

CLASSIFICATION:

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EXHIBIT R-2, RDT&E Budget Item Justification							DATE: February 2000			
APPROPRIATION/BUDGET ACTIVITY RESEARCH DEVELOPMENT TEST & EVALUATION, NAVY/BA-5					R-1 ITEM NOMENCLATURE SSN-21 Development/0604561N					
COST (\$ in Million)		FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	Cost to Complete	Total Cost
Total PE Cost		24.446	31.825	6.617	5.994	4.917	4.921	3.938	0.000	1677.242
SSN-21 Development/F1946		24.446	31.825	6.617	5.994	4.917	4.921	3.938	0.000	1677.242
Quantity of RDT&E Articles										0.000
<p>A. (U) Mission Description and Budget Item Justification: The SEAWOLF submarine is a multi-missionship that will introduce unprecedented performance capabilities. It is the quietest, most heavily-armed attack submarine the Navy has ever built. The design of the SEAWOLF is based on an extensive research and development program and incorporates technological advancements to provide: order of magnitude improvement in ship quieting; improved acoustic sensors; more capable combat systems; greater weapon capacity and capability; quieter launch; weapon launch at high ship speed; advanced reactor; improved performance machinery program; an advanced propulsor; increased operating depth; improved ship control; and enhanced survivability.</p> <p>(U) Program Accomplishments and Plans:</p> <p>1. (U) FY 1999 Accomplishments :</p> <ul style="list-style-type: none"> - (U) (\$14.650) Commenced post-Post Shakedown Availability (PSA) trials, e.g., acoustic trials, and weapons/sonar certification. Continue Operational Test (OT) planning. Re-engineering and design to correct acoustic deficiencies including propulsor. Complete post-PSA analysis of Advanced Special Hull Treatment (ASHT) installation on SSN 21. - (U) (\$6.819) Re-engineering and correction of deficiencies in Non-Propulsion Electronics (NPE) systems including ship control, Weapons Stowage Handling System (WSHS), Exterior Communications Systems (ECS), Total Ship Monitoring System, etc. - (U) (\$2.977) Continued risk management efforts in all high risk areas. 										

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<p>2. (U) FY 2000 Plan:</p> <ul style="list-style-type: none">- (U) (\$21.913) Commence Operational Evaluation (OPEVAL)/Technical Evaluation (TECHEVAL).- (U) (\$4.000) Funds Live Fire Test & Evaluation requirements without performing FSST and restore the ship to its baseline condition.- (U) (\$5.912) Re-engineering and correction of deficiencies in NPE systems including ship control, WSHS, ECS, etc. Re-engineering and design to correct acoustic deficiencies including propulsor. Continue risk management efforts in all high risk areas. <p>3. (U) FY 2001 Plan</p> <ul style="list-style-type: none">- (U) (\$2.085) Complete Operational Evaluation (OPEVAL)/Technical Evaluation (TECHEVAL).- (U) (\$1.700) Funds Live Fire Test & Evaluation requirements without performing FSST and restore the ship to its baseline condition; funds Live Fire Test & Evaluation requirements without performing FSST.- (U) (\$2.832) Re-engineering and correction of deficiencies in NPE systems including ship control, WSHS, ECS, etc. Re-engineering and design to correct acoustic deficiencies including propulsor. Continue risk management efforts in all high risk areas.		

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<p>B. (U) Program Change Summary:</p> <table border="0"> <thead> <tr> <th></th> <th>FY 1999</th> <th>FY 2000</th> <th>FY 2001</th> </tr> </thead> <tbody> <tr> <td>FY 2000 President's Budget:</td> <td>27.456</td> <td>32.001</td> <td>6.546</td> </tr> <tr> <td>Appropriated Value:</td> <td>22.456</td> <td>32.001</td> <td>0.000</td> </tr> <tr> <td>Adjustment to FY 1999/2000 Appropriated Value:</td> <td>-3.010</td> <td>-0.176</td> <td>0.071</td> </tr> <tr> <td>FY 2000 President's Budget:</td> <td></td> <td></td> <td></td> </tr> <tr> <td>FY 2001 President's Budget Submit:</td> <td>24.446</td> <td>31.825</td> <td>6.617</td> </tr> </tbody> </table> <p>(U) <u>Change Summary Explanation</u></p> <p>(U) Funding: The FY99 net decrease is a result of Navy-wide reductions for Revised Economic Assumption (-\$.052M), Civilian Personnel Underexecution (-\$.031M), FFRDC (-\$.021M), Contract Advisory & Assistance (-\$.617M), Congressional Cut for Live Fire Testing (-\$5.000M), Small Business Innovative Research (-\$.241M), the Total Ship Monitoring System (+\$3.100M), Inflation (-\$.102M), minor program adjustments (-\$.046M). The FY 00 decrease is a result of an across-the-board reduction directed by Congress (-\$.176M). \$.492M portion of the extramural program is reserved for SBIR assessment in accordance with 15 USC 638. The FY01 is a result of Technology Insertion for SEAWOLF Submarines (+\$2.900M), Strategic Outsourcing redistribution (+\$.098M), NWCF Rates (+\$.039M), SSP-NUWC (-\$.004), Offsets to SSN 21 R&D (-\$2.900M), Nonpayroll Purchases Inflation (-\$.045M), and Active Navy Operations (-\$.017).</p> <p>(U) Schedule: No Schedule change.</p> <p>(U) Technical: No change.</p> <p>C. (U) Other Program Funding Summary</p> <table border="0"> <thead> <tr> <th></th> <th>FY 1999</th> <th>FY 2000</th> <th>FY 2001</th> <th>FY 2002</th> <th>FY 2003</th> <th>FY 2004</th> <th>FY 2005</th> <th>To Complete</th> <th>Total Cost</th> </tr> </thead> <tbody> <tr> <td>(U) SCN #201200</td> <td>34.481</td> <td>19.402</td> <td>0.000</td> <td>10.953</td> <td>2.047</td> <td>1.238</td> <td>0.582</td> <td>0</td> <td>8126.791</td> </tr> <tr> <td>(U) MILCON P-398</td> <td>0.000</td> <td>0.000</td> <td>0.000</td> <td>0.000</td> <td>0.000</td> <td>0.000</td> <td>0.000</td> <td>0</td> <td>27.300</td> </tr> </tbody> </table>					FY 1999	FY 2000	FY 2001	FY 2000 President's Budget:	27.456	32.001	6.546	Appropriated Value:	22.456	32.001	0.000	Adjustment to FY 1999/2000 Appropriated Value:	-3.010	-0.176	0.071	FY 2000 President's Budget:				FY 2001 President's Budget Submit:	24.446	31.825	6.617		FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Cost	(U) SCN #201200	34.481	19.402	0.000	10.953	2.047	1.238	0.582	0	8126.791	(U) MILCON P-398	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0	27.300
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RESEARCH DEVELOPMENT TEST & EVALUATION, NAVY/BA-5					SSN-21 Development/0604561N				
	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Cost
(U) OPN #094900, #51000, #094100	22.932	47.070	12.101	8.085	19.077	0.193	9.991	0	360.200
(U) Related RDT&E:									
(U) PE 0603570N (Advanced Nuclear Power Systems)									
(U) PE 0604524N (Submarine Combat Systems)									
(U) PE 0604567N (Ship Contract Design/Live Fire T&E)									
D. (U) Acquisition Strategy:									
(U) To deliver three SEAWOLF submarines under cost cap									
(U) To continue to correct SEAWOLF Acoustics deficiencies.									
(U) To increase commonality with Virginia Class Submarines.									
(U) Continue to review all areas for possible cost reductions.									
E. (U) Schedule Profile:									
(U) See attached Planning Schedule Program									

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APPROPRIATION/BUDGET ACTIVITY

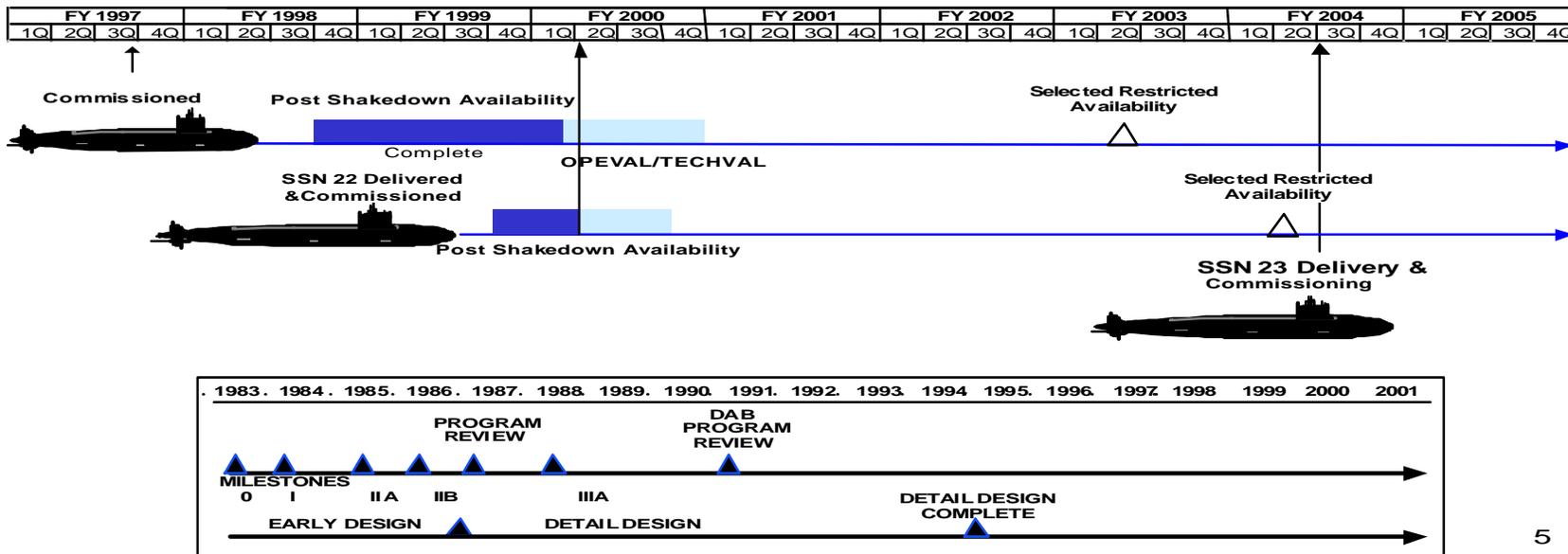
R-1 ITEM NOMENCLATURE

RESEARCH DEVELOPMENT TEST & EVALUATION, NAVY/BA-5

Program Element (PE) Name and No. SSN-21 Development/0604561N



Program Timeline



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Exhibit R-3 Cost Analysis (page 1)										DATE: February 2000		
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT			PROJECT NAME AND NUMBER						
RDT&E, N/BA-5			SSN-21 Development/0604561N			SSN-21 Development/F1946						
Cost Categories (Tailor to WBS, or System/Item Requirements)	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 99 Cost	FY 99 Award Date	FY 00 Cost	FY 00 Award Date	FY 01 Cost	FY 01 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Primary Hardware Development											0.000	
Ancillary Hardware Development											0.000	
Systems Engineering	SS/CPFF	General Dynam Groton, CT	355.559	10.832	Various	0.885	Various	0.879		1.631	369.786	371.039
Systems Engineering	SS/CPFF	NNS Newport News, VA	115.960	0.729	Various	0.990	Various	0.060		0.239	117.978	119.250
Systems Engineering	WR/RC	NSWC Carderock, MD	311.781	2.248	Various	1.116	Various	0.212		0.759	316.116	
Systems Engineering	WR	NUWC Newport, RI	44.282	2.301	Various	1.212	Various	0.125		0.565	48.485	
Systems Engineering	Various	Various	465.605	1.240	Various	0.862	Various	1.808		11.730	481.245	
Licenses											0.000	
Tooling											0.000	
GFE											0.000	
Award Fees											0.000	
Subtotal Product Development			1293.187	17.350		5.065		3.084		14.924	1333.610	
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: February 2000		
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT			PROJECT NAME AND NUMBER						
RDT&E, N/BA-5			SSN-21 Development/0604561N			SSN-21 Development/F1946						
Cost Categories (Tailor to WBS, or System/Item Requirements)	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 99 Cost	FY 99 Award Date	FY 00 Cost	FY 00 Award Date	FY 01 Cost	FY 01 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Developmental Test & Evaluation	SS/CPFF	General Dynam Groton, CT	68.670	0.046		0.000				0.000	68.716	
Developmental Test & Evaluation	WR	NSWC Carderock, MD	82.268	2.536	Various	9.543	Various	0.500	Various	0.000	94.847	
Developmental Test & Evaluation	Various	Various	108.581	2.423	Various	13.650	Various	1.185	Various	4.846	130.685	
Operational Test & Evaluation											0.000	
Tooling											0.000	
GFE											0.000	
Subtotal T&E			259.519	5.005		23.193		1.685		4.846	294.248	
Remarks:												
Contractor Engineering Support											0.000	
Government Engineering Support											0.000	
Program Management Support & ETS	Various	Various	41.878	2.091	Various	3.567	Various	1.848		0.000	49.384	
Travel											0.000	
Labor (Research Personnel)											0.000	
Overhead											0.000	
Subtotal Management			41.878	2.091		3.567		1.848		0.000	49.384	
Remarks:												
Total Cost			1594.584	24.446		31.825		6.617		19.770	1677.242	
Remarks:												

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Exhibit R-3, Project Cost Analysis
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