CLASSIFICATION:	UNCLASSIFIED						
EXHIBIT R-2, RDT&E BUDGET ITEM JUSTIFICATION						DATE February 2008	
APPROPRIATION/BUDGET ACTIVITY **RDTEN/BA 5**		R-1 ITEM NOMENCLATURE **0604561N/SSN-21 DEVELOPMENTS**					
COST (In Millions)	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
Total PE Cost	2.548	2.403	0.000	0.000	0.000	0.000	0.000
1946 / SSN-21 DEVELOPMENT	2.548	2.403	0.000	0.000	0.000	0.000	0.000

A. MISSION DESCRIPTION:

A. (U) MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

1946 SSN-21 Developments: The SEAWOLF Submarine is a multi-mission ship that provides 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. SEAFAC Range Upgrade funding is included in 1946 in FY07 - $1.9M.

SEAFAC Range Upgrade: The SEAWOLF Class submarine is a multi-mission ship that provides numerous unprecedented submarine performance capabilities such as more capable combat systems, greater weapons capacity and capability, advanced reactor, improved acoustic sensors, increased operating depth, improved ship control, and enhanced survivability. Among these capabilities is an unprecedented acoustic stealth performance as a result of an order of magnitude improvement in ship quieting. Maintaining the acoustic stealth advantage and upholding the effectiveness and survivability of the SEAWOLF and future class submarines require that radiated acoustic signatures are periodically measured and understood. To this end, Southeast Alaska Acoustic Measurement Facility (SEAFAC) range will be upgraded with new underwater acoustic measurement systems capable of measuring new generation quiet-class submarines stationed in the Pacific fleet. The SEAFAC Range Upgrade Program comprises of a multi-year effort to design, develop, procure, install and test High Gain Measurement Systems (HGMS) in the Static and Underway Sites at SEAFAC. Efforts to upgrade the Static Site began in FY03 and efforts to upgrade the Underway Site began in FY04. (Note: Please refer to RDT&E,N PE0604561N/1946 R2 and OPN BLI 094200/H1RC08 budget exhibits for associated SEAFAC Upgrade Program funding.)

CLASSIFICATION:	UNCLASSIFIED	
EXHIBIT R-2, RDT&E BUDGET ITEM JUSTIFICATION (CONTINUATION)		DATE February 2008
APPROPRIATION/BUDGET ACTIVITY **RDTEN/BA 5**	R-1 ITEM NOMENCLATURE **0604561N/SSN-21 DEVELOPMENTS**	

B. PROGRAM CHANGE SUMMARY:

Funding:	FY 2007	FY 2008	FY 2009
Previous President's Budget (FY08 Pres Controls)	2.548	2.457	2.538
Current BES/President's Budget (FY09 Pres Controls)	2.548	2.403	0.000
Total	0.000	-0.054	-2.538
Summary of Adjustments			
Contractor Efficiencies	0.000	-0.004	0.000
Realignment of Program Funds Previously Use	0.000	0.000	-2.538
Revised Economic Assumptions	0.000	-0.012	0.000
Section 8025: FFRDC Reduction	0.000	-0.002	0.000
Execution Realign SB Issue	0.000	-0.036	0.000
Subtotal Adjustments	0.000	-0.054	-2.538
Schedule:			
Not applicable			
Technical			
Not applicable			

C. OTHER PROGRAM FUNDING SUMMARY:

Line Item No. & Name

(U) Related RDT&E:

(U) P.E. 0603570N (Advanced Nuclear Power Systems)

(U) P.E. 0604524N (Submarine Combat Systems)

(U) P.E. 0604567N (Ship Contract Design/Live Fire T&E)

D. ACQUISITION STRATEGY:

(U) Delivered 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. MAJOR PERFORMERS:

Naval Surface Warfare Center (NSWC) Carderock, MD -FY07 - $1.908M (Acoustics, NPE, Shock, Test & Evaluation, SEAFAC and Tech Insertion), FY08 - $1.968 M (Acoustics and Tech Insertion). Contract award was November 2006 for FY07. Contract awards scheduled for February 2008 (FY08).

CLASSIFICATION:	UNCLASSIFIED						
EXHIBIT R-2a, RDT&E PROJECT JUSTIFICATION					DATE February 2008		
APPROPRIATION/BUDGET ACTIVITY **RDTEN/BA 5**	PROGRAM ELEMENT NUMBER AND NAME **0604561N/SSN-21 DEVELOPMENTS**				PROJECT NUMBER AND NAME **1946/SSN-21 DEVELOPMENT**		
COST (In Millions)	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
Project Cost	2.548	2.403	0.000	0.000	0.000	0.000	0.000
RDT&E Articles Qty	0	0	0	0	0	0	0

A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

A. (U) MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

1946 SSN-21 Developments: The SEAWOLF Submarine is a multi-mission ship that provides 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. SEAFAC Range Upgrade funding is included in 1946 in FY07 - $1.9M.

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CLASSIFICATION:	UNCLASSIFIED		
EXHIBIT R-2a, RDT&E PROJECT JUSTIFICATION			DATE February 2008
APPROPRIATION/BUDGET ACTIVITY **RDTEN/BA 5**	PROGRAM ELEMENT NUMBER AND NAME **0604561N/SSN-21 DEVELOPMENTS**	PROJECT NUMBER AND NAME **1946/SSN-21 DEVELOPMENT**	

B. ACCOMPLISHMENTS/PLANNED PROGRAM:

	FY 2007	FY 2008	FY 2009
Accomplishments/Effort/Subtotal Cost	1.908	0.000	0.000
RDT&E Articles Quantity	0	0	0

FY-07 Plan: System test and validation, and corrective action efforts are planned for the SEAFAC Static Site. System development, engineering, and integration efforts are planned for the SEAFAC Underway Site.

Note: Please refer to OPN BLI 094200/H1RC08 P5 budget exhibits for associated SEAFAC Upgrade Program funding.

	FY 2007	FY 2008	FY 2009
Accomplishments/Effort/Subtotal Cost	0.075	0.671	0.000
RDT&E Articles Quantity	0	0	0

FY-07, FY-08 Plan: Re-engineering and correction of Ship Control System (SCS) and acoustic sail deficiencies.

	FY 2007	FY 2008	FY 2009
Accomplishments/Effort/Subtotal Cost	0.565	0.000	0.000
RDT&E Articles Quantity	0	0	0

FY-07, Plan: Re-engineering and correction of interfaces to the External Hydraulic Pump.

	FY 2007	FY 2008	FY 2009
Accomplishments/Effort/Subtotal Cost	0.000	1.732	0.000
RDT&E Articles Quantity	0	0	0

Technology Insertion for the SSN23.1.786