

CLASSIFICATION:

UNCLASSIFIED

EXHIBIT R-2, RDT&E Budget Item Justification							DATE:			
APPROPRIATION/BUDGET ACTIVITY							R-1 ITEM NOMENCLATURE			
RESEARCH DEVELOPMENT TEST & EVALUATION, NAVY/BA-5							SSN-21 Development/0604561N			
COST (\$ in Millions)		FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	Cost to Complete	Total Cost
Total PE Cost		6.322	5.711	3.981	4.262	3.102	3.106	3.148	0.000	1679.167
SSN-21 Development/F1946		6.322	5.711	3.981	4.262	3.102	3.106	3.148	0.000	1679.167
Quantity of RDT&E Articles										0.000
A. (U) Mission Description and Budget Item Justification: The SEAWOLF submarine is a multi-mission ship 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.										
(U) Program Accomplishments and Plans:										
1. (U) FY 2001 Accomplishments :										
- (U) (\$2.214) Continued Operational Evaluation (OPEVAL)/Technical Evaluation (TECHEVAL).										
- (U) (\$1.069) Funded Component Shock Tests and Analysis including Wide Aperture Array, Ventilation Hangers and components tested during AB1 Improved Propulsion Machinery Program Shock Platform trials.										
- (U) (\$3.039) Re-engineered and corrected deficiencies in Non-Propulsion Electronics (NPE) systems including Ship Control System, Exterior Communications System (ECS), and Total Ship Monitoring System (TSMS). Investigated acoustic deficiencies relating to Propulsor, Sail and Main Ballast Tanks. Continued risk management efforts in all high risk areas.										

R-1 SHOPPING LIST - Item No. 123

Exhibit R-2, RDT&E Budget Item Justification

(Exhibit R-2, page 1 of 7)

UNCLASSIFIED

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APPROPRIATION/BUDGET ACTIVITY RESEARCH DEVELOPMENT TEST & EVALUATION, NAVY/BA-5	R-1 ITEM NOMENCLATURE SSN-21 Development/0604561N	
<p>2. (U) FY 2002 Plan:</p> <ul style="list-style-type: none">- (U) (\$.620) Conduct the analysis and reporting in compliance with Class plans and Director, Operational Test & Evaluation (DOT&E) requirements resulting from the Operational Evaluation (OPEVAL)/Technical Evaluation (TECHEVAL).- (U) (\$.535) Conduct component shock tests and analysis and continue shock qualification for Contractor Furnished Equipment (CFE) and Government Furnished Equipment (GFE) in compliance with Class plans and DOT&E requirements.- (U) (\$4.556) Re-engineering and correcting deficiencies in Non-Propulsion Electronics Systems including Ship Control System and Exterior Communications System. Multifunctional Crypto System Assessment and Development. Investigation of acoustic deficiencies, including wind tunnel testing associated with Sail and Main Ballast Tanks. Continue risk management efforts in all high risk areas.		
<p>3. (U) FY 2003 Plan</p> <ul style="list-style-type: none">- (U) (\$.354) Complete the analysis and reporting in compliance with Class plans and DOT&E requirements resulting from the Operational Evaluation (OPEVAL)/Technical Evaluation (TECHEVAL).- (U) (\$.385) Conduct component shock tests and analysis and continue shock qualification for Contractor Furnished Equipment (CFE) and Government Furnished Equipment (GFE) in compliance with Class plans and DOT&E requirements.- (U) (\$3.242) Re-engineering and correction of Non-Propulsion Electronics (NPE) Systems, including Ship Control System, and Exterior Communication System (ECS). Investigation of acoustic deficiencies associated with Main Ballast Tanks and Sail. Continue risk management efforts in all high risk areas.		

R-1 SHOPPING LIST - Item No. 123

Exhibit R-2, RDT&E Budget Item Justification
(Exhibit R-2, page 2 of 7)

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<p>B. (U) Program Change Summary:</p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th></th> <th style="text-align: right;">FY 2001</th> <th style="text-align: right;">FY 2002</th> <th style="text-align: right;">FY 2003</th> </tr> </thead> <tbody> <tr> <td>(U) FY 2002 President's Budget:</td> <td style="text-align: right;">6.557</td> <td style="text-align: right;">5.770</td> <td style="text-align: right;">4.812</td> </tr> <tr> <td>(U) Appropriated Value:</td> <td style="text-align: right;">6.617</td> <td style="text-align: right;">5.770</td> <td style="text-align: right;">0.000</td> </tr> <tr> <td>(U) Adjustments to FY2001/2002 Appropriated Value/FY 2002 President's Budget:</td> <td style="text-align: right;">-0.295</td> <td style="text-align: right;">-0.059</td> <td style="text-align: right;">-0.831</td> </tr> <tr> <td>(U) FY 2003 Pres Budget Submit:</td> <td style="text-align: right;">6.322</td> <td style="text-align: right;">5.711</td> <td style="text-align: right;">3.981</td> </tr> </tbody> </table> <p>(U) <u>Change Summary Explanation:</u></p> <p>(U) Funding: The FY01 decrease is a result of the Small Business Innovation Research (SBIR) Assessment in accordance with 15 USC 638 (-\$89K), ASN (RD&A) administrative hold to satisfy BTR 01-14 (-\$130K), a .7% Pro-Rata Reduction (across the board) (-\$46K), a Government-wide Rescission of .22% (\$-14K), and cancelled accounts bills assessments (-\$16K). The FY 02 decrease is a result of Management Reform Section 8123 (-\$51K) and a FFRDC reduction (-\$8K). The FY 03 decrease is a result of a BSO realignment (-\$15K), reduction for SYSCOM Contractor Support (-\$655K), and various program adjustments (NWCF Rates) (-\$161K).</p> <p>(U) Schedule: No Schedule change.</p> <p>(U) Technical: No change.</p> <p>C. (U) Other Program Funding Summary:</p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th></th> <th style="text-align: right;">FY 2001</th> <th style="text-align: right;">FY 2002</th> <th style="text-align: right;">FY 2003</th> <th style="text-align: right;">FY 2004</th> <th style="text-align: right;">FY 2005</th> <th style="text-align: right;">FY 2006</th> <th style="text-align: right;">FY 2007</th> <th style="text-align: right;">To Complete</th> <th style="text-align: right;">Total Cost</th> </tr> </thead> <tbody> <tr> <td>(U) SCN #201200</td> <td style="text-align: right;">0.277</td> <td style="text-align: right;">11.830</td> <td style="text-align: right;">1.302</td> <td style="text-align: right;">24.592</td> <td style="text-align: right;">0.253</td> <td style="text-align: right;">0.000</td> <td style="text-align: right;">0.000</td> <td style="text-align: right;">0</td> <td style="text-align: right;">8216.217</td> </tr> <tr> <td>(U) MILCON P-398</td> <td style="text-align: right;">0.000</td> <td style="text-align: right;">0.000</td> <td style="text-align: right;">0.000</td> <td style="text-align: right;">0.000</td> <td style="text-align: right;">0.000</td> <td style="text-align: right;">0.000</td> <td style="text-align: right;">0.000</td> <td style="text-align: right;">0</td> <td style="text-align: right;">27.300</td> </tr> </tbody> </table>											FY 2001	FY 2002	FY 2003	(U) FY 2002 President's Budget:	6.557	5.770	4.812	(U) Appropriated Value:	6.617	5.770	0.000	(U) Adjustments to FY2001/2002 Appropriated Value/FY 2002 President's Budget:	-0.295	-0.059	-0.831	(U) FY 2003 Pres Budget Submit:	6.322	5.711	3.981		FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	To Complete	Total Cost	(U) SCN #201200	0.277	11.830	1.302	24.592	0.253	0.000	0.000	0	8216.217	(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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R-1 SHOPPING LIST - Item No. 123

Exhibit R-2, RDT&E Budget Item Justification

(Exhibit R-2, page 3 of 7)

UNCLASSIFIED

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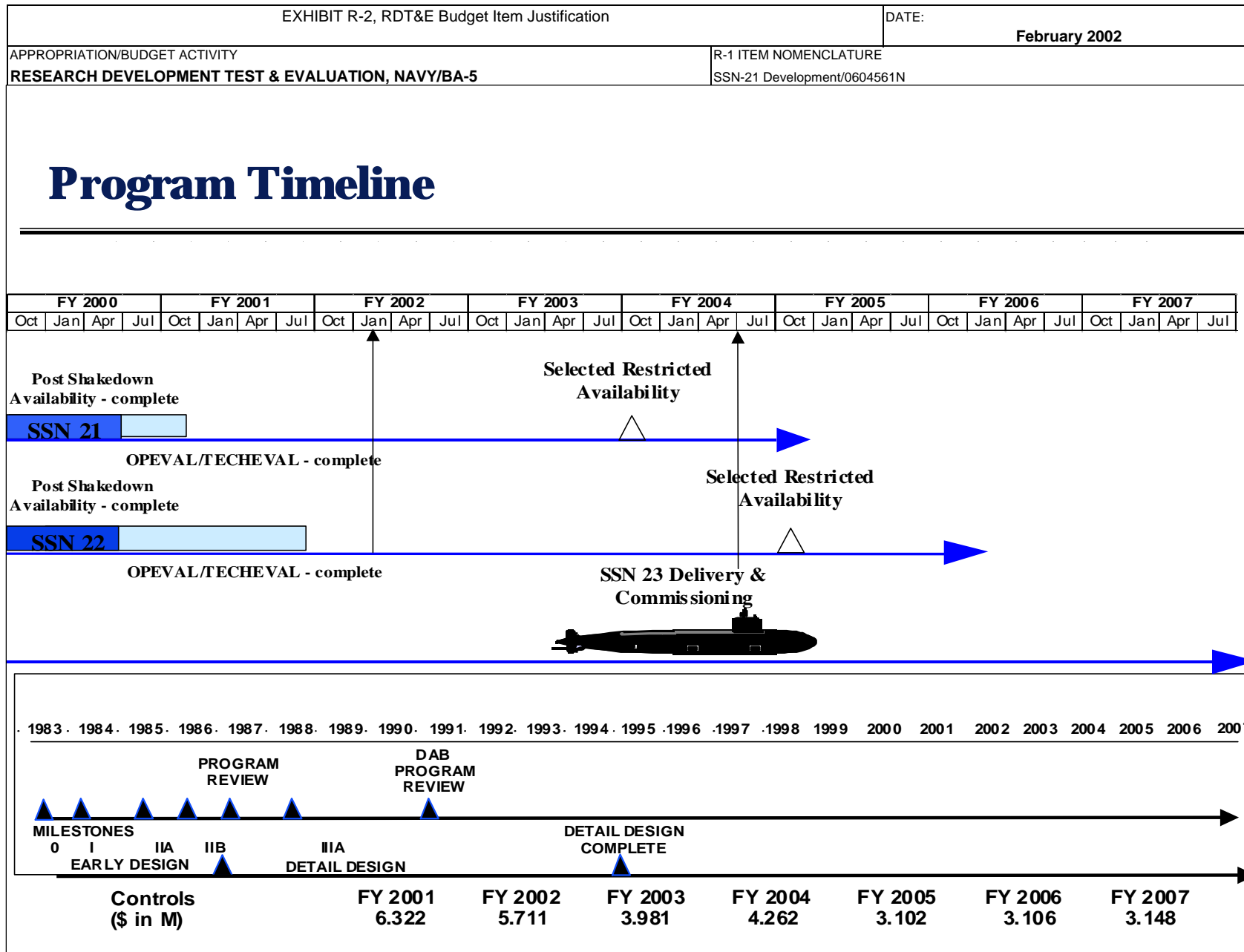
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RESEARCH DEVELOPMENT TEST & EVALUATION, NAVY/BA-5								R-1 ITEM NOMENCLATURE	
								SSN-21 Development/0604561N	
	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	To Complete	Total Cost
(U) OPN #51000/05, #094100/05	11.925	7.979	18.737	0.189	9.905	10.067	10.266	0	381.459
(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									

R-1 SHOPPING LIST - Item No. 123

Exhibit R-2, RDT&E Budget Item Justification

(Exhibit R-2, page 4 of 7)

UNCLASSIFIED



R-1 SHOPPING LIST - Item No. 123

Exhibit R-2, RDT&E Budget Item Justification
(Exhibit R-2, page 5 of 7)

CLASSIFICATION:

UNCLASSIFIED

Exhibit R-3 Cost Analysis (page 1)								DATE: February 2002				
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 01 Cost	FY 01 Award Date	FY 02 Cost	FY 02 Award Date	FY 03 Cost	FY 03 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	368.549	0.332	Various	0.150	Various	0.250		4.132	373.413	373.413
Systems Engineering	SS/CPFF	NNS Newport News, VA	117.679	0.293	Various	0.320	Various	0.414		0.463	119.169	119.169
Systems Engineering	WR/RC	NSWC Carderock, MD	315.288	1.216	Various	1.790	Various	1.093		3.440	322.827	
Systems Engineering	WR	NUWC Newport, RI	47.795	0.843	Various	0.308	Various	0.100		0.000	49.046	
Systems Engineering	Various	Various	466.959	0.480	Various	1.743	Various	1.770		2.230	473.182	
Licenses											0.000	
Tooling											0.000	
GFE											0.000	
Award Fees											0.000	
Subtotal Product Development			1316.270	3.164		4.311		3.627		10.265	1337.637	
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:												

R-1 SHOPPING LIST - Item No. 123

Exhibit R-3, Project Cost Analysis
(Exhibit R-3, page 6 of 7)

UNCLASSIFIED

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Exhibit R-3 Cost Analysis (page 2)								DATE: February 2002				
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 01 Cost	FY 01 Award Date	FY 02 Cost	FY 02 Award Date	FY 03 Cost	FY 03 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Developmental Test & Evaluation	SS/CPFF	General Dynam Groton, CT	68.994	0.000		0.000		0.000		0.000	68.994	
Developmental Test & Evaluation	WR	NSWC Carderock, MD	95.350	0.450	Various	0.000	Various	0.254	Various	0.350	96.404	
Developmental Test & Evaluation	Various	Various	122.093	1.814	Various	0.690	Various	0.100	Various	3.003	127.700	
Operational Test & Evaluation											0.000	
Tooling											0.000	
GFE											0.000	
Subtotal T&E			286.437	2.264		0.690		0.354		3.353	293.098	
Remarks:												
Contractor Engineering Support											0.000	
Government Engineering Support											0.000	
Program Management Support & ETS	Various	Various	46.828	0.894	Various	0.710	Various	0.000		0.000	48.432	
Travel											0.000	
Labor (Research Personnel)											0.000	
Overhead											0.000	
Subtotal Management			46.828	0.894		0.710		0.000		0.000	48.432	
Remarks:												
Total Cost			1649.535	6.322		5.711		3.981		13.618	1679.167	
Remarks:												

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