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EXHIBIT R-2, RDT&E Budget Item Justification	DATE: June 2001
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APPROPRIATION/BUDGET ACTIVITY RESEARCH DEVELOPMENT TEST & EVALUATION, NAVY	R-1 ITEM NOMENCLATURE PE 0603553N Surface ASW/V1704 ASW Adv Dev
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COST (\$ in Millions)	FY2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	Cost to Complete	Total Cost
Total PE Cost	6.723	6.690	3.724						Continuous	Continuous
ASW Advanced Development/V1704*	6.723	0.000	0.000						Continuous	Continuous
ASW Advanced Development/S1704*	0.000	6.690	3.724						Continuous	Continuous
Quantity of RDT&E Articles										

Note *: Due to realignment of Program Executive Office, Undersea Warfare (USW), FY2000 funds allocated under V1704 and FY2001 and beyond funds allocated under S1704.

A. Mission Description and Budget Item Justification: The ASW Advanced Development project provides advanced development demonstration and validation of technology for potential surface sonar and combat system applications. Efforts focus on resolution of technical issues associated with providing capability against the Year 2005 and beyond threat with emphasis on shallow water/littoral area USW a dem/val of Undersea Warfare (USW) concepts and technology. Key technology areas include active sonar transmissions, advanced signal and data processing, active sonar classification, towed and hull arrays and transducer technology, multi-static sonar, and multi-sensor data fusion including multi-platform data fusion and netcentric undersea warfare concepts. This Program Element, 0603553N, has been designated to support Multi-Static Active ASW (MAASW) efforts associated with the Distant Thunder program and other emerging multi-static technologies. The MAASW project conducts advanced development and testing of active multistatic acoustic concepts. The concept development is directed at providing surface ships combat groups with the capability of detection, classification, and localization of quiet threat submarines in difficult acoustic environments associated with Littoral waters. The project concentrates on the development of acoustic processor algorithms, alternative cost-effective active sources and information sharing technologies to develop a coordinated multi-static acoustic picture employing distributed sensors and active sources.

Program Plans and Accomplishments:

1. (U) FY 2000 Accomplishments:

(\$2.831) Multistatic Active ASW: Improved acoustic processing and communication schemes. Participated in SHAREM 134 to collect multi-static processors/communication systems data and environmental acoustic data and analyze and/or demonstrate system performance. Initiated development of Concept of Operations.

(\$3.892) Advanced Undersea Warfare Concept (AUSWC): Provided systems engineering, development, and integration for AUSWC Builds 1.0 and 2.0. Performed Battle Group platform interface investigation, installation planning and scheduling, platform installation and integration for AUSWC first build.

1. (U) FY 2001 Plan:

(\$2.963) Multistatic Active ASW: Continue improvement of acoustic processing and communication schemes. Participate in sea tests, SHAREM 136 and 138, to collect multi-static processors/communication systems data and environmental acoustic data and analyze/evaluate system performance and alternative acoustic sources in Littoral ASW environments. Begin Advanced Processing Build (APB) process in preparation for integration of coherent waveform processing algorithms. Complete development of Impulsive Source Concept of Operations. Install Advanced Development Model (ADM) Type K R&D SHIPALTS on N76 specified COMDESRON Fifteen test ships.

(\$3.640) Advanced Undersea Warfare Concept (AUSWC): Field and demonstrate a network-centric Undersea Warfare (USW) theater combat system to support air, surface, and sub-surface platforms of the Carl Vinson Battlegroup. Support second installation (Build 2.0) plan for Carl Vinson Battlegroup for selected battlegroup platforms.

(\$0.087) Portion of extramural program reserved for Small Business Innovation Research assessment in accordance with 15 USC 638.

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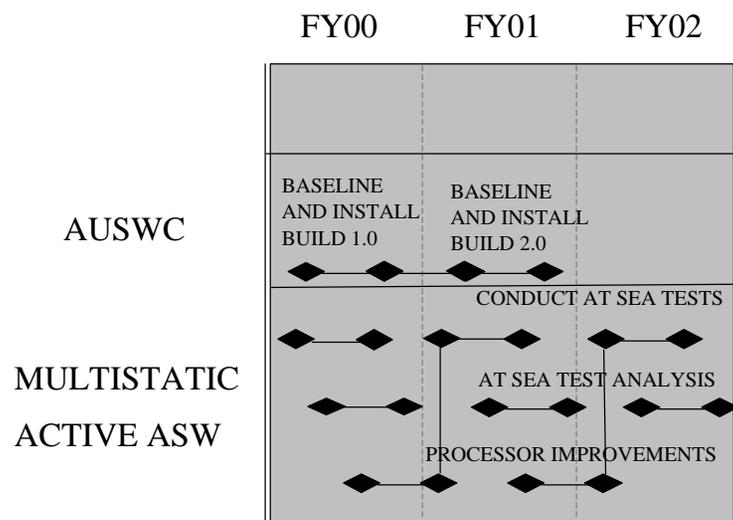
EXHIBIT R-2, RDT&E Budget Item Justification		DATE: June 2001	
APPROPRIATION/BUDGET ACTIVITY RESEARCH DEVELOPMENT TEST & EVALUATION, NAVY	R-1 ITEM NOMENCLATURE PE 0603553N Surface ASW/V1704/S1704 ASW Adv Dev		
<p>3. FY 2002 Plan: (\$3.724) Multistatic Active ASW: Upgrade air deployed advanced deve multistatic processing system. Integrate multi-static active coherent waveform signal processing algorithms. Improve support and interface to shipboard Combat Information Center (CIC) watch standers. Address coherent waveform capabilities in concept of operations and tactical documentation. Initiate preparation for product(s) transition to AN/SQQ-89(V)15.</p>			
B. Program Change Summary:			
	FY 2000	FY 2001	FY 2002
FY 2001 President's Budget:	6.948	6.752	2.986
Appropriated Value:	2.949	6.752	
Adjustment to FY2000/2001 Appropriated Value/	+3.774	-0.047	0.738
Government-Wide Rescission:		-0.015	
FY 2001 President's Budget:			
FY 2002/2003 OSD/OMB Budget Submit:	6.723	6.690	3.724
 (U) Change Summary Explanation:			
(U) FY 2000 decreases: SBIR transfer (-0.150), Mid-yr Review Adjustment (-0.056), Proportionate Reductions (-0.012), actuals (-0.007) increase: Advanced USW Concept (+3999).			
(U) FY 2001 decreases of (-0.047) for 7% Pro-Rate reduction, Government-Wide Rescission (-0.015)			
(U) FY 2002 increases of (+0.750), Distant Thunder (N88 Funding), Non-Pay Inflation Bas (+0.003), Program Support (+0.012) and Final POM 02 Balance decrease (-0.005) Undersea Warfare decrease (-0.004) NWCF Rates - Naval Air Warfare decrease (-0.005), NWCF Rates - Naval Undersea Warfare (-0.012) and NWCF Rates - Naval Air Warfare (0.001).			
Schedule: N/A			
Technical: N/A			
C. Other Program Funding Summary: N/A			
Related RDT&E:			
PE 0205620N (Surface ASW Combat Systems Integration)			
PE 0603504N (Advanced Submarine Combat Systems Development)			
PE 0603513N (DD-21 Associated System Development)			
PE 0603561N (Advanced Submarine System Development)			
PE 0603747N (Undersea Warfare Advanced Technology)			
D. Acquisition Strategy: Plan to continue competitively awarded contract(s).			
E. Schedule Profile: See attached Schedule.			

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EXHIBIT R-2a, RDT&E Project Justification						DATE: June 2001				
APPROPRIATION/BUDGET ACTIVITY RDT&E, N		PROGRAM ELEMENT NAME AND NUMBER Surface ASW, PE 0603553N			PROJECT NAME AND NUMBER ASW Advanced Development, V1704/S1704					
COST (\$ in Millions)	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	Cost to Complete	Total Cost
Project Cost	6.723	6.690	3.724							
RDT&E Articles Qty										

SURFACE ASW ADVANCED DEVELOPMENT



R-1 SHOPPING LIST - Item No. 57 - 3 of 57 - 5

Exhibit R-2a, RDT&E Project Justification
(Exhibit R-2a, page 3 of 5)

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Exhibit R-3 Cost Analysis (page 1)	DATE: June 2001
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APPROPRIATION/BUDGET ACTIVITY RDT&E, N	PROGRAM ELEMENT NAME AND NUMBER Surface ASW/ PE 0603553N	PROJECT NAME AND NUMBER ASW Advanced Development/V1704/S1704
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Cost Categories (Tailor to WBS, or System/Item Requirements)	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 00 Cost	FY 00 Award Date	FY 01 Cost	FY 01 Award Date	FY 02 Cost	FY 02 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Multistatic Sonar Development	WR	NUWC/Npt	10.397	1.098	12/99	1.325	04/01	1.266	12/01	Continuous	Continuous	
Multistatic Sonar Development	WR	BATH MIN		0.010	09/00	0.011	11/00					
Multistatic Sonar Development	WR	PASCAGOULA MS		0.010	09/00	0.007	01/01					
Multistatic Sonar Development	WR	NAWC/KEY WEST		0.010	01/00							
Multistatic Sonar Development	WR	NAWC/Pax River	0.100	0.363	10/99	0.250	02/01	0.750	12/01	Continuous	Continuous	
Multistatic Sonar Development	CPFF	BBN		1.037	03/00	0.930	10/00	1.150	03/02	Continuous	Continuous	
Multistatic Sonar Development	CPFF	APL/JHU	0.116	0.110	01/00	0.100	02/01	0.108	01/02	Continuous	Continuous	
Multistatic Sonar Development	RCP/WR	NRL	0.212									
Multistatic Sonar Development	WR	NUWC/Keyport	1.400									
Multistatic Sonar Development	WR	NSWC/DD	0.108									
Multistatic Sonar Development	RCP	FLT. INDUR. SUP. CTR		0.010	10/00							
Multistatic Sonar Development	RCP	ONR	0.868	0.127	03/00	0.295	03/01	0.400		Continuous	Continuous	
Subtotal Product Development			13.201	2.775		2.918		3.674		0.000	22.568	

Remarks:

Development Support Equipment											0.000	
Software Development											0.000	
Training Development											0.000	
Integrated Logistics Support											0.000	
Configuration Management											0.000	
Technical Data											0.000	
GFE											0.000	
Subtotal Support			0.000	0.000		0.000		0.000		0.000	0.000	

Remarks:

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Exhibit R-3 Cost Analysis (page 2)								DATE: June 2001				
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT NAME AND NUMBER			PROJECT NAME AND NUMBER						
RDT&E, N			Surface ASW/PE 0603553N			ASW Advanced Development/V1704/S1704						
Cost Categories (Tailor to WBS, or System/Item Requirements)	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 00 Cost (K\$)	FY 00 Award Date	FY 01 Cost (K\$)	FY 01 Award Date	FY 02 Cost (K\$)	FY 02 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Developmental Test & Evaluation	WR	NUWC/Npt	0.200	1.004	10/99	1.200	12/00			Continuous	Continuous	
Developmental Test & Evaluation	WR	NAWC/Pax River	0.000	0.165	03/00	0.692	12/00			Continuous	Continuous	
Developmental Test & Evaluation	CPFF	BBN	0.000	0.000						Continuous	Continuous	
Developmental Test & Evaluation	WR	SUPSHIP BATH MIN.	0.000	0.033	09/00					Continuous	Continuous	
Developmental Test & Evaluation	WR	NUWC/Keyport	0.600	0.443	10/99	0.488	12/00			Continuous	Continuous	
Developmental Test & Evaluation	WR	NSWC/Carderock, MD	0.100	0.308	10/99	0.281	12/00			Continuous	Continuous	
Developmental Test & Evaluation	WR	NSWC/Dahlgren, VA	0.150	0.040	10/99		12/00			Continuous	Continuous	
Developmental Test & Evaluation	CPFF	APL/JHU, MD		0.626	01/00	0.210	03/01			Continuous	Continuous	
Developmental Test & Evaluation	CPFF	Progeny, Inc.		0.500	01/00	0.640	03/01			Continuous	Continuous	
Developmental Test & Evaluation	CPFF	APL/UW	0.050	0.000								
Developmental Test & Evaluation	CPFF	IPD	0.050	0.055	12/99							
Developmental Test & Evaluation	MIPR	U.S. ARMY/MITRE		0.000								
Developmental Test & Evaluation	WR	SPAWAR Systems Center	0.250	0.435	10/99	0.101	12/00			Continuous	Continuous	
Subtotal T&E			1.400	3.609		3.612		0.000		Continuous	Continuous	
Remarks:												
Contractor Engineering Support											0.000	
Government Engineering Support											0.000	
Program Management Support	CPFF	Stanley Assoc.	1.326	0.319	11/99	0.140	01/01	0.050		Continuous	Continuous	
Travel			0.145	0.020		0.020				Continuous	Continuous	
Labor (Research Personnel)											0.000	
Overhead											0.000	
Subtotal Management			1.471	0.339		0.160		0.050		Continuous	Continuous	
Remarks:												
Total Cost			16.072	6.723		6.690		3.724		Continuous	Continuous	
Remarks:												

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