#### CLASSIFICATION:

EXHIBIT R-2, RDT&E Budget Item Justification	F	Y 2007 Preside	DATE:									
-				-		Februa	ry 2006					
APPROPRIATION/BUDGET ACTIVITY			R-1 ITEM NOMENCLATURE PE 0603564N/SHIP PRELIM DESIGN & FEASIBILITY STUDIES									
RDTEN/BA-4			PE 0603564N/SHI	P PRELIM DESIGN	& FEASIBILITY S	TUDIES						
COST (\$ in Millions)	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011					
Total PE Cost	0.000	26.615	21.314	13.687	0.588	0.493	0.467					
0408 Ship Development (ADV)	0.000	0.000	0.558	0.588	0.588	0.493	0.467					
3127 Sea Base to Shore Connectors	0.000	14.198	13.380	13.099	0.000	0.000	0.000					
3131 Intratheater Connectors	0.000	4.775	0.000	0.000	0.000	0.000	0.000					
3132 Intertheater Connectors	0.000	7.642	7.376	0.000	0.000	0.000	0.000					

A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION: Initial Capabilities and potential Material Approach Alternatives (ship concepts), identified in PE 0603563N (Ship Concept Advanced Design) or other efforts are transitioned to and further developed by this program after an Initial Capabilities Document (ICD) is approved, and usually after an approved Concept Decision (CD). This project performs the Ship Feasibility Studies, including development of alternative ship concepts, required to address and support the Analysis of Alternatives (AOA) for new surface ships in the Navy Shipbuilding Plan. Under Acquisition Reform for new ships, traditional distinct phasing of the design process has been replaced with a continuous concurrent engineering process. This project performs impact studies of warfare, hull, mechanical and electrical subsystems on advanced ship designs; enhances ship/ship system design methodologies that support feasibility studies; develops and upgrades the engineering tools, especially ship synthesis models, used to support AOA studies and other engineering efforts accomplished during the feasibility study phase; evaluates advanced and alternative technologies and develops total ship concepts with these technologies to assess their suitability; develops the initial documentation and design methodology required by the government for the design of surface ships in the Shipbuilding Program in accordance with the requirements of the DoD 5000; supports the development of the Capabilities Development Document (CDD) and other documentation required at Milestone A. (which is usually program initiation for shipbuilding programs) and accomplishes other efforts for future ship acquisitions in support of a Milestone A. Ship Feasibility Study products include a description of the alternative ships' principal characteristics and mission critical subsystems, weight estimates, general arrangement sketches, technical risk assessments, and Life Cycle Cost estimate (LCCE). The objective of this project is to prov

#### Project Unit Descriptions are as follows:

(0408) Ship Development (ADV) - This project supports the evaluation of advanced and alternative technologies through the Surface Ship Technology (SURFTECH) process for suitability for meeting total ship concepts capability needs. The objective of this project is to provide the decision makers with feasible, affordable alternatives to be selected for further development.

(3127) Sea Base to Shore Connectors - This project supports continued development of AoA studies, and all technical, programmatic and contractual documentation required for the acquisition of the Sea Base Connector. The major effort is the engineering development of the technical and contractual definition of the Sea Base Connector design with sufficient details for the prospective offeror to make a sound estimate of construction cost and schedule. It also serves as the technical definition from which the offeror will develop the detail design and testing package required to build and test the craft.

(3131) Intratheater Connectors - Intratheater connectors, capable of self-deploying to the theater of operations, provide the air and surface means to move forces and supplies over operational distances within a theater. Intratheater connectors provide the JFC a mobility asset that enables rapid force closure to the sea base from advanced bases, movement of logistics, ship-to-ship and ship-to-shore replenishment, and in appropriate threat environments, the maneuver of forces to the shore. FY07 through FY11 requirements realigned to new PE 0208058N, Project 3131.

(3132) Intertheater Connectors - concept studies in support of ship system that will provide a highly flexible sea lift capability to quickly bring war material and strike aircraft from CONUS to the Seabase and secondarily provide high speed lift within the sea base.

#### CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification	F'	Y 2007 Preside	nt's Budget (\$M)	1	DATE:			
						Februa	ry 2006	
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMEI	NT NUMBER AND	NAME		PROJECT NUMBE	R AND NAME		
RDTEN/BA-4	PE 0603564N/SHI	IP PRELIM DES	IGN & FEASIBIL	ITY STUDIES	0408 SI	hip Developmen	t (ADV)	
COST (\$ in Millions)		FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
Project Cost		0.000	0.000	0.558	0.588	0.588	0.493	0.467
RDT&E Articles Qty								

#### A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

### (0408) Ship Development (ADV):

This project supports the evaluation of advanced and alternative technologies through the Surface Ship Technology (SURFTECH) process for suitability for meeting total ship concepts capability needs. The objective of this project is to provide the decision makers with feasible, affordable alternatives to be selected for further development.

In support of surface ship advanced technology development and transformation, the surface ship community has instituted a technology evaluation process to coordinate, identify, prioritize, and integrate technology insertion and development efforts and assist RDT&E community efforts to initiate appropriate technology development. The current acquisition guidelines require the development of critical technologies after Milestone A. If significant gap analysis, planning, and early development efforts are not conducted in parallel with Concept Development the Navy will not be able to provide broad, cross-platform direction to surface navy development efforts in an effective manner and will not effectively leverage limited resources to quicken the pace of both development and transition of critical mission technologies for timely acquisition.

### **CLASSIFICATION:**

EXHIBIT R-2a, RDT&E Budget Item Justification	FY 2007 OSD (\$M)	DATE:
		February 2006
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME
RDTEN/BA-4	PE 0603564N/SHIP PRELIM DESIGN & FEASIBILITY STUDIES	0408 Ship Development (ADV)

## B. Accomplishments/Planned Program

(0408) Ship Development (ADV)	FY 05	FY 06	FY 07
Accomplishments/Effort/Subtotal Cost	0.000	0.000	0.558
RDT&E Articles Quantity	0	0	0

As new ship concepts with desired mission capabilities are developed, SURFTECH will continuously identify, prioritize, and integrate technology insertion and development efforts and assist the RDT&E community efforts to initiate appropriate technology development. SURFTECH will provide continuous analysis of and feedback to ongoing technology development efforts to ensure project relevance and timely transition to meet acquisition schedules, which will be documented in the Technology Plan.

### **CLASSIFICATION:**

EXHIBIT R-2a, RDT&E Budget Item Justification	FY 2007 OSD (\$M	)		DATE:
				February 2006
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME			PROJECT NUMBER AND NAME
RDTEN/BA-4	PE 0603564N/SHIP PRELIM DESIGN & FE	ASIBILITY	STUDIES	0408 Ship Development (ADV)
C. PROGRAM CHANGE SUMMARY:				
Funding:	FY 2005	FY 2006	FY 2007	•
President's Budget 2006	0.000	0.000	0.000	
President's Budget 2007	0.000	0.000	0.558	
Total Adjustments	0.000	0.000	0.558	}
Summary of Adjustments				
Programmatic Changes	0.000	0.000	0.556	
Revised rates & inflation indices	0.000	0.000	0.002	<u>2</u>
Total Adjustment	0.000	0.000	0.558	3
Schedule:				
See R4/R4A Schedule.				
Technical:				
Not Applicable				

### CLASSIFICATION:

EXHIBIT R-2a, RDT&E Budget Item Justification	F	Y 2007 OSD (\$N	1)						DATE:
APPROPRIATION/BUDGET ACTIVITY		PROGRAM ELEN	AENT NILIMDED	AND NAME			PROJECT NUME	DED AND NAME	February 2006
RDTEN/BA-4					FEASIBILITY S	STUDIES	PROJECT NUME		elopment (ADV)
RUTEN/BA-4		PE 0003	004IN/SHIF FK	ELIWI DESIGN 6	PEASIBILITY	STUDIES		0406 Ship Deve	Hopment (ADV)
D. Other Program Funding Summary N/A	FY2005	FY2006	FY2007	FY2008	FY2009	FY2010	FY2011	To Complete	Total Cost
(U) Related RDT&E: N/A									
E. Acquisition Strategy:									
F. Major Performers:									
Field Activities & Locations - Work Performed TBD									
Contractors & Locations - Work Performed TBD									
				NG LIST Iton					

### CLASSIFICATION:

Exhibit R-3 Cost	FY 2007 OSD (\$M)								DATE:								
Exhibit R-3 Cost Analysis									February 2006								
APPROPRIATION/B		TY	PROGRAM	M ELEMENT					PROJECT N	IUMBER AN							
RDT&E, N /	BA-4			64N/SHIP PRELIM DI	ESIGN & FEA	SIBILITY ST	TUDIES		0408 Ship								
Cost Categories		Contract	Performing	Total				FY 05	-	FY 06		FY 07					
		Method	Activity &	PY s			FY 05	Award	FY 06	Award	FY 07	Award	Cost to	Total	Target Value		
		& Type	Location	Cost			Cost	Date	Cost	Date	Cost	Date	Complete		of Contract		
Primary Hardware D	evelopment	,											·	0.000			
Ancillary Hardware D														0.000			
Aircraft Integration	•													0.000			
Ship Integration														0.000			
Ship Suitability														0.000			
Systems Engineering	a													0.000			
Training Developmen														0.000			
Licenses														0.000			
Tooling														0.000			
GFE													1	0.000			
Award Fees														0.000			
Subtotal Product De	evelopment			0.000	0.000		0.00	00	0.000		0.000		0.000				
Development Support										1							
Software Development														0.000			
	pport													0.000			
Integrated Logistics Su																	
Integrated Logistics Su Configuration Manager														0.000			
Configuration Manager		Various	Various								0.100	2 QTR	0.383	0.000 0.000 0.000			
Configuration Manager Technical Data		Various Various	Various Various								0.100		0.383 1.531	0.000 0.000 0.000 0.483			
		_												0.000 0.000 0.000 0.483			
Configuration Manager Technical Data Studies & Analyses		_												0.000 0.000 0.000 0.483 1.931			
Configuration Manager Technical Data Studies & Analyses GFE		_		0.000	0.000		0.00	000	0.00			1 QTR		0.000 0.000 0.000 0.483 1.931 0.000			

### CLASSIFICATION:

FY 2007 OSD (\$M)									DATE:							
Exhibit R-3 Cost Analy	/sis (page 2)		112007	<b>4)</b>	,,				DATE.			February 2	2006			
APPROPRIATION/BUDGE	T ACTIVITY		PROGRAM ELEMENT						PROJECT N	UMBER AI	ND NAME					
RDT&E, N / BA	A-4		PE 0603564N/SHIP PRE	ELIM DE	ESIGN & FEA	SIBILITY ST	TUDIES		0408 Ship	Developm	ent (ADV)					
Cost Categories	Contract	Performing						FY 05		FY 06		FY 07				
	Method	Activity &	PY s				FY 05	Award	FY 06	Award	FY 07	Award	Cost to	Total	Target Value	
	& Type	Location	Cost				Cost	Date	Cost	Date	Cost	Date	Complete		of Contract	
Developmental Test & Eva														0.000		
Operational Test & Evalua														0.000		
Live Fire Test & Evaluation	า													0.000		
Test Assets														0.000		
Tooling														0.000		
GFE														0.000		
Award Fees														0.000		
Subtotal T&E				0.000	0.000		0.00	00	0.000	)	0.000	1	0.000	0.000	1	
Contractor Engineering Support	ort													0.000		
Government Engineering Sup	port													0.000		
Program management Suppor	rt Various	Various									0.058	1 QTR	0.222			
Travel														0.000		
Transportation														0.000		
SBIR Assessment														0.000		
Subtotal Management				0.000	0.000		0.00	00	0.000	)	0.058		0.222	0.280		
Remarks:						ı										
Total Cost				0.000	0.000		0.00	00	0.000	)	0.558		2.136	2.694		
Remarks:	<b>-</b>	+	<del></del>	2.230	2.000	!	- 0.00		3.00		3.000				+	

### CLASSIFICATION:

EXHIBIT R4, Schedule											07 OS															DATE		Fe	brua	ry 200	06		
APPROPRIATION/BUDGE RDT&E, N /	T ACTIVI <b>BA-</b> 4										GRAM 603564							ITV CT	UDIE			PROJ	ECT N	UMBE									
Fiscal Year	BA-4	•					20	05		PE UC	20		PPRE		20		SIDIL	11131	20				200	09	0400	Silit		<b>elopm</b> 010	ent (A	(DV)	201	1	
i isoai i eai	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	1	2	3	4
Concept/Tech Development Analysis														$\triangle$																			$\triangle$
Initial Technology Plan																$\triangle$																	
Technology Plan Updates																			Δ				$\triangle$				$\triangle$				Δ		
																																	Ì

## **CLASSIFICATION:**

Exhibit R-4a, Schedule Detail	FY 2007 OSD (\$	SM)				DATE:		
						F	ebruary 200	<b>16</b>
APPROPRIATION/BUDGET ACTIVITY	PROGRAM EL	EMENT			PROJECT NU	MBER AND NA	AME	
RDT&BA-4	PE 0603564N/	SHIP PRELIM	<b>DESIGN &amp; FE</b>	ASIBILITY STUD	04	08 Ship Deve	elopment (AD	OV)
Schedule Profile		FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
Concept/Tech Development Analysis				1Q-4Q	1Q-4Q	1Q-4Q	1Q-4Q	1Q-4Q
Initial Technology Plan				3rd Qtr				
Technology Plan Updates					2nd Qtr	2nd Qtr	2nd Qtr	2nd Qtr

#### CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		FY 2007 Preside	nt's Budget (\$M)	)	DATE:							
						February 2006						
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEM	ENT NUMBER AND	O NAME		PROJECT NUMBE	R AND NAME						
RDTEN/BA-4	PE 0603564N/SI	HIP PRELIM DES	SIGN & FEASIBIL	LITY STUDIES	3127 Sea Base t	o Shore Connec	ctors					
COST (\$ in Millions)		FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011				
Project Cost		0.000	14.198	13.380	13.099	0.000	0.000	0.000				
RDT&E Articles Qty												

#### A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

### (3127) Sea Base to Shore Connectors:

Provides the surface assault portion of the Joint Expeditionary Maneuver Warfare tactical solution set requirement to project, sustain, retrograde and re-employ joint combat power from the sea and Sea Base, independent of tides, water depth, underwater obstacles, or beach gradient. Provides the functional replacement for LCAC SLEP whose SLEP extended service life ends beginning in 2014. The program is currently developing an Initial Capabilities Document.

### **CLASSIFICATION:**

EXHIBIT R-2a, RDT&E Budget Item Justification	FY 2007 President's Budget (\$M)	DATE:
		February 2006
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME
RDTEN/BA-4	PE 0603564N/SHIP PRELIM DESIGN & FEASIBILITY STUDIES	3127 Sea Base to Shore Connectors
		•

### **B.** Accomplishments/Planned Program

(3127) Sea Base to Shore Connectors	FY 05	FY 06	FY 07	FY 08
Accomplishments/Effort/Subtotal Cost	0.000	14.198	13.380	13.099
RDT&E Articles Quantity	0	0	0	0

## Complete ICD in FY 05

Start and Complete AoA in FY 06

Start Concept Refinement in FY 06: Refine the initial concept and develop a technology development strategy. The ICD and AoA shall guide the Concept Refinement. Start Capability Development Document (CDD) in FY 06: CDD outlines an affordable increment of militarily useful, logistically supportable and technically mature capability. Start and Complete Technology Development in FY 07: Reduce technology risk and determine the appropriate set of technologies to be integrated into a full system.

### **CLASSIFICATION:**

EXHIBIT R-2a, RDT&E Budget Item Justification		FY 2007 Pre	sident's Budget (\$M)		D	ATE:
						February 2006
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEME	NT NUMBER	AND NAME		PROJECT NUM	BER AND NAME
RDTEN/BA-4	PE 0603564N/SH	IP PRELIM D	ESIGN & FEASIBILIT	Y STUDIES	3127 Sea Base	e to Shore Connectors
C. PROGRAM CHANGE SUMMARY:						
Funding:	FY 2005	FY 2006	FY 2007			
President's Budget 2006	0.000	14.415	13.849			
President's Budget 2007	0.000	<u>14.198</u>	<u>13.380</u>			
Total Adjustments	0.000	-0.217	-0.469			
Summary of Adjustments						
Programmatic Changes		0.000	-0.550			
Revised rates & inflation indices		0.000	0.081			
Sec 8125 Revised Economic Assumptions		-0.066	0.000			
Congressional Action 1% Reduction		<u>-0.151</u>	0.000			
Total	0.000	-0.217	-0.469			
Schedule:						
Not Applicable						
Technical:						
Not Applicable						
			2.4.0110000110			

#### CLASSIFICATION:

EXHIBIT R-2a, RDT&E Budget Item Justification		FY 2007 President	t's Budget (\$M)	1					DATE:
									February 2006
APPROPRIATION/BUDGET ACTIVITY		PROGRAM ELEMEN	NT NUMBER AND	NAME			PROJECT NUMBER	AND NAME	
RDTEN/BA-4		PE 0603564	N/SHIP PRELII	M DESIGN & FE	ASIBILITY STU	DIES	3127	7 Sea Base to S	hore Connectors
D. Other Program Funding Summary	FY2005	FY2006	FY2007	FY2008	FY2009	FY2010		To Complete	Total Cost
SCN 0204411N Surface Connector (5112)	0.000	0.000	0.000	0.000	0.000	98.000	207.080		305.080
(U) Related RDT&E:									
0604567 Sea Base Connector (3133)	0.000	0.000	0.000	9.466	20.001	9.946	2.019	0.000	41.432
0604567 Sea Base Connector (1803)	1.673	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.673

### E. Acquisition Strategy:

FY05 - ICD, FY06 - AoA, FY07 CDD, FY07 Concept Refinement, FY07 Technology Development

### F. Major Performers:

#### Field Activities & Locations - Work Performed

NSWC Philadelphia, Phil. PA.

NSWC Panama City, FL

Systems Engineering - Propulsion Systems

Systems Engineering - Hull, Mechanical & Electrical

### Contractors & Locations - Work Performed

TBI

### CLASSIFICATION:

									DATE:					
Exhibit R-3 Cost Analysis									F	ebruary 20	06			
APPROPRIATION/BUDGET ACTIV	ITY		PROGRAM ELEN	MENT					PROJECT N	NUMBER AND	NAME			
RDT&E, N / BA-4			PE 0603564N/SH	IP PRELIM D	ESIGN & FEA	SIBILITY ST	UDIES		3127 Sea I	Base to Shor	e Connecto	ors		
Cost Categories	Contract	Performing	Total				FY 05		FY 06		FY 07			
	Method	Activity &	PY s			FY 05	Award	FY 06	Award	FY 07	Award	Cost to	Total	Target Value
	& Type	Location	Cost			Cost	Date	Cost	Date	Cost	Date	Complete	Cost	of Contract
Primary Hardware Development													0.000	
Ancillary Hardware Development													0.000	)
Aircraft Integration													0.000	)
Ship Integration													0.000	)
Ship Suitability													0.000	)
Systems Engineering	Various	Various						5.755	11/05	5.682	11/06	5.400	16.837	7
Training Development													0.000	)
Licenses													0.000	)
Tooling													0.000	)
GFE													0.000	)
Award Fees													0.000	)
Subtotal Product Development			0.000	0.000		0.000		5.755		5.682	1	5.400	16.837	7

Development Support		NSWC PC			3.983		3.579		3.486	11.048	
Software Development	C/CPAF				3.000	01/05	2.680	01/06	2.760	8.440	
Integrated Logistics Support										0.000	
Configuration Management										0.000	
Technical Data										0.000	
Studies & Analyses										0.000	
GFE										0.000	
Award Fees										0.000	
Subtotal Support		0.000	0.000	0.000	6.983		6.259	•	6.246	19.488	•

Remarks:

### CLASSIFICATION:

	۵)								DATE:	February 2006				
Exhibit R-3 Cost Analysis (pag APPROPRIATION/BUDGET ACTIV			IDDOOD AM ELEM	ENT					DDO IEO	TAULMEED AND MANE				
	IIY		PROGRAM ELEM							T NUMBER AND NAME				
RDT&E, N / BA-4			PE 0603564N/SHI	P PRELIM DE	ESIGN & FE	ASIBILITY ST				a Base to Shore Cor				
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost			FY 05 Cost	FY 05 Award Date	FY 06 Cost	FY 06 Award Date	FY 07 Cost	FY 07 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Developmental Test & Evaluation	α rype	NSWC PC	COSI			Cost	Date	1.100		1.06		1.073		
Operational Test & Evaluation		NOVICTO						1.100	<u> </u>	1.00	5	1.07	0.0	
Live Fire Test & Evaluation	-					+							0.0	
Test Assets	-					+							0.0	
Fooling	-					+							0.0	
GFE	-		+			+	1	1			-		0.0	
Award Fees		1				+	†	+	1		+		0.0	
Subtotal T&E			0.000	0.000		0.000	1	1.100	1	1.06	2	1.073		
Contractor Engineering Support Government Engineering Support Program management Support	C/CPAF							0.360	10/05	0.37	0 10/06	0.380	0.0 0.0 0 1.1	00
Travel	O/Ol Al					+	-	0.500	10/03	0.51	10/00	0.300	0.0	
Fransportation													0.0	
SBIR Assessment													0.0	
Subtotal Management			0.000	0.000		0.000	)	0.360	)	0.37	0	0.380		
Remarks:					ı									
Total Cost			0.000	0.000		0.000	)	14.198	3	13.38	0	13.099	9 40.6	77
Remarks:	-1	1	0.000	0.000	I	3.000	1	14.100	1	10.00	~ <u> </u>	10.000	10.0	

### CLASSIFICATION:

EXHIBIT R4, Schedule	Profile																								DATE	::	Fol	brugi	ry 200			
APPROPRIATION/BUDGET RDT&E, N /	ACTIVI BA-4	TY							PROC PE 0							IE & FEAS	SIBIL	ITY S	TUDIE		PROJ	ECT N	NUMBE			IE se to S						
Fiscal Year						20	05			20	06			200	07			20	08			20	09			20	10			201	1	
	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	1	2	3	4
Acquisition Milestones															$\triangle$	MS A			Z	<b>М</b> ЅВ					$\triangle$	MS C						
Decision Reviews												$\triangle$	CD										DRR									
Concept/Tech Development																				$\rightarrow$												
Initial Capabilities Document (ICD)						A	ICD																									
Analysis of Alternatives (AoA)									AoA																							
Concept Refinement											Conc	ept Re	efinem	ent																		
Capability Development Document (CDD)										CDD																						
Technology Development													Techi	ology	Deve	lopme	nt															
Preliminary Design														$\triangle$																		
System Development & Demonstration																	_					$\triangle$										

## **CLASSIFICATION:**

Exhibit R-4a, Schedule Detail						DATE:		
						F	ebruary 200	6
APPROPRIATION/BUDGET ACTIVITY	PROGRAM	ELEMENT			PROJECT NU	MBER AND N	AME	
RDT&BA-4	3127	Sea Base to	Shore Conne	ctors				
Schedule Profile		FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
Acquisition Milestones				3Q	4Q		2Q	
Contract Award (construction et)							2Q	
Concept/Tech Development			1Q-4Q	1Q-4Q	1Q-4Q			
Initial Capabilities Document		2Q-4Q	1Q					
Analysis of Alternatives			1Q-2Q					
Concept Refinement			3Q-4Q					
Capabiliti\y Development Document				1Q-3Q				
Preliminary Design				2Q-4Q	1Q-4Q	2Q		
System Development & Demonstration					1Q-4Q	2Q		
Technology Development				1Q-4Q	1Q			

#### CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification	F	Y 2007 Preside	nt's Budget (\$M)		DATE:			
						February 2006		
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEME	NT NUMBER AND	NAME		PROJECT NUMBE	R AND NAME		
RDTEN/BA-4	PE 0603564N/SH	IIP PRELIM DES	IGN & FEASIBIL	ITY STUDIES	3131 lr	ntratheater Conn	ectors	
COST (\$ in Millions)		FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
Project Cost		0.000	4.775	0.000	0.000	0.000	0.000	0.000
RDT&E Articles Qty								

A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION: (3131) Intratheater Connectors - develops future capabilities in support of intratheater connectors. These ship systems will be capable of self-deploying to the theater of operations, provide the air and surface means to move forces and supplies over operational distances within a theater. Intratheater connectors provide the JFC a mobility asset that enables rapid force closure to the seabase from advanced bases, movement of logistics, ship-to-ship and ship-to-shore replenishment, and in appropriate threat environments, the maneuver of forces to the shore.

The primary missions approved by the Services and defined in the Initial Capabilities Document (ICD) include the following:

- Global War on Terror (GWOT)/Theater Security Cooperation Program (TSCP)
- Intratheater Operational/Littoral Maneuver
- Force Closure/Seabasing Support

The Intratheater connector will have the following characteristics:

- \* Moderate payload capacity (500 to 1,000 short tons)
- \* Shallow draft
- \* Self deploying and sustaining for short periods
- \* Cross-theater laden ranges

FY07 through FY11 requirements realigned to new PE 0208058N, Project 3131

### **CLASSIFICATION:**

EXHIBIT R-2a, RDT&E Budget Item Justification	FY 2007 PRESIDENT'S BUDGET SUBMISSION	DATE:
		February 2006
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME
RDTEN/BA-4	PE 0603564N/SHIP PRELIM DESIGN & FEASIBILITY STUDIES	3131 Intratheater Connectors

# B. Accomplishments/Planned Program

	FY 05	FY 06	FY 07
Accomplishments/Effort/Subtotal Cost	0.000	4.775	0.000
RDT&E Articles Quantity			

**R&D Efforts for Intratheater Connector** - commercial technology integration analysis, risk mitigation, analysis of alternatives, concept refinement, and development of analysis of performance specification.

### **CLASSIFICATION:**

EXHIBIT R-2a, RDT&E Budget Item Justification	FY 2007 Pre	sident's Buc	lget (\$M)		DATE:	
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER	AND NAME		PROJECT N	February 2006 UMBER AND NAME	
RDTEN/BA-4	PE 0603564N/SHIP PRELIM		EAGIDII ITV STIIDIES		heater Connectors	
RDTEN/BA-4	PE 0003304IN/3HIP PRELIMI	DESIGN & FE	EASIBILITY STUDIES	3131 IIIII ali	leater Connectors	
C. PROGRAM CHANGE SUMMARY:						
Funding:	FY 2005	FY 2006	FY 2007			
President's Budget 2006	0.000	4.848	11.850			
President's Budget 2007	<u>0.000</u>	4.775	0.000			
Total Adjustments	0.000	-0.073	-11.850			
Summary of Adjustments						
Technical Adjustment	0.000	0.000	-11.850			
Sec 8125 Revised Economic Assumptions	0.000	-0.022	0.000			
1% Congressional Reduction	0.000	<u>-0.051</u>	0.000			
Total Adjustment	0.000	-0.073	-11.850			
Schedule:						
Not Applicable						
Technical:						
Not Applicable						

#### CLASSIFICATION:

EXHIBIT R-2a, RDT&E Budget Item Justification		FY 2007 President	's Budget (\$M)	1					DATE:	
									February :	2006
APPROPRIATION/BUDGET ACTIVITY		PROGRAM ELEMEN	IT NUMBER AND	NAME		P	ROJECT NUMBER	AND NAME		
RDTEN/BA-4		PE 0603564	N/SHIP PRELII	M DESIGN & FE	ASIBILITY STU	DIES	;	3131 Intratheat	er Connectors	
D. Other Program Funding Summary PE 0204228N SCN/BLl3043 Intratheater Connector Surface Support	FY2005	FY2006	FY2007	FY2008	FY2009 <b>197.680</b>	FY2010 <b>174.151</b>	FY2011 <b>181.788</b>	To Complete TBD	Total Cost <b>553.619</b>	
(U) Related RDT&E: PE 0604567N (U)SHIP CONTRACT DESIGN/ LIVE FIRE T&E/3134 Intratheater Connectors	0.000	1.941	0.000	0.000	0.000	0.000	0.000	0.000	1.941	
PE 0208058N (U)JOINT HIGH SPEED VESSEL (JHSV) 3131 Intratheater Connectors (Concept Studies) 3134 Intratheater Connectors (Contract Design)			11.906 2.257	5.046 13.893	3.923 7.974	1.751 6.854	2.448 1.359	TBD TBD	25.074 32.337	

### E. Acquisition Strategy:

Feasibility studies will be conducted to determine the best designs to meet new Joint Service requirements for intratheater connectors.

#### F. Major Performers:

Field Activities & Locations - Work Performed

NSWC, Carderock, MD - Concept development and engineering support

SPAWAR Systems Center, Charleston SC - Concept development and engineering support

NAVAIR Pax River, MD - Concept development and engineering support

Contractors & Locations - Work Performed CSC, Washington, DC - Engineering Support ALION-JJMA, Washington, DC - Program Support

Universities & Locations - Work Performed

### CLASSIFICATION:

Primary Hardware Development Ancillary Hardware Development Modeling & Simulation  Va	Contract Per Method Act Type Loc Various Various Various		M ELEMENT 664N/SHIP PRELIM DE Total PY s Cost	SIGN & FEASIBI	LITY STUDIES  FY 05 Cost	FY 05 Award	PROJECT NI 3131 Intrath		NAME nectors	FY 07			
APPROPRIATION/BUDGET ACTIVITY RDTEN/BA-4  Cost Categories Communication   Ancillary Hardware Development   Ancillary Hardware Development   Modeling & Simulation   Varisk Mitigation Efforts   Mitigation Efforts   Mitigation   GFE   Award Fees	Contract Per Method Act Type Loc Various Various Various	PE 06035 rforming rivity & cation	Total PY s	SIGN & FEASIBI	FY 05		PROJECT NI 3131 Intrath	UMBER ANI	NAME nectors	Invoz.			
RDTEN/BA-4  Cost Categories Comment   Ancillary Hardware Development   Modeling & Simulation Varies   Risk Mitigation Efforts   Licenses   Tooling   GFE   Award Fees	Contract Per Method Act Type Loc Various Various Various	PE 06035 rforming rivity & cation	Total PY s	SIGN & FEASIBI	FY 05		3131 Intrath	neater Con	nectors	IE) ( 07			
Cost Categories Comment  Primary Hardware Development  Ancillary Hardware Development  Modeling & Simulation Var  Risk Mitigation Efforts M//  Licenses  Tooling  GFE  Award Fees	Method Act Type Loc  Various Val	rforming tivity & cation	Total PY s	SIGN & FEASIBIL	FY 05					E) ( 07			
Primary Hardware Development Ancillary Hardware Development Modeling & Simulation Risk Mitigation Efforts Licenses Tooling GFE Award Fees	Method Act Type Loc  Various Val	cation	PY s					F I 00					
Risk Mitigation Efforts Licenses Tooling GFE Award Fees	Arious Various	rious					IFA 06	Award		Award	Cost to	Total	Target Value
Primary Hardware Development Ancillary Hardware Development Modeling & Simulation Risk Mitigation Efforts Licenses Tooling GFE Award Fees	/arious Va	rious	COST			Date	Cost	Date	Cost	Date	Complete	Cost	of Contract
Ancillary Hardware Development  Modeling & Simulation  Va Risk Mitigation Efforts  Mu Licenses  Tooling  GFE  Award Fees					0031	Date	Cost	Date	0031	Date	Complete	0.000	
Modeling & Simulation Va Risk Mitigation Efforts Mi Licenses Tooling GFE Award Fees												0.000	
Risk Mitigation Efforts M/Licenses Tooling GFE Award Fees							1.175	2Q	0.000			1.175	
Licenses Tooling GFE Award Fees							0.175		0.000			0.175	
Tooling GFE Award Fees												0.000	
GFE Award Fees												0.000	
												0.000	
Cultistal Deadust Davidonment												0.000	
Subtotal Product Development			0.000	0.000	0.00	0	1.350		0.000		0.000	1.350	
Development Support									0.000			0.000	1
Software Development												0.000	
Integrated Logistics Support												0.000	
Configuration Management												0.000	
Technical Data												0.000	
	arious Var	ious					1.020	2Q	0.000			1.020	
GFE												0.000	
Award Fees												0.000	
Subtotal Support			0.000	0.000	0.00	0	1.020		0.000		0.000	1.020	
Remarks:													

### CLASSIFICATION:

									DATE:						
Exhibit R-3 Cost Analysis (pag	ge 2)									ebruary 2	2006				
APPROPRIATION/BUDGET ACTIV	ΊΤΥ		PROGRAM ELEME	ENT					PROJECT N	JMBER AN	D NAME				,
RDTEN/BA-4			PE 0603564N/SHIP	P PRELIM DE	SIGN & FEA	SIBILITY ST	UDIES		3131 Intrath	neater Con	nectors				
Cost Categories	Contract Method	Performing Activity &		otal PY s			FY 05	FY 05 Award		FY 06 Award	FY 07	FY 07 Award	Cost to	Total	Target Value
	& Type	Location		Cost			Cost	Date	Cost	Date	Cost	Date	Complete	Cost	of Contract
Developmental Test & Evaluation														0.000	
Operational Test & Evaluation														0.000	
Live Fire Test & Evaluation														0.000	
Test Assets														0.000	
Tooling														0.000	
GFE														0.000	
Award Fees														0.000	
Subtotal T&E				0.000	0.000		0.000	)	0.000		0.000		0.000	0.000	
Contractor Engineering Support	MAC	CSC							0.350	2Q	0.000			0.350	
Government Engineering Support	WX	Various							0.290	2Q				0.290	,
Program management Support	MAC	ALION-JJI	MA						1.415	2Q				1.415	
Travel	PD	NAVSEA							0.350					0.350	
Transportation														0.000	,
SBIR Assessment														0.000	,
Subtotal Management				0.000	0.000		0.000	)	2.405		0.000		0.000	2.405	
Remarks:	<b>T</b>			0 0001	0.000		1	SI.	1 4 776					D. 4 776	
Total Cost		ļ		0.000	0.000		0.000	)	4.775		0.000		0.000	4.775	
Remarks:															

## CLASSIFICATION:

EXHIBIT R4, Schedule	Profile	!																							DATE	:	F	ebrua	ry 20	06		
APPROPRIATION/BUDGE	Γ ACTIV	ITY							PROC	RAM I	ELEM	ENT N	IUMBE	R AND	NAME						PROJ	ECT N	IUMBE	R ANI	D NAM	ΙE						
RDTEN/BA-4									PE 0	60356	4N/SI	HIP P	RELIN	I DES	IGN &	FEAS	SIBIL	ITY S	TUDII	ES		31	31 Int	rathe	ater (	onne	ectors	(Con	cept	Studie	es)	
Fiscal Year						20	05			200	06			20	07			20	108			200				20			-	20		
	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	1	2	3	4
Acquisition Milestones										M	^ S A						MS	В														
Preliminary Design & Feasibility Studies						CD					CI	D Z																				
							<u> </u>	AoA						^																		
											⊸ Sp	ec De	velopm	ent'																		

## **CLASSIFICATION:**

Exhibit R-4a, Schedule Detail						DATE:					
						F	ebruary 200	16			
APPROPRIATION/BUDGET ACTIVITY	PROGRAM E	LEMENT			PROJECT NU	IMBER AND N	AME				
RDTEN/BA-4	PE 0603564	IN/SHIP PREL	IM DESIGN	& FEASIBILITY	31	131 Intrathea	ter Connecto	rs			
Schedule Profile											
AoA Completion			1Q								
Milestone A			3Q								
		1						-			
	+	+									

#### CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		FY 2007 Preside	nt's Budget (\$M)	)	DATE:			
						February 2006		
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEM		PROJECT NUMBE	R AND NAME				
RDTEN/BA-4	PE 0603564N/S	HIP PRELIM DES	3132 lr	tertheater Conn	ectors			
COST (\$ in Millions)		FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
Project Cost		0.000	7.642	7.376	0.000	0.000	0.000	0.000
RDT&E Articles Qty								

**A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:** (3132) Intertheater Connectors - conduct feasibility studies and preliminary design studies for a high speed sealift ship to deliver strike aircraft to the seabase. The ship will provide an improved MEB force closure for the seabase by deploying troops, non-self deploying aircraft and other high demand/low density (HD/LD) items via rapid surface strategic lift directly to the seabase. Analysis developed during Joint Staff sponsored Advanced Mobility Concept Study also indicates that rapid surface lift can close larger forces faster than airlift in certain circumstances. Consequently, the Intertheater Connector is envisioned to be a strategic sealift vessel capable of supporting closure of Marine Expeditionary Brigade, Army SBCT, Navy, Air Force or SOF units. Employment could support entire conflict spectrum.

#### CLASSIFICATION:

EXHIBIT R-2a, RDT&E Budget Item Justification	FY 2007 President's Budget (\$M)	DATE:
		February 2006
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME
RDTEN/BA-4	PE 0603564N/SHIP PRELIM DESIGN & FEASIBILITY STUDIES	3132 Intertheater Connectors

## B. Accomplishments/Planned Program

	FY 05	FY 06	FY 07
Accomplishments/Effort/Subtotal Cost	0.000	4.947	3.095
RDT&E Articles Quantity			

**R&D Efforts for Intertheater Connector** - Develop and Validate tools in critical technology areas to allow Navy to Warrant /Certify possible designs of high speed intertheater connectors; Resistance and Powering, Hull/Propulsor Interaction, Seakeeping and Structural Loads.

	FY 05	FY 06	FY 07
Accomplishments/Effort/Subtotal Cost			
RDT&E Articles Quantity		2.695	4.281

Engineering and Acquisition Support: Engineering and program management including requirements development, acquisition documentation development in support of acquisition milestones. Concept studies in support of Concept Decision and AOA.

### **CLASSIFICATION:**

EXHIBIT R-2a, RDT&E Budget Item Justification	FY 2007 Pre	sident's Bud	lget (\$M)	DATE:	
•			- , ,	February 2006	
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER	AND NAME		PROJECT NUMBER AND NAME	
RDTEN/BA-4	PE 0603564N/SHIP PRELIM [	DESIGN & FE	ASIBILITY STUDIES	3132 Intertheater Connectors	
C. PROGRAM CHANGE SUMMARY:					
Funding:	FY 2005	FY 2006	FY 2007		
President's Budget 2006	0.000	7.758	7.524		
President's Budget 2007	0.000	7.642	<u>7.376</u>		
Total Adjustments	0.000	-0.116	-0.148		
Summary of Adjustments					
Programmatic changes	0.000	0.000	-0.192		
Revised rates & inflation indices	0.000	0.000	0.044		
Sec 8125 Revised Economic Assumptions	0.000	-0.035	0.000		
Congressional 1% reduction	0.000	<u>-0.081</u>	0.000		
Total Adjustment	0.000	-0.116	-0.148		
Schedule:					
Not Applicable					
• •					
Technical:					
Not Applicable					
	D 4 0110DD				

#### CLASSIFICATION:

EXHIBIT R-2a, RDT&E Budget Item Just	tification		FY 2007 Presid	lent's Budget (	(\$M)					DATE:
										February 2006
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEI	MENT NUMBER	AND NAME			PROJECT NUMBE	R AND NAME	
RDTEN/BA-4		PE 0603	564N/SHIP PR	ELIM DESIGN 8	FEASIBILITY	3132 Intertheater Connectors				
D. Other Program Funding Summary	FY2005	FY2006	FY2007	FY2008	FY2009	FY2010	FY2011	To Complete	Total Cost	

(U) Related RDT&E: Not Applicable

### E. Acquisition Strategy:

Concept studies will be conducted to determine how to best meet new Navy requirements for the intertheater connector.

#### F. Major Performers:

Field Activities & Locations - Work Performed

NSWC, Carderock, MD - Concept development and engineering support

NSWC, Panama City, FL - Concept development

NFESC Pt Hueneme CA - Concept development

SPAWAR Systems Center, Charleston SC - Concept development and engineering support

NAVAIR Pax River, MD - Concept development and engineering support

Office of Naval Research, Arlington, VA - Concept Development

Contractors & Locations - Work Performed CSC, Washington, DC - Engineering Support

Universities & Locations - Work Performed

### CLASSIFICATION:

									DATE:						
Exhibit R-3 Cost Analysis										ebruary 20	ne				
APPROPRIATION/BUDGET ACTIV	ITV		PROGRAM ELEM	MENT						UMBER AND					
RDTEN/BA-4	111		PE 0603564N/SH		SIGN & FFA	SIRII ITY ST	UDIES		3132 Interth						
Cost Categories	Contract	Performing		Total	JOIN & LA	SIDILITI ST		FY 05		FY 06		FY 07			
Cost Categories	Method	Activity &		PY s				Award		Award		Award	Cost to	Total	Target Value
	& Type	Location		Cost			Cost	Date		Date		Date			of Contract
Primary Hardware Development	a rype	Lucation		Cost			Cost	Date	Cost	Date	CUSI	Date	Complete	0.000	Of Contract
Hullform Development	WX	NSWC		<del>                                     </del>					1.915	1Q	1.360	1Q	0.000	3.275	
Propulsor Development	WX	NSWC		<del>                                     </del>					0.955	1Q	0.490	1Q	0.000	1.445	
Hull/Propulsor Integration	WX	NSWC		<del>                                     </del>					1.803	1Q	0.970	1Q	0.000	2.773	
Light Weight Auxiliary Systems	WX	NSWC		<del>                                     </del>					0.000	1Q	0.000	100	0.000	0.000	
Industry Risk Reduction	WX	NSWC		<del>                                     </del>					0.275		0.275	1Q	0.000	0.550	·
Training Development	VVX	110110		<del>                                     </del>					0.213	100	0.273	100	0.000	0.000	
Licenses														0.000	
Tooling														0.000	
GFE														0.000	
Award Fees														0.000	
Subtotal Product Development				0.000	0.000		0.000		4.947		3.095		0.000	8.042	
Development Support				Т										0.000	<del></del>
Software Development														0.000	
Integrated Logistics Support														0.000	
Configuration Management														0.000	
Technical Data														0.000	I
Studies & Analyses														0.000	
GFE														0.000	
Award Fees														0.000	
Subtotal Support				0.000	0.000		0.000		0.000		0.000		0.000	0.000	I
Remarks:															

### CLASSIFICATION:

									DATE:											
Exhibit R-3 Cost Analysis (pag	ge 2)								57.1.2.	February 2006										
APPROPRIATION/BUDGET ACTIV	ΊΤΥ		PROGRAM ELEMENT						PROJECT NUMBER AND NAME											
RDTEN/BA-4	PE 0603564N/SHIP PRI	ELIM DE	SIGN & FEA	SIBILITY ST	TUDIES		3132 Intertheater Connectors													
Cost Categories	Contract	Performing	g Total					FY 05		FY 06		FY 07								
	Method	Activity &	PY s				FY 05	Award	FY 06	Award	FY 07	Award	Cost to	Total	Target Value					
	& Type	Location	Cost				Cost	Date	Cost	Date	Cost	Date	Complete	Cost	of Contract					
Developmental Test & Evaluation														0.000						
Operational Test & Evaluation														0.000						
Live Fire Test & Evaluation														0.000						
Test Assets														0.000						
Tooling														0.000						
GFE														0.000						
Award Fees														0.000	)					
Subtotal T&E				0.000	0.000		0.000	)	0.000		0.000		0.000	0.000	,					
Contractor Engineering Support	MAC	CSC							1.174	1Q	1.700		0.000							
Government Engineering Support	MAC	CSC							0.849	1Q	1.141	1Q	0.000							
Program management Support	WX	NSWC							0.662	1Q	1.430	1Q		2.092						
Travel	MAC	CSC							0.010	1Q	0.010	1Q		0.020						
Transportation	PD	NAVSEA												0.000						
SBIR Assessment														0.000						
Subtotal Management				0.000	0.000		0.00	ו	2.695		4.281		0.000	6.976	j					
Remarks:	T			0.000	0.000		0.00	ol .	7.642		7.376	ı	0.000	15.018	sl					
Remarks:				0.000	0.000		0.00	7	7.642		7.376	1	0.000	15.018	1					
remarks:																				

### **CLASSIFICATION:**

EXHIBIT R4, Schedule	Profile																				DAT	E:	Febr	uary	2006			
APPROPRIATION/BUI	OGET A	CTIV	/ITY		PRO	GRAI	M EL	EMEN	NT NL	JMBE	R AN	ID NA	ME								PRO	JECT	NUN	/IBER	AND	NAM	E	
RDTEN/BA-4		PE 0	6035	64N/S	SHIP	PREL	IM D	<b>ESIG</b>	N & F	EASI	BILI	TY ST	UDIE	S				3132 Intertheater Connectors										
Fiscal Year		20	05			20	06			20	007			20	08			20	09		2010 2011							
	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
Acquisition Milestones																												
ICD Approval								$\triangle$																				
Concept Decision									$\vdash$																			
AoA Completion																												
AoA Briefing																												

## **CLASSIFICATION:**

Exhibit R-4a, Schedule Detail	DATE:								
						February 2	006		
APPROPRIATION/BUDGET ACTIVITY	UMBER AND NAME								
RDTEN/BA-4	PE 0603564	N/SHIP PREL	IM DESIGN &	3132 Intertheater Connectors					
Schedule Profile		FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	
ICD Approval			4Q						
Concept Decision				1Q					
AoA Completion				3Q					
AoA Breifing				4Q					