757N/SHIP SELF DEFENSE (ENGAGE: SOFT KILL/EW)

B. PROGRAM CHANGE SUMMARY:

Funding:	FY 2008	FY 2009	FY 2010
FY09 President's Budget	38.365	57.574	21.842
FY10 President's Budget	36.461	63.780	88.895
Total Adjustments	-1.904	6.206	67.053
(U) Summary of Adjustments			
Congressional Adjustments	0.000	6.227	0.000
SBIR/STTR/FTT Assessment	-0.362	0.000	0.000
Program Adjustments	-1.500	0.000	68.339
Rate/Misc Adjustments	-0.042	-0.021	-1.286
Total	-1.904	6.206	67.053

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EXHIBIT R-2a, RDT&E PROJECT JUSTIFICATION					DATE May 2009		
APPROPRIATION/BUDGET ACTIVITY RD TEN/BA 5		PROGRAM ELEMENT NUMBER AND NAME 0604757N/SHIP SELF DEFENSE (ENGAGE: SOFT KILL/EW)			PROJECT NUMBER AND NAME 0954/Shipboard EW Improvement Program		
COST (In Millions)	FY 2008	FY 2009	FY 2010				
Project Cost	27.448	54.380	21.223				
RDT&E Articles Qty	0	0	0				
A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:							
<p>The Surface Electronic Warfare Improvement Program (SEWIP) provides enhanced Electronic Warfare (EW) capabilities to existing and new ship combat systems to improve Anti Ship Missile Defense (ASMD), counter-targeting and counter-surveillance capabilities, as well as improved situational awareness. The SEWIP employs an evolutionary acquisition and incremental development strategy to upgrade surface EW capabilities via a series of block upgrades to the AN/SLQ-32(V) system, and field EW improvements to keep pace with the ASMD threat. SEWIP will provide required EW capabilities and will incorporate technology advances as they become available to provide incremental upgrades and improvements in performance.</p> <p>SEWIP Block 1 is segmented into Block 1A, and Block 1B. Block 1A upgrades the AN/SLQ-32 pulse-processing computers and the display console allowing the system to more quickly identify threats and better display the information to the operator. Block 1A Electronic Surveillance Enhancements (ESE) pulse processing computers and the Improved Control and Display (ICAD) Human System Interface (HSI) console partially open the electronic warfare system architecture to support subsequent EW capability upgrades. Block 1A is in production with the FRP decision provided August 2006. Block 1B adds the Specific Emitter Identification (SEI) receiver capabilities in a stand-alone configuration (Block 1B1), and in a fully ICAD-integrated configuration (Block 1B2). Block 1B also adds High Gain High Sensitivity (HGHS) (Block 1B3), a critical improvement for threat correlation, situational awareness, and extending the battle space. Block 1B SEI (1B1 and 1B2) completed Milestone B and at-sea DT/OT testing in FY08.</p> <p>SEWIP Block 2 is expected to be a separate ACAT II program to develop an upgraded antenna, receiver, and combat system interface for SLQ-32. The upgrades are necessary in order to pace the threat, improving detection, accuracy, and mitigation of Electromagnetic Interference (EMI). (SEWIP Block 2 has funding in FY08 and FY09 under 0954/Shipboard EW Improvement Program; For FY10 SEWIP Block 2 is a separate project 3227/SEWIP Increment 2.)</p>							

CLASSIFICATION:		UNCLASSIFIED	
EXHIBIT R-2a, RDT&E PROJECT JUSTIFICATION			DATE May 2009
APPROPRIATION/BUDGET ACTIVITY RDTEN/BA 5	PROGRAM ELEMENT NUMBER AND NAME 0604757N/SHIP SELF DEFENSE (ENGAGE: SOFT KILL/EW)	PROJECT NUMBER AND NAME 0954/Shipboard EW Improvement Program	
B. ACCOMPLISHMENTS/PLANNED PROGRAM:			
	FY 2008	FY 2009	FY 2010
Accomplishments/Effort/Subtotal Cost	12.362	1.121	0.000
RDT&E Articles Quantity	0	0	0
Block 1B1/1B2 SEI. Transitioned stand alone Specific Emitter Identification (SEI) RDC under formal acquisition as Block 1B1. Completes Improved Control and Display(ICAD)-integrated SEI (Block 1B2) with display upgrades and Network Centric Warfare Electronic Support (NCWES) - all added capability to the AN/SLQ-32B(V) System. ICAD improvements provide reduced workload for the operator with Human Systems Interface (HSI) enhancements, Mission Planning capability, and Embedded Training. SEI provides a high confidence means of identifying contacts of interest within the operating area. NCWES provides a direct link to off-board information to enhance the awareness of the AN/SLQ-32 operator. Blocks 1B1 and 1B2 completed Milestone B and developmental and operational test and evaluation (TECHEVAL and OPEVAL) at-sea in Feb 2008.			
	FY 2008	FY 2009	FY 2010
Accomplishments/Effort/Subtotal Cost	5.028	20.743	10.450
RDT&E Articles Quantity	0	0	0
Block 1B3 builds off the foundation of the 1B2-enhanced AN/SLQ-32B(V) system and significantly increases warfighting capability with the addition of the High Gain High Sensitivity (HGHS). HGHS technology will be matured through System Development and Demonstration (SDD) and integrated with SLQ-32 through ICAD.			
	FY 2008	FY 2009	FY 2010
Accomplishments/Effort/Subtotal Cost	5.371	4.586	10.773
RDT&E Articles Quantity	0	0	0
ESE and ICAD development will be extended to ships with active variants of SLQ-32 (that is, (V)3 and (V)4). Electronic Surveillance Enhancements upgrades (V(4) ESE) provides proven Block 1A (V)3 ESE processing adapted to the aircraft carrier variant of SLQ-32. Improved Control and Display (ICAD) for AN/SLQ-32 V(3/4) provides ICAD for both active EW system variants.			
	FY 2008	FY 2009	FY 2010
Accomplishments/Effort/Subtotal Cost	4.687	27.930	0.000
RDT&E Articles Quantity	0	0	0
SEWIP Block 2 provides an upgraded receiver, antenna, and combat system interface for SLQ-32 for both forward fit (e.g., DDG-1000 and CVN 78) and back-fit ships. (FY10 funding reported under project 3227/SEWIP Increment 2.)			

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EXHIBIT R-2a, RDT&E PROJECT JUSTIFICATION (CONTINUATION) DATE
May 2009

APPROPRIATION/BUDGET ACTIVITY PROGRAM ELEMENT NUMBER AND NAME PROJECT NUMBER AND NAME
RD TEN/BA 5 **0604757N/SHIP SELF DEFENSE (ENGAGE: SOFT KILL/EW)** **0954/Shipboard EW Improvement Program**

C. OTHER PROGRAM FUNDING SUMMARY:

Line Item No. and Name	FY 2008	FY 2009	FY 2010
OPN 2312 AN/SLQ-32	24.660	22.900	34.264
O&M,N AN/SLQ-32 (12CR0/1C2C)	4.711	5.668	5.820

D. ACQUISITION STRATEGY:

The Surface EW Improvement Program (SEWIP) will develop Block upgrades to SLQ-32 based on integrating technology advances and adding functional capabilities in an incremental fashion. Each Block and sub-Block will be developed and contracted in an individual yet coordinated and overlapping fashion.

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EXHIBIT R-3, RDT&E PROJECT COST ANALYSIS							DATE May 2009	
APPROPRIATION/BUDGET ACTIVITY RD TEN/BA 5		PROGRAM ELEMENT NUMBER AND NAME 0604757N/SHIP SELF DEFENSE (ENGAGE: SOFT KILL/EW)			PROJECT NUMBER AND NAME 0954/Shipboard EW Improvement Program			
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY Cost (\$000)	FY 2009 Cost (\$000)	FY 2009 Award Date	FY 2010 Cost (\$000)	FY 2010 Award Date	
Ancillary Hardware Development			151.420	0.000		0.000		
ESE Development	SS / FFP	Northrop Grumman	9.425	3.667	NOV-08	2.266	NOV-09	
ICAD Development	SS / CPFF	GD-AIS	11.747	0.000		3.689	NOV-09	
ESE Development (Block 1A)	SS / CPFF	Northrop Grumman	0.471	0.000		0.000		
System Integrator	SS / CPAF	GD-AIS	13.792	2.217	MAR-09	2.159	NOV-09	
1B Development	SS / CPAF	GD-AIS	52.875	13.133	MAR-09	3.847	NOV-09	
Q-70 Mods	SS / CPFF	LM-EAGAN	3.491	0.000		0.000		
Block 2 Study/Development	MIPR/CPIF	BAE & Others	0.336	0.000		0.000		
Block 2 Preliminary Development	C / CPIF	TBD	0.000	20.967	SEP-09	0.000		
Block 2 SD&D	C / CPIF	TBD	0.000	0.000		0.000		
Subtotal Product Development			243.557	39.984		11.961		
Remarks:								
Block 1 Integrated Logistics Support	WR	NSWC Crane, DD, NRL	9.394	0.537	NOV-08	1.000	NOV-09	
Block 1 Government Engineering Support	WR	NSWC Crane, DD, NRL	33.521	3.006	NOV-08	3.862	NOV-09	
Block 1 Integration and Test	WR	NSWC Crane, DD, NRL	0.853	1.090	NOV-08	0.000		
Block 2 Integrated Logistics Support	WR	NSWC Crane, DD, NRL	0.495	0.460	NOV-08	0.000		
Block 2 Government Engineering Support	WR	NSWC Crane, DD, NRL	2.295	1.834	NOV-08	0.000		
Subtotal Support Costs			46.558	6.927		4.862		
Remarks:								
Developmental Test & Evaluation	Various	Various	8.958	0.000		0.000		
Block 1A Test Planning/T&E Events	WR	NSWC Crane, DD, NRL	11.036	0.000		0.000		
Block 1B Test Planning/T&E Events	WR	NSWC Crane, DD, NRL, NAVAIR, OPTEVFOR, NSWC PHD	7.673	0.000		0.000		
Former Block 1C Test Planning/T&E Events	WR	NSWC Crane, DD, NRL	0.000	0.500	NOV-08	2.000	NOV-09	
Block 2 Test Planning/T&E Events	WR	NSWC, Crane, DD, NRL	0.650	1.008	NOV-08	0.000		
Subtotal Test and Evaluation			28.317	1.508		2.000		
Remarks:								

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EXHIBIT R-3, RDT&E PROJECT COST ANALYSIS							DATE May 2009		
APPROPRIATION/BUDGET ACTIVITY RDTEN/BA 5		PROGRAM ELEMENT NUMBER AND NAME 0604757N/SHIP SELF DEFENSE (ENGAGE: SOFT KILL/EW)			PROJECT NUMBER AND NAME 0954/Shipboard EW Improvement Program				
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY Cost (\$000)	FY 2009 Cost (\$000)	FY 2009 Award Date	FY 2010 Cost (\$000)	FY 2010 Award Date		
Block 1 Program Management Support	C / FFP	SEAPORT	27.371	1.200	NOV-08	1.200	NOV-09		
Block 1 Program Management Support	WR	NSWC Crane, DD, NRL	9.577	1.000	NOV-08	1.000	NOV-09		
Block 1 Travel	PD	NAVSEA Program Office Travel	0.605	0.100	NOV-08	0.200	NOV-09		
Block 2 Program Management Support	C / FFP	SEAPORT	0.208	1.159	NOV-08	0.000			
Block 2 Program Management Support	WX	NSWC Crane, DD, PHD, NRL	1.039	2.448	NOV-08	0.000			
Block 2 Travel	PD	NAVSEA Program Office Travel	0.000	0.054	NOV-08	0.000			
Subtotal Management Services			38.800	5.961		2.400			
Remarks:									
Total Cost			357.232	54.380		21.223			

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EXHIBIT R-4, SCHEDULE PROFILE																	DATE May 2009																
APPROPRIATION/BUDGET ACTIVITY RD TEN/BA 5										PROGRAM ELEMENT NUMBER AND NAME 0604757N/SHIP SELF DEFENSE (ENGAGE: SOFT KILL/EW)										PROJECT NUMBER AND NAME 0954/Shipboard EW Improvement Program													
Fiscal Year	2008				2009				2010																								
	1	2	3	4	1	2	3	4	1	2	3	4																					
Acquisition Milestones	Block 1B MS B DR 				Block 1B1 MS C/FR DR 				LL Proc 																								
Block 1 Development/Integration	1B1 SEI Transition				(Stand-alone RDC Transition to 1B1 Acquisition)																												
	1B2 Integrated SEI				(Mission Planning, Display Updates, & Embedded Training Development/Integration)																												
	1B3 HGHS Development and Integration																																
	V(4) ESE Development, Integration, and Test																																
									ICAD EA																								
Block 2 Development	New Receiver/Antenna/Interface Development (Development moved to PU 3227 starting in FY10)																																
Block 1B Test and Evaluation Milestones	Development Test																																
	Operational Test																																

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EXHIBIT R-4a, SCHEDULE DETAIL						DATE May 2009	
APPROPRIATION/BUDGET ACTIVITY RD TEN/BA 5		PROGRAM ELEMENT NUMBER AND NAME 0604757N/SHIP SELF DEFENSE (ENGAGE: SOFT KILL/EW)			PROJECT NUMBER AND NAME 0954/Shipboard EW Improvement Program		
Schedule Profile		FY 2008	FY 2009	FY 2010			
Block 1B MS B DR		2Q					
Block 1B1/1B2 MS C/FRP DR			1Q				
Block 1B3 LL Proc				1Q			
1B1 SEI Transition		1Q-4Q					
1B2 Integrated SEI		1Q-4Q					
1B3 HGHS Development and Integration		1Q-4Q	1Q-4Q	1Q-4Q			
V(4) ESE Development, Integration, and Test		4Q	1Q-4Q	1Q-4Q			
ICAD EA Development, Integration, and Test				1Q-4Q			
Block 2 New Receiver/Antenna/Interface Development		1Q-4Q	1Q-4Q				
1B1/1B2 Gov't LBT		1Q					
1B1/1B2 TECHEVAL		2Q					
1B1/1B2 OPEVAL		2Q					

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EXHIBIT R-2a, RDT&E PROJECT JUSTIFICATION					DATE May 2009		
APPROPRIATION/BUDGET ACTIVITY RD TEN/BA 5		PROGRAM ELEMENT NUMBER AND NAME 0604757N/SHIP SELF DEFENSE (ENGAGE: SOFT KILL/EW)			PROJECT NUMBER AND NAME 2190/NULKA Decoy		
COST (In Millions)	FY 2008	FY 2009	FY 2010				
Project Cost	4.313	3.017	4.797				
RDT&E Articles Qty	0	0	0				
A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:							
<p>The Offboard Active Decoy (NULKA) is a joint cooperative program between the United States and Australia that developed an active offboard decoy that utilizes a broadband radio frequency repeater mounted atop a hovering rocket. NULKA is designed to counter a wide variety of present and future radar guided Anti-Ship Missiles (ASMs) by radiating a large radar cross section while flying a ship-like trajectory. The United States developed the electronic payload and fire control system, while Australia developed the hovering rocket. In FY08 the program completed the development of DLP Software Version 6_3, tested it at sea and certified it for Fleet use. Future efforts involve development of the capability for high value unit protection.</p>							

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APPROPRIATION/BUDGET ACTIVITY RD TEN/BA 5	PROGRAM ELEMENT NUMBER AND NAME 0604757N/SHIP SELF DEFENSE (ENGAGE: SOFT KILL/EW)		PROJECT NUMBER AND NAME 2190/NULKA Decoy	
B. ACCOMPLISHMENTS/PLANNED PROGRAM:				
	FY 2008	FY 2009	FY 2010	
Accomplishments/Effort/Subtotal Cost	1.926	1.100	1.200	
RDT&E Articles Quantity	0	0	0	
NULKA decoy subsystem integration and improvements to include Effectiveness Studies, Engineering Studies and Fly Out Tactics.				
	FY 2008	FY 2009	FY 2010	
Accomplishments/Effort/Subtotal Cost	0.000	1.917	0.597	
RDT&E Articles Quantity	0	0	0	
Continue the development of NULKA decoy enhancements to include increased duty cycle and Electromagnetic Compatibility (EMC).				
	FY 2008	FY 2009	FY 2010	
Accomplishments/Effort/Subtotal Cost	2.387	0.000	0.000	
RDT&E Articles Quantity	0	0	0	
Conduct at-sea test of upgraded Decoy Launching System (DLS) software.				
	FY 2008	FY 2009	FY 2010	
Accomplishments/Effort/Subtotal Cost	0.000	0.000	3.000	
RDT&E Articles Quantity	0	0	0	
Upgrade Launching System software to provide CVN protection capability.				
C. OTHER PROGRAM FUNDING SUMMARY:				
Line Item No. and Name	FY 2008	FY 2009	FY 2010	
OPN 5530 Anti-Ship Missile Decoy System	42.099	37.965	37.128	
O&MN: Nulka / Anti-Ship	3.920	3.280	4.859	
D. ACQUISITION STRATEGY:				
NULKA is a joint cooperative program between United States and Australia in full rate production.				

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EXHIBIT R-3, RDT&E PROJECT COST ANALYSIS							DATE May 2009		
APPROPRIATION/BUDGET ACTIVITY RD TEN/BA 5		PROGRAM ELEMENT NUMBER AND NAME 0604757N/SHIP SELF DEFENSE (ENGAGE: SOFT KILL/EW)			PROJECT NUMBER AND NAME 2190/NULKA Decoy				
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY Cost (\$000)	FY 2009 Cost (\$000)	FY 2009 Award Date	FY 2010 Cost (\$000)	FY 2010 Award Date		
Primary Hardware Development	RC	NSWC Crane, IN	3.000	0.000		0.000			
Primary Hardware Development	RX	BAE Systems, Australia / Sippican, MA	5.656	0.000		0.000			
Primary Hardware Development	MIPR	BAE Systems, Australia	6.142	0.000		0.200	OCT-09		
Systems Engineering	WR	NRL, Washington, DC	11.396	1.237	OCT-08	1.444	OCT-09		
Systems Engineering	WR	NWAD China Lake, CA	0.120	0.000		0.000			
Mk 53 System Eng Changes	FFP	Sechan, PA	0.150	0.000		0.000			
Systems Engineering	RX	NSWC Dahlgren, VA	0.867	0.831	OCT-08	2.153	OCT-09		
Systems Engineering	RX	NSMA, VA	0.360	0.000		0.000			
Systems Engineering	WR	NSWC Crane, IN	0.788	0.713	OCT-08	0.750	OCT-09		
Subtotal Product Development			28.479	2.781		4.547			
Remarks:									
Development Support	RX	NRL, Washington, DC	1.314	0.000		0.000			
Software Development	WR	NSWC Dahlgren, VA	2.527	0.000		0.000			
Subtotal Support Costs			3.841	0.000		0.000			
Remarks:									
Developmental Test & Evaluation	WR	NSWC Dahlgren, VA	0.700	0.000		0.000			
Developmental Test & Evaluation	WR	NRL, Washington, DC	1.181	0.000		0.000			
Test Assets	WR	NRL, Washington, DC	0.701	0.000		0.000			
Test Support	WR	NSWC Louisville, KY	0.050	0.000		0.000			
Subtotal Test and Evaluation			2.632	0.000		0.000			
Remarks:									

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Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY Cost (\$000)	FY 2009 Cost (\$000)	FY 2009 Award Date	FY 2010 Cost (\$000)	FY 2010 Award Date		
Program Management Support	FFP	SEAPORT	0.659	0.200	OCT-08	0.210	OCT-09		
Travel	PD	NAVSEA Program Office Travel	0.442	0.036	OCT-08	0.040	OCT-09		
Subtotal Management Services			1.101	0.236		0.250			
Remarks:									
Total Cost			36.053	3.017		4.797			

APPROPRIATION/BUDGET ACTIVITY RD TEN/BA 5	PROGRAM ELEMENT NUMBER AND NAME 0604757N/SHIP SELF DEFENSE (ENGAGE: SOFT KILL/EW)	PROJECT NUMBER AND NAME 2190/NULKA Decoy
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Fiscal Year	2008				2009				2010																								
	1	2	3	4	1	2	3	4	1	2	3	4																					
Acquisition Milestones																																	
Production Milestones									△ CVN DLP Software																								
Test & Evaluation Milestones																																	
Development Test			▲ LPD 20 DT						△ USCG Deepwater DT																								
Operational Test			▲ LSD 41/49 Class DT																														

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EXHIBIT R-4a, SCHEDULE DETAIL						DATE May 2009	
APPROPRIATION/BUDGET ACTIVITY RD TEN/BA 5		PROGRAM ELEMENT NUMBER AND NAME 0604757N/SHIP SELF DEFENSE (ENGAGE: SOFT KILL/EW)			PROJECT NUMBER AND NAME 2190/NULKA Decoy		
Schedule Profile		FY 2008	FY 2009	FY 2010			
LSD 41/49 CLASS DT		2ND QTR					
LPD 20 DT		3RD QTR					
LPD 20 OT			1ST QTR				
USCG DEEPWATER DT			3RD QTR				
CVN DLP SOFTWARE (START)				1ST - 4TH QTR			

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COST (In Millions)	FY 2008	FY 2009	FY 2010				
Project Cost	0.000	0.000	62.875				
RDT&E Articles Qty	0	0	0				
A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION: SEWIP Block 2 is expected to be a separate ACAT II program to develop an upgraded antenna, receiver, and combat system interface for SLQ-32. The upgrades are necessary in order to pace the threat, improving detection, accuracy, and mitigation of Electromagnetic Interference (EMI). (SEWIP Block 2 has funding in FY08 and FY09 under 0954/Shipboard EW Improvement Program. For FY10, SEWIP Block 2 is a separate project 3227/SEWIP Increment 2.)							

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B. ACCOMPLISHMENTS/PLANNED PROGRAM:			
	FY 2008	FY 2009	FY 2010
Accomplishments/Effort/Subtotal Cost	0.000	0.000	62.875
RDT&E Articles Quantity	0	0	0
<p>SEWIP Block 2 is a new-start program to provide an upgraded receiver, antenna, and combat system interface for SLQ-32, for both forward fit (e.g., DDG-1000 and CVN 78) and back-fit ships. This upgrade will greatly improve the Navy's Surface Electronic Warfare (EW) capabilities against emerging threats, as well as better integrate EW capabilities into the combat direction/management system. This effort consists of transitioning technology developed and demonstrated by the Office of Naval Research.</p> <p>C. OTHER PROGRAM FUNDING SUMMARY:</p> <p>D. ACQUISITION STRATEGY: The Surface EW Improvement Program (SEWIP) will develop Block upgrades to SLQ-32 based on integrating technology advances and adding functional capabilities in an incremental fashion. Each Block and sub-Block will be developed and contracted in an individual yet coordinated and overlapping fashion. A full and open competition will be utilized to select the SEWIP Block 2 prime contractor.</p>			

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Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY Cost (\$000)	FY 2009 Cost (\$000)	FY 2009 Award Date	FY 2010 Cost (\$000)	FY 2010 Award Date		
Block 2 SD&D	C / CPIF	TBD	0.000	0.000		51.922	JAN-10		
Subtotal Product Development			0.000	0.000		51.922			
Remarks:									
Block 2 Integrated Logistics Support	WR	NSWC Crane, DD, NRL	0.000	0.000		0.735	NOV-09		
Block 2 & Future EW Government Engineering Support	WR	NSWC Crane, DD, NRL	0.000	0.000		2.942	NOV-09		
Subtotal Support Costs			0.000	0.000		3.677			
Remarks:									
Block 2 Test Planning/T&E Events	WR	NSWC Crane, DD, NRL	0.000	0.000		2.414	NOV-09		
Subtotal Test and Evaluation			0.000	0.000		2.414			
Remarks:									
Block 2 Program Management Support	C / FFP	SEAPORT	0.000	0.000		1.355	NOV-09		
Block 2 Program Management Support	WR	NSWC Crane, DD, PHD, NRL	0.000	0.000		3.407	NOV-09		
Block 2 Travel	PD	NAVSEA Program Office Travel	0.000	0.000		0.100	NOV-09		
Subtotal Management Services			0.000	0.000		4.862			
Remarks:									
Total Cost			0.000	0.000		62.875			

CLASSIFICATION:

UNCLASSIFIED

EXHIBIT R-4, SCHEDULE PROFILE

DATE
May 2009

APPROPRIATION/BUDGET ACTIVITY
RD TEN/BA 5

PROGRAM ELEMENT NUMBER AND NAME
0604757N/SHIP SELF DEFENSE (ENGAGE: SOFT KILL/EW)

PROJECT NUMBER AND NAME
3227/SEWIP Increment 2

Fiscal Year	2008				2009				2010																			
	1	2	3	4	1	2	3	4	1	2	3	4																
Acquisition Milestones							Block 2 M\$ B DR																					
Block 2 Development	New Receiver/Antenna/Interface Development																											
Block 2 Test and Evaluation Milestones																												
Development Test																												
Operational Test																												

CLASSIFICATION:		UNCLASSIFIED					
EXHIBIT R-4a, SCHEDULE DETAIL						DATE May 2009	
APPROPRIATION/BUDGET ACTIVITY RD TEN/BA 5		PROGRAM ELEMENT NUMBER AND NAME 0604757N/SHIP SELF DEFENSE (ENGAGE: SOFT KILL/EW)			PROJECT NUMBER AND NAME 3227/SEWIP Increment 2		
Schedule Profile		FY 2008	FY 2009	FY 2010			
Block 2 MS B DR			4Q				
Block 2 New Receiver/Antenna/Interface Development		1Q-4Q	1Q-4Q	1Q-4Q			

CLASSIFICATION:		UNCLASSIFIED	
EXHIBIT R-2a, RDT&E PROJECT JUSTIFICATION			DATE May 2009
APPROPRIATION/BUDGET ACTIVITY RD TEN/BA 5	PROGRAM ELEMENT NUMBER AND NAME 0604757N/SHIP SELF DEFENSE (ENGAGE: SOFT KILL/EW)	PROJECT NUMBER AND NAME 9999/Congressional Add	
B. ACCOMPLISHMENTS/PLANNED PROGRAM:			
	FY 2008	FY 2009	FY 2010
9C24A Electronic Warfare Concept Demonstrator for the Littoral Combat	0.773	0.000	0.000
RDT&E Articles Quantity	0	0	0
Develop Electronic Warfare Concept Demonstrator for the Littoral Combat System.			
	FY 2008	FY 2009	FY 2010
9C25A	1.993	0.000	0.000
RDT&E Articles Quantity	0	0	0
Block 1B3 builds off the foundation of the 1B2-enhanced AN/SLQ-32B(V) system and significantly increases warfighting capability with the addition of the High Gain High Sensitivity (HGHS).			
	FY 2008	FY 2009	FY 2010
9243A Advanced Radar Absorbing Tiles for Surface Ships	1.934	0.000	0.000
RDT&E Articles Quantity	0	0	0
Develop advanced radar absorbing materials.			
	FY 2008	FY 2009	FY 2010
2441A NULKA Decoy System and Mk 53 Decoy Launch System	0.000	1.596	0.000
RDT&E Articles Quantity	0	0	0
Develop capability improvements for shipboard radars.			
	FY 2008	FY 2009	FY 2010
9D92A Shipboard Electronic Warfare Sustainment Training	0.000	3.191	0.000
RDT&E Articles Quantity	0	0	0
Begin development of the capability to perform synthetic training for the SEI and HGHS.			
	FY 2008	FY 2009	FY 2010
9D93A Accelerated Improvement for Active Surface Electronic Warfare Systems	0.000	1.596	0.000
RDT&E Articles Quantity	0	0	0
Begin development of display enhancements for the active variants of the AN/SLQ-32(V) system similar to those already provided for passive variants.			