

UNCLASSIFIED

CLASSIFICATION:

EXHIBIT R-2, RDT&E Budget Item Justification							DATE: February 2003	
APPROPRIATION/BUDGET ACTIVITY RESEARCH DEVELOPMENT TEST & EVALUATION, NAVY / BA4					R-1 ITEM NOMENCLATURE PE 0603553N Surface ASW/1704 ASW Advanced Development			
COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Total PE Cost	3.542	3.184	2.506	2.698	2.758	3.328	3.391	3.450
Defense Emergency Response Funds (DERF) Funds: N/A A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION: <p>The Anti Submarine Warfare (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 Undersea Warfare (USW) and on demonstration and validation of 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.</p>								

R-1 SHOPPING LIST - Item No.

49

UNCLASSIFIED

Exhibit R-2, RDTEN Budget Item Justification
(Exhibit R-2, page 1 of 8)

UNCLASSIFIED

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: February 2003		
APPROPRIATION/BUDGET ACTIVITY RD RDT&E N/BA4	PROGRAM ELEMENT NUMBER AND NAME PE 0603553N Surface ASW	PROJECT NUMBER AND NAME S1704 ASW Advanced Development		
B. Accomplishments/Planned Program				
	FY 02	FY 03	FY 04	FY 05
Accomplishments/Effort/Subtotal Cost	3.542	3.184	2.506	2.698
RDT&E Articles Quantity				
<p>FY98 Prototypes deployed to 7th fleet ships - participated in sea exercises with positive fleet users feedback - mitigated into Advanced Development (ADM) system with laptops since FY01. Integrate to Advanced Process Build (APB) initiates FY02/plan for SQQ-89 A(V) 15 migration FY05-FY07.</p>				

R-1 SHOPPING LIST - Item No.

49

UNCLASSIFIED

Exhibit R-2a, RDTEN Project Justification
(Exhibit R-2a, page 2 of 8)

CLASSIFICATION:

UNCLASSIFIED

EXHIBIT R-2a, RDT&E Project Justification			DATE: February 2003																																																																																																																																													
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA4	PROGRAM ELEMENT NUMBER AND NAME PE 0603553N Surface ASW	PROJECT NUMBER AND NAME S1704 ASW Advanced Development																																																																																																																																														
<p>C. PROGRAM CHANGE SUMMARY:</p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left; width: 40%;">Funding:</th> <th style="text-align: right; width: 10%;">FY 2002</th> <th style="text-align: right; width: 10%;">FY 2003</th> <th style="text-align: right; width: 10%;">FY 2004</th> <th style="text-align: right; width: 10%;">FY 2005</th> </tr> </thead> <tbody> <tr> <td>Previous President's Budget: (FY 03 Pres Controls)</td> <td style="text-align: right;">3.724</td> <td style="text-align: right;">3.219</td> <td style="text-align: right;">3.302</td> <td style="text-align: right;">3.320</td> </tr> <tr> <td>FY04/05 Congressional Controls</td> <td style="text-align: right;">3.542</td> <td style="text-align: right;">3.184</td> <td style="text-align: right;">2.506</td> <td style="text-align: right;">2.698</td> </tr> <tr> <td>Total Adjustments</td> <td style="text-align: right;">-0.182</td> <td style="text-align: right;">-0.035</td> <td style="text-align: right;">-0.796</td> <td style="text-align: right;">-0.622</td> </tr> <tr> <td colspan="5" style="padding-top: 10px;">Summary of Adjustments</td> </tr> <tr> <td>Section 8123 - Management Reform</td> <td style="text-align: right;">-0.033</td> <td></td> <td></td> <td></td> </tr> <tr> <td>SBIR/STTR Transfer</td> <td style="text-align: right;">-0.040</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Post Production R&D Continuation</td> <td></td> <td></td> <td style="text-align: right;">-0.388</td> <td style="text-align: right;">-0.480</td> </tr> <tr> <td>Section 313 PL 107-206: Revised</td> <td style="text-align: right;">-0.008</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Naval Warfare Center Funding - Naval Undesea Warfare</td> <td></td> <td></td> <td style="text-align: right;">0.003</td> <td style="text-align: right;">0.005</td> </tr> <tr> <td>Naval Working Capitol Funding - Naval Air Warfare</td> <td></td> <td></td> <td style="text-align: right;">-0.007</td> <td style="text-align: right;">-0.007</td> </tr> <tr> <td>FY02 BTR (July - 02)</td> <td style="text-align: right;">-0.073</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Economic Assumptions (Section 813)</td> <td style="text-align: right;">-0.010</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Technical Process Re-engineering</td> <td></td> <td></td> <td style="text-align: right;">-0.009</td> <td style="text-align: right;">-0.009</td> </tr> <tr> <td>Business Process Re-engineering</td> <td></td> <td></td> <td style="text-align: right;">-0.007</td> <td style="text-align: right;">-0.007</td> </tr> <tr> <td>Streamlining Training Initiating</td> <td></td> <td></td> <td style="text-align: right;">-0.002</td> <td style="text-align: right;">-0.002</td> </tr> <tr> <td>Reduction in Support Contract</td> <td></td> <td></td> <td style="text-align: right;">-0.012</td> <td style="text-align: right;">-0.011</td> </tr> <tr> <td>FY02 Actuals</td> <td style="text-align: right;">-0.018</td> <td></td> <td></td> <td></td> </tr> <tr> <td>NAWC PBD 426</td> <td></td> <td></td> <td style="text-align: right;">-0.002</td> <td></td> </tr> <tr> <td>NUWC PBD 426</td> <td></td> <td></td> <td style="text-align: right;">-0.002</td> <td></td> </tr> <tr> <td>Non-S&T R&D Offset</td> <td></td> <td></td> <td style="text-align: right;">-0.271</td> <td></td> </tr> <tr> <td>PBD203 ACTD Offsets</td> <td></td> <td></td> <td style="text-align: right;">-0.044</td> <td style="text-align: right;">-0.056</td> </tr> <tr> <td>NWCF Rates - R&D Fuel</td> <td></td> <td></td> <td style="text-align: right;">0.002</td> <td style="text-align: right;">0.003</td> </tr> <tr> <td>Inflation Savings</td> <td></td> <td style="text-align: right;">-0.035</td> <td></td> <td></td> </tr> <tr> <td>PBD-604 Nonpay Purchase Inflation</td> <td></td> <td></td> <td style="text-align: right;">-0.044</td> <td></td> </tr> <tr> <td>PBD-604 Nonpay Inflation</td> <td></td> <td></td> <td style="text-align: right;">-0.013</td> <td></td> </tr> <tr> <td>PBD-604: FY05/09 Inflation</td> <td></td> <td></td> <td></td> <td style="text-align: right;">-0.058</td> </tr> <tr> <td>Subtotal</td> <td style="text-align: right;">-0.182</td> <td style="text-align: right;">-0.035</td> <td style="text-align: right;">-0.796</td> <td style="text-align: right;">-0.622</td> </tr> </tbody> </table> <p style="margin-top: 20px;">Schedule: N/A</p> <p style="margin-top: 20px;">Technical: N/A</p>					Funding:	FY 2002	FY 2003	FY 2004	FY 2005	Previous President's Budget: (FY 03 Pres Controls)	3.724	3.219	3.302	3.320	FY04/05 Congressional Controls	3.542	3.184	2.506	2.698	Total Adjustments	-0.182	-0.035	-0.796	-0.622	Summary of Adjustments					Section 8123 - Management Reform	-0.033				SBIR/STTR Transfer	-0.040				Post Production R&D Continuation			-0.388	-0.480	Section 313 PL 107-206: Revised	-0.008				Naval Warfare Center Funding - Naval Undesea Warfare			0.003	0.005	Naval Working Capitol Funding - Naval Air Warfare			-0.007	-0.007	FY02 BTR (July - 02)	-0.073				Economic Assumptions (Section 813)	-0.010				Technical Process Re-engineering			-0.009	-0.009	Business Process Re-engineering			-0.007	-0.007	Streamlining Training Initiating			-0.002	-0.002	Reduction in Support Contract			-0.012	-0.011	FY02 Actuals	-0.018				NAWC PBD 426			-0.002		NUWC PBD 426			-0.002		Non-S&T R&D Offset			-0.271		PBD203 ACTD Offsets			-0.044	-0.056	NWCF Rates - R&D Fuel			0.002	0.003	Inflation Savings		-0.035			PBD-604 Nonpay Purchase Inflation			-0.044		PBD-604 Nonpay Inflation			-0.013		PBD-604: FY05/09 Inflation				-0.058	Subtotal	-0.182	-0.035	-0.796	-0.622
Funding:	FY 2002	FY 2003	FY 2004	FY 2005																																																																																																																																												
Previous President's Budget: (FY 03 Pres Controls)	3.724	3.219	3.302	3.320																																																																																																																																												
FY04/05 Congressional Controls	3.542	3.184	2.506	2.698																																																																																																																																												
Total Adjustments	-0.182	-0.035	-0.796	-0.622																																																																																																																																												
Summary of Adjustments																																																																																																																																																
Section 8123 - Management Reform	-0.033																																																																																																																																															
SBIR/STTR Transfer	-0.040																																																																																																																																															
Post Production R&D Continuation			-0.388	-0.480																																																																																																																																												
Section 313 PL 107-206: Revised	-0.008																																																																																																																																															
Naval Warfare Center Funding - Naval Undesea Warfare			0.003	0.005																																																																																																																																												
Naval Working Capitol Funding - Naval Air Warfare			-0.007	-0.007																																																																																																																																												
FY02 BTR (July - 02)	-0.073																																																																																																																																															
Economic Assumptions (Section 813)	-0.010																																																																																																																																															
Technical Process Re-engineering			-0.009	-0.009																																																																																																																																												
Business Process Re-engineering			-0.007	-0.007																																																																																																																																												
Streamlining Training Initiating			-0.002	-0.002																																																																																																																																												
Reduction in Support Contract			-0.012	-0.011																																																																																																																																												
FY02 Actuals	-0.018																																																																																																																																															
NAWC PBD 426			-0.002																																																																																																																																													
NUWC PBD 426			-0.002																																																																																																																																													
Non-S&T R&D Offset			-0.271																																																																																																																																													
PBD203 ACTD Offsets			-0.044	-0.056																																																																																																																																												
NWCF Rates - R&D Fuel			0.002	0.003																																																																																																																																												
Inflation Savings		-0.035																																																																																																																																														
PBD-604 Nonpay Purchase Inflation			-0.044																																																																																																																																													
PBD-604 Nonpay Inflation			-0.013																																																																																																																																													
PBD-604: FY05/09 Inflation				-0.058																																																																																																																																												
Subtotal	-0.182	-0.035	-0.796	-0.622																																																																																																																																												

UNCLASSIFIED**Exhibit R-2a, RD TEN Project Justification**

(Exhibit R-2a, page 3 of 8)

UNCLASSIFIED

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: February 2003
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA4	PROGRAM ELEMENT NUMBER AND NAME PE 0603553N SurfaceASW	PROJECT NUMBER AND NAME S1704 ASW Advanced Development
<p>D. OTHER PROGRAM FUNDING SUMMARY: N/A</p> <p>E. ACQUISITION STRATEGY: *</p> <p>Competitively awarded contracts from Broad Agency Announcement (BAA) solicitations.</p> <p>F. MAJOR PERFORMERS: **</p> <p><u>Naval Air Warfare Center /PAX River, MD</u> – Build the two Air Multistatic Active ASW (MAASW(DT)) systems, lab test these systems, and gain NAVAIR authorization to install and fly this ADM system in P-3C TYCOM Aircraft.</p> <p><u>ONR, Arlington, VA/BBN</u> – Participate in two tactical at-sea exercises for FY02. Coordinate with NAWC, NUWC, and Program Office to publish a report on system performance.</p> <p><u>Naval Undersea Warfare Center, Newport, RI</u> – Provide management support in working with various administrative and operational organizations to develop and implement teams for MAASW Distant Thunder development and evaluation.</p>		

R-1 SHOPPING LIST - Item No. 49

UNCLASSIFIED

Exhibit R-2a, RDTEN Project Justification
(Exhibit R-2a, page 4 of 8)

UNCLASSIFIED

CLASSIFICATION:

Exhibit R-3 Cost Analysis (page 1)								DATE: February 2003				
APPROPRIATION/BUDGET ACTIVITY RDTE&E, N / BA4			PROGRAM ELEMENT PE 0603553N Surface ASW			PROJECT NUMBER AND NAME S1704 ASW Advanced Development						
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 03 Cost	FY 03 Award Date	FY 04 Cost	FY 04 Award Date	FY 05 Cost	FY 05 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Multistatic Sonar Development	WR	NUWC Newport	3.339	0.750	12/02	0.500	12/03	0.600	12/04	Continuous	5.189	
Multistatic Sonar Development	WR	BATH MIN	0.021								0.021	
Multistatic Sonar Development	WR	PASCAGOULA MS	0.017								0.017	
Multistatic Sonar Development	WR	NAWC/Key West	0.010								0.010	
Multistatic Sonar Development	WR	NAWC/Pax River	1.213	0.300	12/02	0.100	12/03	0.100	12/04	Continuous	1.713	
Multistatic Sonar Development	CPFF	BBN	2.932	0.400	12/02	0.150	12/03	0.150	12/04	Continuous	3.632	
Multistatic Sonar Development	CPFF	APL/JHU	0.350								0.350	
Multistatic Sonar Development	RCP	FLT. Industry SUP Center	0.010								0.010	
Multistatic Sonar Development	RCP	ONR	0.472								0.472	
Various	Various	Various	0.203	0.339	03/03	0.198	02/04	0.255	01/05	Continuous	0.995	
											0.000	
Subtotal Product Development			8.567	1.789		0.948		1.105		Continuous	Continuous	
Remarks:												
Development Support											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	
Award Fees											0.000	
Subtotal Support			0.000	0.000		0.000		0.000		0.000	0.000	
Remarks:												

CLASSIFICATION:

UNCLASSIFIED

Exhibit R-3 Cost Analysis (page 2)								DATE: February 2003				
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT			PROJECT NUMBER AND NAME						
RDT&E, N / BA4			PE 0603553N Surface ASW			S1704 ASW Advanced Development						
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 03 Cost	FY 03 Award Date	FY 04 Cost	FY 04 Award Date	FY 05 Cost	FY 05 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Developmental Test & Evaluation	WR	NUWC/Npt	2.255	0.250	11/02	0.600	11/03	0.705	11/04	Continuous	3.810	
Developmental Test & Evaluation	WR	NAWC/Pax River	0.916	0.170	11/02	0.170	11/03	0.170	11/04	Continuous	1.426	
Developmental Test & Evaluation	CPFF	BBN	0.223	0.400	11/02	0.300	11/03	0.300	11/04	Continuous	1.223	
Developmental Test & Evaluation	WR	SUPSHIP BATH MIN.	0.033							Continuous	0.033	
Developmental Test & Evaluation	WR	NUWC/Keyport	0.933							Continuous	0.933	
Developmental Test & Evaluation	WR	NSWC/Carderock, MD	0.695							Continuous	0.695	
Developmental Test & Evaluation	WR	NSWC/Dahlgren, VA	0.040							Continuous	0.040	
Developmental Test & Evaluation	CPFF	APL/JHU, MD	1.536							Continuous	1.536	
Developmental Test & Evaluation	CPFF	ARL/UT		0.200	11/02	0.100	11/03	0.150	11/04	Continuous	0.450	
Developmental Test & Evaluation	CPFF	Various		0.325	11/02	0.338	11/03	0.218	Various	Continuous	0.881	
Developmental Test & Evaluation	CPFF	Progeny, Inc.	1.217									
Developmental Test & Evaluation	CPFF	IPD	0.055									
Developmental Test & Evaluation	MIPR	U.S. ARMY/MITRE	0.000									
Developmental Test & Evaluation	WR	SPAWAR Systems Center	0.558									
Subtotal T&E			8.461	1.345		1.508		1.543		Continuous	Continuous	
Remarks:												
Contractor Engineering Support											0.000	
SBIR												
Government Engineering Support											0.000	
Program Management Support	CPFF	Stanley Assoc.	0.499	0.040	01/03	0.040	01/04	0.040	01/05		0.619	
Travel			0.050	0.010	11/02	0.010	11/03	0.010	11/04		0.080	
Labor (Research Personnel)											0.000	
Overhead											0.000	
Subtotal Management			0.549	0.050		0.050		0.050		Continuous	Continuous	
Remarks:												
Total Cost			17.577	3.184		2.506		2.698		Continuous	Continuous	
Remarks:												

UNCLASSIFIED

Exhibit R-3, Project Cost Analysis
(Exhibit R-3, page 6 of 8)

UNCLASSIFIED

CLASSIFICATION:

EXHIBIT R4, Schedule Profile																								DATE: February 2003								
APPROPRIATION/BUDGET ACTIVITY								PROGRAM ELEMENT NUMBER AND NAME								PROJECT NUMBER AND NAME																
RDT&E, N / BA4								PE 0603553N Surface ASW								S1704 ASW Advanced Development																
Fiscal Year	2002				2003				2004				2005				2006				2007				2008				2009			
	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				
MULTISTATIC ACTIVE ASW																																
Conduct At Sea Test																																
At SEA Test Analsis and System Evaluation																																
Processor Improvements																																

R-1 SHOPPING LIST - Item No. 49

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

UNCLASSIFIED

UNCLASSIFIED

CLASSIFICATION:

[illegible]