

CLASSIFICATION:

UNCLASSIFIED

EXHIBIT R-2, RDT&E Budget Item Justification							DATE: June 2001			
APPROPRIATION/BUDGET ACTIVITY RESEARCH DEVELOPMENT TEST & EVALUATION, NAVY/BA-5					R-1 ITEM NOMENCLATURE Submarine Combat System/0604524N					
COST (\$ in Millions)	FY 2000	FY 2001	FY 2002							
Total PE Cost	9.184	3.609	0.000							
AN/BSY-2/F1941	9.184	3.609	0.000							
Quantity of RDT&E Articles										
<p>A. (U) Mission Description and Budget Item Justification: This program provides system engineering support and develops software fixes for deficiencies identified during shipyard and at sea testing of the AN/BSY-2 Submarine Combat System (SCS). It incorporates the software fixes into a scheduled block upgrade(s) to the USS Seawolf prior to the conduct of Technical Evaluation (TECHEVAL) and Operational Evaluation (OPEVAL). It also provides for TECHEVAL and OPEVAL planning, asset and equipment procurement and provides direct government engineering support for the conduct of TECHEVAL and OPEVAL. In order to resolve obsolescence and reliability issues, improve acoustic superiority, and maximize Submarine Combat System commonality, it provides funds to migrate the AN/BSY-2 Submarine Combat System into the Integrated Development Plan (IDP), by implementing Acoustics Rapid COTs Insertion (ARCI) Phases II-IV on the Seawolf Class as ARCI-(V)5. Funding also supports engineering services for integration of AN/UYQ-70 on backfit submarines.</p> <p>(U) Program Accomplishments and Plans:</p> <p>1. (U) FY 2000 Accomplishments:</p> <ul style="list-style-type: none"> - (U) (\$2.394) Completed Block 3A/3B and 3B1 and continued Block 3B2 and 3C development, integration and test. Initiated ARCI-(V)5 development. - (U) (\$3.894) Continued TECHEVAL and OPEVAL (excluding Arctic Operations). - (U) (\$2.896) Continued engineering support for integration on the AN/UYQ-70 Displays in backfit submarines. <p>2. (U) FY 2001 Plan:</p> <ul style="list-style-type: none"> - (U) (\$2.413) Complete TECHEVAL and OPEVAL (including Arctic Operations). - (U) (\$1.160) Complete Block 3B2 and 3C and continue ARCI-(V)5 development and integration. - (U) (\$0.036) Portion of extramural program reserved for Small Business Innovative Research assessment in accordance with 15 USC 638. <p>Note: FY2002 & out Funds shifted to PE 0604503N Project F0219 for display purposes due to similar developmental efforts under the ARCI APB effort.</p>										

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<p>B. (U) Program Change Summary</p> <table style="width: 100%; margin-top: 20px;"> <thead> <tr> <th></th> <th style="text-align: right;"><u>FY 2000</u></th> <th style="text-align: right;"><u>FY 2001</u></th> <th style="text-align: right;"><u>FY 2002</u></th> </tr> </thead> <tbody> <tr> <td>(U) FY 2001 President's Budget:</td> <td style="text-align: right;">9.504</td> <td style="text-align: right;">3.642</td> <td style="text-align: right;">0.000</td> </tr> <tr> <td>(U) Appropriated Value:</td> <td style="text-align: right;">9.546</td> <td style="text-align: right;">3.642</td> <td style="text-align: right;">0.000</td> </tr> <tr> <td>(U) Adjustments to FY2000/2001 Appropriated Value/ FY2001 President's Budget:</td> <td style="text-align: right;">-0.362</td> <td style="text-align: right;">-0.033</td> <td style="text-align: right;">0.000</td> </tr> <tr> <td>(U) FY 2002 PRES Budget Submit:</td> <td style="text-align: right;">9.184</td> <td style="text-align: right;">3.609</td> <td style="text-align: right;">0.000</td> </tr> </tbody> </table> <p style="margin-top: 20px;">(U) Change Summary Explanation:</p> <p style="margin-top: 20px;">(U) Funding: FY00 net decrease reflects reductions for Small Business Innovative Research (-\$.139) and undistributed reductions of (-\$.223). The FY01 reduction of (-\$.033) are undistributed reductions.</p> <p style="margin-top: 20px;">(U) Schedule: Three (3) additional software block upgrades have been added as 3B1, 3B2 and 3C. The completion of Block 3B2 has been rescheduled from the last quarter of FY00 to the first quarter of FY01. The completion of TECHEVAL/OPEVAL has been rescheduled from the last quarter of FY00 to the third quarter of FY01.</p> <p style="margin-top: 20px;">(U) Technical: Due to a program replan B2-CI Phase 2 has been replaced by ARCI-(V)5. ARCI-(V)5 brings ARCI Phases II-IV to the Seawolf Class submarines. ARCI-(V)5 adds improved Towed Array (including concurrent spatial vernier threatband processing), Large Spherical Array and High Frequency Array improvements as well as replacing the aging and obsolete Enhanced Modular Signal Processors with COTS based Multi Purpose Processors. The rescheduling of Block 3B2 and the subsequent rescheduling of TECHEVAL and OPEVAL can be attributed to additional software fixes that were required for delivery in the Block 3B2 product prior to the conduct of TECHEVAL/OPEVAL.</p>					<u>FY 2000</u>	<u>FY 2001</u>	<u>FY 2002</u>	(U) FY 2001 President's Budget:	9.504	3.642	0.000	(U) Appropriated Value:	9.546	3.642	0.000	(U) Adjustments to FY2000/2001 Appropriated Value/ FY2001 President's Budget:	-0.362	-0.033	0.000	(U) FY 2002 PRES Budget Submit:	9.184	3.609	0.000
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<p>C. (U) Other Program Funding Summary:</p> <table><thead><tr><th></th><th>FY 2000</th><th>FY 2001</th><th>FY 2002</th></tr></thead><tbody><tr><td>OPN BLI: 214700*</td><td>183.030</td><td>86.140</td><td>76.404</td></tr></tbody></table> <p>* The AN/BSY-2 Program shares the above OPN funding line with other PMS425 Programs</p> <p>(U) Related RDT&E,N:</p> <ul style="list-style-type: none">(U) PE 0604561N (SSN-21 Development)(U) PE 0604558N (Virginia Class Design Development)(U) PE 0604503N (Submarine Sonar Improvements)(U) PE 0604574N (Navy Tactical Computer Resources) <p>D. (U) Acquisition Strategy: The Full Scale Development and Limited Production contract is essentially complete. The follow-on contract with Lockheed-Martin Corporation, Syracuse is a sole source Cost Plus Award Fee (CPAF) with multiple option years ending in FY 2001. A contract extension through is contemplated followed by a new sole source contract with Lockheed Martin Corporation.</p>				FY 2000	FY 2001	FY 2002	OPN BLI: 214700*	183.030	86.140	76.404
	FY 2000	FY 2001	FY 2002							
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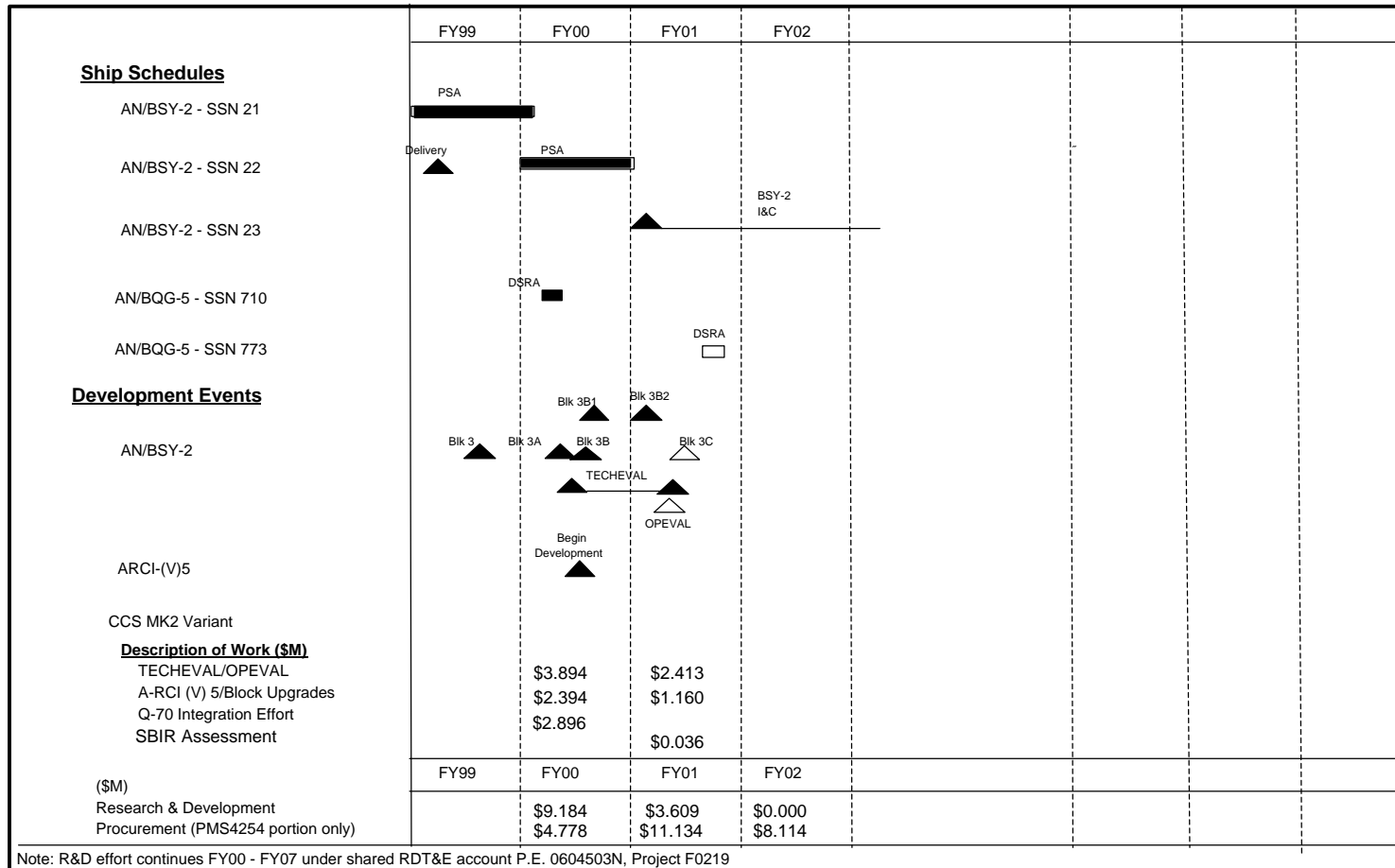
APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

RESEARCH DEVELOPMENT TEST & EVALUATION, NAVY/BA-5

Submarine Combat System/0604524N

E. (U) Schedule Profile:



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Exhibit R-3 Cost Analysis (page 1)							DATE:		June 2001			
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT			PROJECT NAME AND NUMBER						
RDT&E, N/BA-5			Submarine Combat System/0604524N			AN/BSY-2/F1941						
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			
Primary Hardware Development	FFP	IBM Manassas, VA	16.800	0.000	N/A	0.000	N/A	0.000	N/A			
Engineering Services	FFP	DDL Omni Engineering, VA	0.000	2.896	04/00	0.000	N/A	0.000	N/A			
Systems Engineering	WR	NUWC Newport, RI	300.722	1.386	10/99	1.025	10/00	0.000	N/A			
Primary/Ancillary HW &SW Dev	CPIF	LMC Syacuse, NY	1206.800	0.000	N/A	0.000	N/A	0.000	N/A			
Team Trainer Development	CPIF	Raytheon Portsmouth, RI	22.300	0.000	N/A	0.000	N/A	0.000	N/A			
Hardware Engineering	WR	NSWC, Crane, IN	15.600	0.000	N/A	0.000	N/A	0.000	N/A			
Trainer Development Support	WR	NTSC Orlando, FL	5.300	0.000	N/A	0.000	N/A	0.000	N/A			
Software Dev. & Systems Engineering	CPAF	Lockheed Syracuse, NY	23.539	0.644	11/99	0.000	N/A	0.000	N/A			
Government Furnished Property	Various	Various	3.200	0.000	N/A	0.000	N/A	0.000	N/A			
Miscellaneous	Various	Various	34.800	0.000	N/A	0.036	N/A	0.000	N/A			
Software Dev. & Systems Engineering	CPFF	LMC, Manassas, VA	0.000	0.200	07/00	0.000	N/A	0.000	N/A			
Engineering Services	CPFF	ARL, University of Texas	0.000	0.000	N/A	0.035	N/A	0.000	N/A			
GFE Enhanced Modular Signal Proc	CPIF	AT&T Greensboro, NC	39.900	0.000	N/A	0.000	N/A	0.000	N/A			
Award Fees	CPAF	Lockheed, Syracuse, NY	2.636	0.064	6/00 & 11/00	0.000	N/A	0.000	N/A			
Subtotal Product Development			1671.597	5.190		1.096		0.000	N/A			
Remarks: Award Fee: LMC, Syracuse CPAF contract: Maximum 10% award fee budgeted. The Lockheed Martin contract does not have a target value it is a Level of Effort CPAF contract.												
	Period	Rating	Percentage Awarded			Period	Rating	Percentage Awarded				
	10/1/96 - 3/31/97	Outstanding	100%			10/1/98-3/30/99	Outstanding	100%				
	4/1/97 - 9/30/97	Outstanding	100%			4/1/99-9/30/99	Outstanding	100%				
	10/1/97 - 3/31/98	Above Average	80%			10/1/99-3/31/00	Outstanding	100%				
	4/1/98-9/30/98	Outstanding	100%			4/1/00-9/30/00	Outstanding	100%				
Development Support Equipment												
Software Development												
Training Development												
Integrated Logistics Support												
Configuration Management												
Engineering Support	WR/RCP	NUWC Newport, RI	35.200	0.000		0.000		0.000				
Technical Data												
GFE												
Subtotal Support			35.200	0.000		0.000		0.000				
Remarks:												

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Exhibit R-3, Project Cost Analysis
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Developmental Test & Evaluation	CPAF	LMC, Syracuse, NY	0.000	0.486	11/99	0.293	11/00	0.000	N/A																																																																																													
Operational Test & Evaluation	WR	Arctic Sub Lab	0.000	0.000	N/A	0.120	10/00	0.000	N/A																																																																																													
Dev T&E, Operational T&E	WR	NUWC Newport, RI	4.652	3.351	10/98	2.000	10/00	0.000	10/00																																																																																													
Government Furnished Property	Various	Various	0.500	0.000	N/A	0.000	N/A	0.000	N/A																																																																																													
Tooling																																																																																																						
Award Fees	CPAF	LMC, Syracuse, NY	0.000	0.047	11/99	0.000	N/A	0.000	N/A																																																																																													
Subtotal T&E			5.152	3.884		2.413		0.000																																																																																														
Remarks: Test articles required in support of TECHEVAL/OPEVAL.																																																																																																						
<table border="0"> <tr> <td colspan="3"></td> <td colspan="3">FY 00</td> <td colspan="3"></td> <td colspan="3">FY 01</td> </tr> <tr> <td>Description</td> <td>Qty</td> <td>Cost</td> <td>Description</td> <td>Qty</td> <td>Cost</td> <td colspan="7"></td> </tr> <tr> <td>Range Support</td> <td></td> <td>.600</td> <td>Range Support</td> <td></td> <td>1.000</td> <td colspan="7"></td> </tr> <tr> <td>SSXBT/SSXSV</td> <td>75</td> <td>.023</td> <td colspan="10"></td> </tr> <tr> <td>ADCAP</td> <td>2</td> <td>.054</td> <td colspan="10"></td> </tr> <tr> <td>TOTEMs</td> <td>8</td> <td>.100</td> <td colspan="10"></td> </tr> <tr> <td>TLAM*</td> <td>1*</td> <td>3.500*</td> <td colspan="10"></td> </tr> </table>																FY 00						FY 01			Description	Qty	Cost	Description	Qty	Cost								Range Support		.600	Range Support		1.000								SSXBT/SSXSV	75	.023											ADCAP	2	.054											TOTEMs	8	.100											TLAM*	1*	3.500*										
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* Current plan has TLAM launch cost funded by PMA281 as part of Operational Tomahawk (OTL) requirement for FY00. an is not budoeted in this Prooram Elemer																																																																																																						
Contractor Engineering Support																																																																																																						
Government Engineering Support																																																																																																						
Program Management Support																																																																																																						
Mgt Spt Service& Eng Tech Services	CPAF	EG&G Gaithersburg, MD	76.900	0.000	N/A	0.000	N/A	0.000	N/A																																																																																													
Engineering Support	MIPR	Mitre McLean, VA	7.400	0.000	N/A	0.000	N/A	0.000	N/A																																																																																													
Travel	PD	PMS4254	0.000	0.100	10/99	0.100	10/00	0.000	N/A																																																																																													
Engineering Support	WR	SUBLANT	0.000	0.010	11/99	0.000	10/00	0.000	N/A																																																																																													
Overhead																																																																																																						
Subtotal Management			84.300	0.110		0.100		0.000																																																																																														
Remarks:																																																																																																						
Total Cost			1796.249	9.184		3.609		0.000																																																																																														
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