CLASSIFICATION:

UNCLASSIFIED

EXHIBIT R-2, RDT&E Project Justification						DATE:			
						FEBRUA	RY 2004		
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEM	IENT NUMBER AN	D NAME		PROJECT NUMB	ER AND NAME			
RDT&E, N / BA-7	Sub Acoustic	Warfare Develo	pment/0101226	6 N	Submarine Defensive Warfare Systems/126				
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009		
Project Cost	1.057	5.889	8.453	8.633	8.793	8.970	9.150		
RDT&E Articles Qty									

Defense Emergency Responses Funds (DERF): Not Applicable

A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION: This project develops a Submarine Defensive Warfare System (SDWS) to improve the effectiveness and
survivability of all classes of US submarines. Acoustic Intercept consist of developing a new acoustic sensor, the Sparsely Populated Volumetric Array (SPVA), that will improve
the performance of acoustic intercept systems and will provide a ranging capability for submarines through Acoustic Rapid COTS Insertion (ARCI) and Advanced Process Build
(APB) software improvements. Next Generation Countermeasure (NGCM) efforts entails simulation and effectiveness analysis of new technologies from Future Naval
Capability (FNC) and SBIR efforts at the Weapons Analysis Facility (WAF). The WAF analysis provides the US Navy with robust testing of new hardware and software within a
detailed representation of complex acoustic environments. Anti-Torpedo Torpedo (ATT) includes integration and testing efforts that will be used to determine physical
compatibility of the Anti-Torpedo Torpedo (ATT) All Up Round (AUR) to survive storage and launch from the CSA MK2 countermeasure launcher.

CLASSIFICATION:

XHIBIT R-2a, RDT&E Project Justification	on			DATE: FEBRUARY 2004
ROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMI	BER AND NAME	PROJECT NUMBER AND N	
T&E, N /BA-7	Sub Acoustic Warfare I			
IQE, N /BA-/	Sub Acoustic Warrare	Dev/0101220N	Submarine Defensive Wa	inare Systems/1205
Accomplishments/Planned Program				
Acoustic Intercept	FY 03	FY 04	FY 05	
Accomplishments/Effort/Subtotal Cost	0.581	0.900	0.700	
RDT&E Articles Quantity				
FY03 - FY04 - Continue Acoustic Intercept Tech FY03 - Conduct at Sea-Tests (TACDEVEX) FY04 - Conduct SACA/ SPVA Sea-Test to confil FY05 - Participate in APB 05 Sea-Test.		guration for FY06 produ	uction.	
WAF Analysis	EV 02	EV.04	EV 05	
WAF Analysis	FY 03	FY 04	FY 05	
Accomplishments/Effort/Subtotal Cost	0.476	1.989	1.253	
RDT&E Articles Quantity FY 03-06 - Continue to conduct countermeasur	re proofing and effectiveness analy	rsis for designated torpo	edo at Weapons Analysis Facility	(WAF) .
FY 03-06 - Continue to conduct countermeasur ATT AUR Development	FY 03	FY 04	FY 05	(WAF) .
FY 03-06 - Continue to conduct countermeasur ATT AUR Development Accomplishments/Effort/Subtotal Cost				(WAF) .
FY 03-06 - Continue to conduct countermeasur ATT AUR Development Accomplishments/Effort/Subtotal Cost RDT&E Articles Quantity	FY 03 0.000	FY 04 0.000	FY 05 6.500	
FY 03-06 - Continue to conduct countermeasur ATT AUR Development Accomplishments/Effort/Subtotal Cost RDT&E Articles Quantity FY 05 - Begin commonality Integration/develop FY 06 - Continue ATT Development and Submanus NGCM Accomplishments/Effort/Subtotal Cost	FY 03 0.000 ment of ATT AUR for Submarine u	FY 04 0.000 using a modified Subma	FY 05 6.500 arine CSA MK 2 Launcher system.	
FY 03-06 - Continue to conduct countermeasur ATT AUR Development Accomplishments/Effort/Subtotal Cost RDT&E Articles Quantity FY 05 - Begin commonality Integration/develop FY 06 - Continue ATT Development and Submanus	FY 03 0.000 ment of ATT AUR for Submarine uarine Integration. Conduct at-sea S	FY 04 0.000 Ising a modified Subma Submarine Launch Cap	FY 05 6.500 arine CSA MK 2 Launcher system. ability Test using a modified CSA FY 05	
FY 03-06 - Continue to conduct countermeasur ATT AUR Development Accomplishments/Effort/Subtotal Cost RDT&E Articles Quantity FY 05 - Begin commonality Integration/develop FY 06 - Continue ATT Development and Submanus NGCM Accomplishments/Effort/Subtotal Cost	FY 03 0.000 ment of ATT AUR for Submarine u arine Integration. Conduct at-sea S FY 03 0.000	FY 04 0.000 Using a modified Subma Submarine Launch Cap FY 04 0.000	FY 05 6.500 arine CSA MK 2 Launcher system. ability Test using a modified CSA FY 05 0.000	

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification					DATE:
APPROPRIATION/BUDGET ACTIVITY	PROGRAM F	LEMENT NUMBER	AND NAME		PROJECT NUMBER AND NAME
RDT&E, N /BA-7		stic Warfare Dev			Submarine Defensive Warfare Systems/1265
C. PROGRAM CHANGE SUMMARY:	·				
Funding:		FY 2003	FY 2004	FY 2005	5
Previous President's Budget: (FY 04 Pres	Controls)	1.065	2.955	8.580	
Current President's Budget: (FY05 Pres C		1.057	5.889	8.453	
Total Adjustments	,	-0.008	2.934	-0.127	
Summary of Adjustments					
Miscellaneous Adjustment		-0.008	-0.066	-0.127	7
Submarine Launched Littoral Warfare Congres	sional Plus-Up	0.000	3.000	0.000	
Subtotal	,	-0.008	2.934	-0.127	
Schedule:					
Not Applicable					
Technical:					
Not Applicable					

CLASSIFICATION:

HIBIT R-2a, RDT&E Project Justification				DATE: FEBRUARY 2004						
PROPRIATION/BUDGET ACTIVITY	PROGRAM E	LEMENT NUM	BER AND NAM	ИΕ	PROJECT NU	IMBER AND N				
T&E, N /BA-7	Sub Acous	tic Warfare	Dev/010122	6N	Submarine D	efensive Wa	rfare System	s/1265		
D. OTHER PROGRAM FUNDING SUMMARY:								T .	Tatal	
Line Item No. & Name	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To <u>Complete</u>	Total <u>Cost</u>	
OPN - 221000/221005 Submarine Acoustic Warfare Systems	20.485	25.937	20.857	23.563	25.326	25.924	31.314	CONT.	CONT.	
E. ACQUISITION STRATEGY:										
See Attached Schedule										
F. MAJOR PERFORMERS:										
See Attached R-3										

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										DATE:				
Exhibit R-3 Cost Analysis						T						FEBRUARY 2	004	
APPROPRIATION/BUDGET AC RDT&E, N /BA-7	CTIVITY	PROGRAM Sub Acou	ELEMENT ustic Warfare	Dev/01012	26N	PROJECT NU Submarine I		NAME ′arfare Systen	ns/1265					
Cost Categories	Method	Performing Activity & Location	Total PY s Cost	FY 03 Cost	FY 03 Award Date	FY 04	FY 04 Award Date	FY 05 Cost	FY 05 Award Date	FY 06 Cost	FY 06 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Hardware Analysis	WX	NUWC Newport, RI	0.000	0.807	12/02	0.600	12/03	1.047	12/04			CONT.	0.000	
Systems Engineering	WX	NUWC Newport, RI	0.000	0.000		0.900	02/04	0.500				CONT.	0.000	
Systems Engineering	CPFF	PSU, State College, PA	0.000	0.000		0.000		5.971	02/05			CONT.	0.000	
SLWW	CPFF	Raytheon Middleton, RI	0.000	0.000)	3.000	04/04	0.000				CONT.	0.000	
			0.000	0.807	,	4.500	0	7.51	8				12.825	
Subtotal Product Development Remarks:			0.000	0.007	1		-1	·						
·			, 0.000	0.007										
				3.507									0.000	
Remarks:				3.507									0.000	
Remarks: Development Support			0.000											
Remarks: Development Support Software Development			0.000										0.000	
Remarks: Development Support Software Development Training Development			0.000										0.000 0.000	
Remarks: Development Support Software Development Training Development Integrated Logistics Support			0.000										0.000 0.000 0.000	
Remarks: Development Support Software Development Training Development Integrated Logistics Support Configuration Management													0.000 0.000 0.000 0.000	
Remarks: Development Support Software Development Training Development Integrated Logistics Support Configuration Management Technical Data						1.139		0.68	5				0.000 0.000 0.000 0.000 0.000	

CLASSIFICATION:

								DATE:		DATE:						
Exhibit R-3 Cost Analysis (pa	ge 2)											FEBRUARY 2	004			
APPROPRIATION/BUDGET ACTIV	/ITY	PROGRAM				PROJECT NU	JMBER AND N	IAME								
RDT&E, N /BA-7			ustic Warfare	e Dev/01012		Submarine Defensive Warfare Systems/1265										
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 03 Cost	FY 03 Award Date	FY 04	FY 04 Award Date	FY 05 Cost	FY 05 Award Date	FY 06 Cost	FY 06 Award Date	Cost to Complete	Total Cost	Target Value of Contract		
Developmental Test & Evaluation	и турс	Location	COST	0031	Date	0031	Date	0031	Date	0031	Date	Complete	0.000			
Operational Test & Evaluation													0.000			
Live Fire Test & Evaluation													0.000			
Test Assets													0.000			
Tooling													0.000			
GFE													0.000			
Award Fees													0.000			
Subtotal T&E			0.000	0.000	1	0.000	١	0.000					0.000			
Contractor Engineering Support													0.000	,		
Government Engineering Support													0.000	1		
Program Management Support	C/CPFF	EG&G Gaithersburg, MD	0.000	0.200	06/03	0.200	11/03	0.200	11/04			CONT				
Travel		PMS415	0.000	0.050	11/02	0.050	11/03	0.050	11/04			CONT	0.150)		
Labor (Research Personnel)													0.000)		
SBIR Assessment													0.000			
Subtotal Management			0.000	0.250)	0.250)	0.250					0.750)		
Remarks:																
Total Cost			0.000	1.057		5.889)	8.453					15.399	i		
Remarks:																

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R-4, RDT&E Project Justification						DATE		BRUARY 2004
IATION/BUDGET ACTIVITY N /BA-7	NUMBER AND NAM are Dev/0101226			MBER AND NAME	ND NAME Warfare Systems/1265			
N /DA-/	Sub	ACOUSTIC War	are Dev/0101220	DIN	Submanne De	elensive wanale	Systems/1205	
	FY02	FY03	FY04	FY05	FY06	FY07	FY08	FY09
		Sensor D	evelopment					
Acoustic Intercept		At-S	Sea Tests (TACDE	VEX)				
Improvement Initiative - SPVA				SACA / SPVA	Sea-Test			
	Transition F	Phase		_	Participat	e in APB 05 Sea- 	Test	
Anti-Torpedo Torpedo				ATT AUR (Commonality/	Integration		
Weapons Analysis Facility			СМ	Effectivenes	s / WAF Threa	at Vulnerability		
NGCM						Next	Generation CM	1