CLASSIFICATION:

EXHIBIT R-2, RDT&E Budget Item Justification	•		•				DATE:				
-							FEBRUA	RY 2005			
APPROPRIATION/BUDGET ACTIVITY					R-1 ITEM NOMEN	CLATURE	•				
RESEARCH DEVELOPMENT TEST & EVALUAT	ION, NAVY /	BA-7	Ţ		PE 0204413N/Amp	phibious Tactical S	Support Units				
COST (\$ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011			
Total PE Cost	5.558	3.668	4.768	4.190	2.278	2.751	2.792	2.849			
1980 AMPHIB OTHER C2	4.355	0.158	2.748	2.314	0.375	0.386	0.399	0.411			
2231 Technology Transfer	1.153	0.000	2.020	1.876	1.903	2.365	2.393	2.438			
2909 AMPHIBIOUS LIGHTERAGE DEVELOP	0.050	3.510	0.000	0.000	0.000	0.000	0.000	0.000			

A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION: This Program Element supports multiple amphibious warfare development and technology insertion efforts.

B. PROJECT UNIT EFFORTS are as follows:

AMPHIB OTHER C2 (1980) - SACC-A automates the Supporting Arms Coordination Center (SACC) aboard LHA 1, LHD 1 and LHD 5 ship classes, providing an integrated, automated capability to conduct Amphibious Task Force (ATF) Marine Expeditionary Brigade (MEB) level fire support planning, coordination, deconfliction, and execution of fires utilizing all supporting arms including naval surface fires, air assets, artillery, mines and mortars.

AADS (1980) - This PU also contains FY06-FY07 funding for the Amphibious Assault Direction System (AADS, AN/KSQ-1), which provides AADS the ability to investigate future Navy C4ISR technical direction, explore technological advances, and analyze interoperability issues in order to develop the requisite technical upgrades.

TECHNOLOGY TRANSFER (2231) - The FY06-FY11 funding supports 6.3 research efforts on LCAC Future Naval Capabilities (FNC): Current S&T initiatives include the ONR Expeditionary Logistics (EXLOG), LCAC Cargo Griping Lashings System (STTR), Self Contained Rudder Actuator System (STTR), Advanced structural design for LCAC ramps (SBIR), Personal Transport Module (SBIR), Enhanced Skirt Finger Material (FCT), the Lube Oil Cooler (FCT) and the Composit Shroud (FCT).

AMPHIBIOUS LIGHTERAGE DEVELOPMENT (2909) - This project supports development and procurement of technology to develop Navy causeway lighterage. The Improved Navy Lighterage System (INLS) replaces the existing Navy Lighterage (NL) system and supports the US Navy Lighterage recapitalization plan. Current NL will reach the end of its service life and will impact crew safety and operation readiness. INLS will be capable of operations in higher sea states, have a greater service life, and have reduced maintenance costs. INLS will be deployed during Logistic Over The Shore (LOTS) operations, Assault Follow On Echelon (AFOE) operations and Maritime Prepositioning Force (MPF) operations. INLS consists of Warping Tugs, Causeway Ferries, RO/RO Discharge Facilities and Floating Causeway. The design and development for INLS was completed in FY04. Contract for Low Rate Initial Production (LRIP) was awarded in Aug 03. OPEVAL DT/OT will take place 3rd quarter in FY05. In addition, INLS Phase III design process continues with the High Speed Ferry Assault Connector (CFFX) in support of the Seabasing concept.

R-1 SHOPPING LIST - Item No.

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification						DATE:		
						F	EBRUARY 200	5
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMI	ENT NUMBER AND	O NAME			PROJECT NUMBE	R AND NAME	
RDT&E,N / BA-7	0204413N/Amp	hibious Tactic	al Support Unit	s		1980 AMPHIB O	THER C2	
COST (\$ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
Project Cost	4.355	0.158	2.748	2.314	0.375	0.386	0.399	0.411
RDT&E Articles Qty								

A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

AMPHIB OTHER C2 includes:

SACC-A: The FY04-FY11 Supporting Arms Coordination Center - Automation (SACC-A) program automates the SACC aboard LHA & LHD class ships. Currently the process is all manual and voice accomplished, unresponsive to the needs of Marine Forces ashore. Specifically, SACC-A is developing a Ship to Objective Maneuver (STOM) Fire's Command & Control cell for the Amphibious Large Deck ships. SACC-A provides an integrated, auto capability to conduct Marine Expeditionary Brigade level fire support planning, coordination, and execution of all supporting arms fires, including Naval Surface Fires, Tactical Air and Artillery & Mortars ashore. SACC-A integrates other Command & Control systems aboard the ship and ashore to provide maximum situational awareness and a common operating picture.

AADS: The FY06-FY07 Amphibious Assault Direction System (AADS, AN/KSQ-1) program researches Network Centric Warfare requirements for Amphibious Assault Command and Control, identifies the projected technological advances and requirements of Fleet systems, and identifies the Next Generation AADS operational requirements and capabilities. Technology integration with Expeditionary Strike Group ships is also included.

R-1 SHOPPING LIST - Item No.

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification			DATE:
			FEBRUARY 2005
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND N	NAME
RDT&E, N / BA-7	0204413N/Amphibious Tactical Support Units	1980 AMPHIP OTHER C	2

B. ACCOMPLISHMENTS/PLANNED PROGRAM

	FY 04	FY 05	FY 06	FY 07
Accomplishments/Effort/Subtotal Cost	4.355	0.158	2.748	2.314
RDT&E Articles Quantity				

SACC-A: System Engineering development for spiral acquisition, including requirements definition and lab-based testing; Acquisition and prototype interface development of AFATDS with other systems and installation and test aboard LHA/LHD; DoD documentation program reviews (e.g. ORD revalidation, APB, TEMP, SEMP, ILSP); Programmatic support (e.g. management, plans, schedule, briefs, travel, studies, etc.); shipboard interface and interoperability testing of spiral development, training, and logistics system development, and system integration and shipboard interface/interoperability testing.

AADS: System Engineering and software development begin in FY06. Software testing and equipment interoperability testing begin in FY07.

C. Program Change Summary: (U) Funding

(U) Funding	FY 2004	FY 2005	FY 2006	FY 2007
(U) FY 2005 President's Budget Controls	4.466	0.161	2.718	2.263
(U) FY 2006/07 President's Budget Controls	<u>4.355</u>	<u>0.158</u>	<u>2.748</u>	<u>2.314</u>
(U) Total Adjustments	-0.111	-0.003	0.030	0.051
- (U) Summary of Adjustments:				
SBIR	-0.050	0.000	0.000	0.000
Revised Rates & Inflation Indices	0.000	0.000	0.002	0.001
Appn Reductions	-0.050	-0.003	0.000	0.000
Project Corrections/Clean up	0.000	0.000	0.028	0.050
Cancelled Accounts Liability	<u>-0.011</u>	0.000	0.000	0.000
Subtotal	-0.111	-0.003	0.030	0.051

(U) Schedule: Not Applicable

(U) Technical: Not Applicable

R-1 SHOPPING LIST - Item No.

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification								DATE:			
									FEBRU/	ARY 2005	
APPROPRIATION/BUDGET ACTIVITY		PROGRAM EI	LEMENT NUM	BER AND NAM	E	PROJECT NU	MBER AND N	AME			
RDT&E, N / BA-7		0204413N/A	Amphibious	Tactical Sup	port Units	1980 AMPHI	B OTHER C2	<u> </u>			
D. OTHER PROGRAM FUNDING SUMMARY:											
									То	Total	
Line Item No. & Name	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	Complete	Cost	
SACC-A											
OPN Line 098100 Items Under \$5M	0.857	0.855	0.576	0.716	0.787	0.823	0.803	0.826	Con't	Con't	
AADS											
OPN Line 5239 SSDS	0	0	11.709	10.535	6.708	5.794	1.717	0	0	36.463	

SACC-A: The procurement items for SACC-A include Advanced Field Artillery Tactical Data System (AFATDS), Effect Management Tool (EMT), jam boxes, Automated Distribution Network Systems (ADNS), racks, workstations, Large Screen Color Displays (LSCDs), PICT phones, new Theater Tables, communications devices which will be permanent changeouts to the amphibious ships. These need to be in place in order to permit the connection of the automated SACC capabilities. The operations and maintenance efforts are for program, engineering, and technical support, logistics support and technical assists.

AADS: The procurement items for AADS are related to two subsystems: EPLRS and the ship dependent AN/KSQ-1 hardware configurations. Examples of specific items include RT-1720(c) Enhanced PLRS User Unit (EPUU) digital radios, EPLRS Net Control Station (NCS) workstations and other EPLRS equipment.

E. ACQUISITION STRATEGY:

The SACC-A effort is related to the development and fielding of a Naval Fire Control System (NFCS) that satisfies the requirements of naval and supported forces. The NFCS is to be an ACAT III program under Navy management. The AADS strategy is to develop a software interface to ensure integrated communications and joint operations for joint forces.

F. MAJOR PERFORMERS:

Field Activities & Locations - Work Performed:

NSWC DD, Dahlgren, VA - Hardware Development, Systems Engineering, Training, ILS, T&E

NSWC CSS, Panama City, FL - System engineering; NNSY, Norfolk, VA - Technical Data; ARMY - Hardware Development

NSWC PHD, Port Hueneme, CA - Software Configuration Management

Contractors & Locations - Work Performed: PM Effects - Hardware Development

TBD - Software Development

Universities & Locations - Work Performed - Not applicable.

R-1 SHOPPING LIST - Item No.

CLASSIFICATION:

								DATE:						
Exhibit R-3 Cost Analysis (pa	ge 1)									FE	BRUARY	2005		
APPROPRIATION/BUDGET ACTIV	/ITY	PROG	RAM ELEMENT			PROJECT N								
RDT&E, N / BA-7			13N/Amphibious Tactic	al Support Unit	S	1980 / AMP	HIB OTHE	R C2						
Cost Categories	Contract	Performing	Total		FY 04		FY 05		FY 06		FY 07			
	Method	Activity &	PY s	FY 04	Award	FY 05	Award		Award	FY 07	Award	Cost to	Total	Target Value
B: U I B I .	& Type	Location	Cost	Cost	Date	Cost	Date	Cost	Date	Cost	Date	Complete	Cost	of Contract
Primary Hardware Development														
Ancillary Hardware Development	WX	SPAWAR		0.755	02/04	+		-		-		-	0.755	+
Aircraft Integration										1				+
Ship Integration	WX	NSWC DD		3.000	12/03	0.011		0.000		0.050		0.270	3.331	1
Ship Suitability														
Systems Engineering	WX	NSWC CSS, APL		0.600	12/03			1.800	12/05	1.750	12/06		4.150	
Training Development														
Licenses														
Tooling														
GFE													0.000	
Award Fees														
Subtotal Product Development			0.000	4.355	5	0.011		1.800		1.800		0.270	8.236	
Development Support													0.000	
Software Development	WX	CSS				0.147	12/04	0.948	12/05	0.514	12/06	1.301	2.910	
Integrated Logistics Support														
Configuration Management														
Technical Data														
Studies & Analyses														
GFE													0.000	
Award Fees														
Subtotal Support			0.000	0.000)	0.147		0.948		0.514		1.301	2.910	
Remarks:														

CLASSIFICATION:

									DATE:		_				
Exhibit R-3 Cost Analysis (pa	age 2)		Innonnu				Inno inot till				FI	BRUAR	Y 2005		
APPROPRIATION/BUDGET ACTI RDT&E, N / BA-7	IVIIY		PROGRAM E				PROJECT NU								
Cost Categories	Contract	Performing	0204413N/An	nphibious Tacti Total		FY 04	1980 AMPH	FY 05	1	FY 06		FY 07			1
Cost Categories	Contract Method	Activity &		PY s		Award	FY 05	Award	FY 06	Award	FY 07	Award	Cost to	Total	Target Value
	& Type	Location		Cost	Cost	Date	Cost	Date	Cost	Date	Cost	Date	Complete	Cost	of Contract
Developmental Test & Evaluation	71 -			0.000										0.000	
Operational Test & Evaluation															
Live Fire Test & Evaluation															
Test Assets															
Tooling															
GFE															
Award Fees															
Subtotal T&E				0.000	0.000		0.000		0.000		0.000)	0.000	0.000	
	•	•		•	•				•			•	•	•	•
Contractor Engineering Support														0.000	
Government Engineering Support														0.000	
Program Management Support														0.000	
Travel														0.000	
Transportation															
SBIR Assessment															
Subtotal Management				0.000	0.000		0.000		0.000		0.000)	0.000	0.000)
Remarks:															
Total Cost	1			0.000	4.355		0.158		2.748		2.314	ıl	1.571	11.146	0.000
rotal cost	1	1		0.000	1 4.555	1	0.130	1	2.740	1	2.51	1	1.571	11.140	0.000
Remarks:															

CLASSIFICATION:

EXHIBIT R4, Schedule I									PROG	PAM	FLEM	FNT N	LIMBE	R ANI	NAM	F					PRO I	ECT N	LIMBE		DATE		FEI	3RU/	ARY 2	2005		
RDT&E, N / BA-7	AOTIV								0204								Unit	s				AMP										
Fiscal Year		200	04			20	05			20	06			200	07			20	08			200	9			20	10			201	11	
	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
Software Development									_					Δ																		
Systems Engineering									Δ-																							

CLASSIFICATION:

					DATE:		
					FE	EBRUARY 2	005
PROGRAM EI	LEMENT			PROJECT NU	MBER AND N	AME	
0204413N/A	mphibious Ta	actical Suppo	rt Units	1980/AMPHI	B OTHER C2		
FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
		1Q - 4Q	1Q, 2Q				
		1Q - 4Q	1Q - 4Q				
	0204413N/A		0204413N/Amphibious Tactical Suppo FY 2004 FY 2005 FY 2006 1Q - 4Q 1Q - 4Q	0204413N/Amphibious Tactical Support Units FY 2004 FY 2005 FY 2006 FY 2007 1Q - 4Q 1Q, 2Q	0204413N/Amphibious Tactical Support Units 1980/AMPHI FY 2004 FY 2005 FY 2006 FY 2007 FY 2008 1Q - 4Q 1Q, 2Q TQ, 2Q	PROGRAM ELEMENT	PROGRAM ELEMENT PROJECT NUMBER AND NAME

R-1 SHOPPING LIST - Item No.

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification	1					DATE:		
						F	EBRUARY 200	5
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEM	ENT NUMBER ANI	D NAME			PROJECT NUMBE	R AND NAME	
RDT&E,N / BA-7	0204413N/Amp	hibious Tactic	al Support Unit	s		2231 TECHNOL	OGY TRANSITION	ON
COST (\$ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
Project Cost	1.153	0.000	2.020	1.876	1.903	2.365	2.393	2.438
RDT&E Articles Qty								

A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION: TECHNOLOGY TRANSITION (2231) -

<u>FY06-FY11</u>: Provides for 6.3 research efforts on LCAC Future Naval Capabilities (FNC): Current S&T initiatives include the ONR Expeditionary Logistics (EXLOG), LCAC Cargo Griping Lashings System (STTR), Self Contained Rudder Actuator System (STTR), Advanced structural design for LCAC ramps (SBIR), Personal Transport Module (SBIR), Enhanced Skirt Finger Material (FCT), the Lube Oil Cooler (FCT), and the Composite Shroud (FCT).

R-1 SHOPPING LIST - Item No.

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification			DATE:	
				FEBRUARY 2005
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND N	IAME	
RDT&E, N / BA-7	0204413N/Amphibious Tactical Support Units	2231 / TECHNOLOGY TI	RANSITION	

B. ACCOMPLISHMENTS/PLANNED PROGRAM

	FY 04	FY 05	FY 06	FY 07
Accomplishments/Effort/Subtotal Cost	1.153	0.000	2.020	1.876
RDT&E Articles Quantity				

LCU:- Analysis of Alternatives (AoA); Commercial designs (Feasibility & Detail designs); Conduct enabling technologies R&D; Model Testing & Simulations (e.g., beaching, seakeeping, survivability); Government Studies & Technical Support; Shipboard interface & interoperability; DoD 5000 Documentation & Program reviews; Contracting & Evaluation support; Programmatic support; Portion of extramural program reserved for Small business innovation Research assessment in accordance with 15 USC 638.

TECHNOLOGY TRANSFER - Current S&T initiatives include the ONR Expeditionary Logistics (EXLOG), LCAC Cargo Griping Lashings System (STTR), Self Contained Rudder Actuator System (STTR), Advanced structural design for LCAC ramps (SBIR), Personal Transport Module (SBIR), Enhanced Skirt Finger Material (FCT), the Lube Oil Cooler (FCT) and the Composite Shroud (FCT).

FY 2005

C. Program Change Summary: (U) Funding

(U) FY 2005 President's Budget (U) FY 2006/2007 President's Budget (U) Total Adjustments - (U) Summary of Adjustments:	1.186 <u>1.153</u> -0.033	0.000 <u>0.000</u> 0.000	1.955 <u>2.020</u> 0.065	1.955 <u>1.876</u> -0.079
Misc Minor Adjustments Programmatic/Other Adjustments	-0.030	0.000	0.001	0.002
	0.000	0.000	0.064	-0.081
Cancelled Accounts Liability	<u>-0.003</u>	0.000	0.000	0.000
	-0.033	0.000	0.065	-0.079

FY 2004

(U) Schedule: Not Applicable

(U) Technical: Not Applicable

R-1 SHOPPING LIST - Item No.

174/10

FY 2006

FY 2007

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification								DATE:		
									FEBRU <i>A</i>	ARY 2005
APPROPRIATION/BUDGET ACTIVITY		PROGRAM EI	LEMENT NUM	BER AND NAM	E	PROJECT NU	MBER AND N	AME		
RDT&E, N / BA-7		0204413N/A	Amphibious	Tactical Sup	pport Units	2231 / TECH	NOLOGY TR	ANSFER		
D. OTHER PROGRAM FUNDING SUMMARY:										
Line Item No. & Name	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	To <u>Complete</u>	Total <u>Cost</u>
SCN Line 510000 LCU(R)	0	24.947	0	0	0	0	0	0		25.048

E. ACQUISITION STRATEGY:

LCU - Feasibility studies were conducted to determine the best design to meet Navy requirements for heavy lift utility landing craft and to support a performance specification. TECHNOLOGY TRANSFER - RDT&E efforts commence in FY06. Multiple contracts and Field Activities will be involved through FY11 to complete the various projects.

F. MAJOR PERFORMERS:

Field Activities & Locations - Work Performed:

NSWC, Bethesda, MD - System engineering, test and evaluation.

NSWC (CSS) Panama City, FL - System engineering NSWC Philadelphia, PA - Systems engineering

NOVO Filladelphia, FA - Systems engineerin

TBD

Universities & Locations - Work Performed

Contractors & Locations - Work Performed:

Not applicable

R-1 SHOPPING LIST - Item No.

CLASSIFICATION:

Exhibit R-3 Cost Analysis (pa									DATE:		FE	BRUARY	/ 2005		
APPROPRIATION/BUDGET ACTIV	VITY		PROGRAM E	LEMENT			PROJECT NU	JMBER ANI	NAME						
RDT&E, N / BA-7			0204413N/An	nphibious Tacti	cal Support Un		2231 / TECH		TRANSFER						
Cost Categories		Performing		Total		FY 04		FY 05		FY 06		FY 07			
	Method	Activity &		PY s	FY 04	Award	FY 05	Award	FY 06	Award	FY 07	Award	Cost to	Total	Target Value
	& Type	Location		Cost	Cost	Date	Cost	Date	Cost	Date	Cost	Date	Complete	Cost	of Contract
Primary Hardware Development									1		1				
Ancillary Hardware Development		1							1		1				
Component Development	WX/CPA	Various							0.150	02/05	0.150	01/07		0.300	
Ship Design															
Ship Suitability															
Systems Engineering	FFP/CPF	Various		2.841					0.565	02/05	0.821	01/07		4.227	
Training Development															
Licenses															
Tooling															
GFE	WX				0.110	06/04								0.110	
Award Fees															
Subtotal Product Development				2.841	0.110		0.000		0.715		0.971		0.000	4.637	
Development Support	WX	Various		2.067	0.400	03/04			0.700)	0.300)		3.467	
Software Development															
Training Development															
Integrated Logistics Support															
Configuration Management															
Technical Data															
Studies & Analyses	WX	ONR		0.254										0.254	
GFE															
Award Fees															
Subtotal Support				2.321	0.400		0.000		0.700		0.300		0.000	3.721	
Remarks:															

CLASSIFICATION:

Fullibit D O O t A b 1 /	0\								DATE:				V 000F		
Exhibit R-3 Cost Analysis (pa APPROPRIATION/BUDGET ACTI			PROGRAM ELEME	ITNIT			PROJECT NU	IMPED AND	NIANAT		FI	BRUAR	Y 2005		
RDT&E, N / BA-7	VII Y		0204413N/Amphibi		al Cunnort I Ini	to	2231 / TECH								
Cost Categories	Contract	Performing	Tota			FY 04	2231 / TECF	FY 05	IKANSFER	FY 06	1	FY 07			1
Cost Categories	Method	Activity &	PY s			Award	FY 05	Award	FY 06	Award	FY 07	Award	Cost to	Total	Target Valu
	& Type	Location	Cost			Date	Cost	Date	Cost	Date	Cost	Date	Complete	Cost	of Contract
Developmental Test & Evaluation	WX	Various		0.250	0.040	03/04			0.100		0.100)	3.950	4.44	0
Operational Test & Evaluation	WX	Various		0.029					0.050		0.050)		0.12	9
Live Fire Test & Evaluation															
Test Assets									0.100		0.100)		0.20	0
Tooling															
GFE															
Award Fees															
											1	1			
									1		1				
								-							
Subtotal T&E Remarks:				0.279	0.040		0.000		0.250		0.250	<u> </u>	3.950	4.76	9
				0.279	0.040		0.000		0.250		0.250	<u>) </u>	3.950	4.76	9
	FFP	VARIOUS		0.279	0.040	12/03	0.000		0.250		0.250		3.950 4.263		
Remarks:	FFP WX	VARIOUS VARIOUS				12/03 04/04	0.000								8
Remarks: Contractor Engineering Support				0.995	0.200		0.000							5.85 0.81	8
Remarks: Contractor Engineering Support Government Engineering Support	wx	VARIOUS	/EL	0.995 0.599	0.200 0.213	04/04	0.000		0.200		0.200		4.263	5.85 0.81 1.20	8 2 7
Remarks: Contractor Engineering Support Government Engineering Support Program Management Support	WX CPFF	VARIOUS VARIOUS	/EL	0.995 0.599 0.282	0.200 0.213 0.175	04/04 12/03	0.000		0.200		0.200		4.263	5.85 0.81 1.20	8 2 7
Remarks: Contractor Engineering Support Government Engineering Support Program Management Support Travel	WX CPFF	VARIOUS VARIOUS	/EL	0.995 0.599 0.282	0.200 0.213 0.175	04/04 12/03	0.000		0.200		0.200		4.263	5.85 0.81 1.20	8 2 7
Remarks: Contractor Engineering Support Government Engineering Support Program Management Support Travel Labor (Research Personnel)	WX CPFF	VARIOUS VARIOUS	/EL	0.995 0.599 0.282	0.200 0.213 0.175	04/04 12/03	0.000		0.200		0.200		4.263	5.85 0.81 1.20	8 2 7
Remarks: Contractor Engineering Support Government Engineering Support Program Management Support Travel Labor (Research Personnel)	WX CPFF	VARIOUS VARIOUS	/EL	0.995 0.599 0.282	0.200 0.213 0.175	04/04 12/03	0.000		0.200		0.200		4.263	5.85 0.81 1.20	8 2 7
Remarks: Contractor Engineering Support Government Engineering Support Program Management Support Travel Labor (Research Personnel)	WX CPFF	VARIOUS VARIOUS	/EL	0.995 0.599 0.282	0.200 0.213 0.175	04/04 12/03	0.000		0.200		0.200		4.263	5.85 0.81 1.20 0.51	8 2 7 3
Contractor Engineering Support Government Engineering Support Program Management Support Travel Labor (Research Personnel) SBIR Assessment	WX CPFF	VARIOUS VARIOUS	/EL	0.995 0.599 0.282 0.052	0.200 0.213 0.175 0.015	04/04 12/03			0.200 0.100 0.055		0.200 0.100 0.055		4.263 0.550 0.336	5.85 0.81 1.20 0.51	8 2 7 3
Remarks: Contractor Engineering Support Government Engineering Support Program Management Support Travel Labor (Research Personnel) SBIR Assessment Subtotal Management	WX CPFF	VARIOUS VARIOUS	/EL	0.995 0.599 0.282 0.052	0.200 0.213 0.175 0.015	04/04 12/03			0.200 0.100 0.055		0.200 0.100 0.055	5	4.263 0.550 0.336	5.85 0.81 1.20 0.51 8.39	8 2 7 3 3

CLASSIFICATION:

EXHIBIT R4, Schedule	Profile	•																							DATE	:	FE	BRUA	ARY 2	2005		
APPROPRIATION/BUDGE RDT&E, N / BA-7	Γ ACTIV	ΊΤΥ							PROG 0204								Unit	s				ECT N					R					
Fiscal Year 2004 2005					200	06			200	07			20	108			200	9			20	10			201	11						
	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	2
Acquisition filestones		мѕ в																														
CAC S&T Initiatives									\triangle																							

CLASSIFICATION:

Exhibit R-4a, Schedule Detail						DATE:		
						FE	EBRUARY 2	005
APPROPRIATION/BUDGET ACTIVITY	PROGRAM E	LEMENT			PROJECT NU	IMBER AND N	AME	
RDT&E, N / BA-7	2231 / TECH	NOLOGY TR	ANSFER					
Schedule Profile	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
Milestone B	2Q							
LCAC S&T Initiatives			1Q-4Q	1Q-4Q	1Q-4Q	1Q-4Q	1Q-4Q	1Q-4Q

R-1 SHOPPING LIST - Item No.

CLASSIFICATION:

UNCLASSIFIED

EX	HIBIT R-2a, F	RDT&E Proje	ct Justification				DATE:			
				FEB	RUARY 2005					
APPROPRIATION/BUDGET ACTIVITY	PROGRAM EL	AME AND NU	MBER							
RDT&E,N/BA7	0204413N/A	mphibious 1	Factical Supp	ort Units	Amphibious I	_ighterage De	velopment/290)9		
COST (\$ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	Cost to Complete	Total Cost
Project Cost	0.050	3.510	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.560
RDT&E Articles Qty	N/A	30	N/A	N/A	N/A	N/A	N/A	N/A		

A. Mission Description and Budget Item Justification:

This project supports development and procurement of technology to develop Navy causeway lighterage. The Improved Navy Lighterage System (INLS) replaces the existing Navy Lighterage (NL) system and supports the US Navy Lighterage recapitalization plan. Current NL will reach the end of its service life and will impact crew safety and operation readiness. INLS will be capable of operations in higher sea states, have a greater service life, and have reduced maintenance costs. INLS will be deployed during Logistic Over The Shore (LOTS) operations, Assault Follow On Echelon (AFOE) operations and Maritime Prepositioning Force (MPF) operations. INLS consists of Warping Tugs, Causeway Ferries, RO/RO Discharge Facilities and Floating Causeway. The design and development for INLS was completed in FY04. Contract for Low Rate Initial Production (LRIP) was awarded in Aug 03. OPEVAL DT/OT will take place 3rd quarter FY05. In addition, INLS Phase III design process continues with the High Speed Ferry Assault Connector (CFFX) in support of the Seabasing concept.

FY2004 Actual: \$0.050 for INLS OPEVAL Support

FY2005 Plan: \$2.443M for INLS OPEVAL and \$1.067M for CFFX

FY2006 Plan: Not Applicable FY2007 Plan: Not Applicable

	FY2004	FY2005	FY2006	FY2007
INLS OPEVAL	0.050	2.443	0.000	0.000
CFFX	0.000	1.067	0.000	0.000
RDT&E Articles Qty	N/A	30	N/A	N/A

INLS design and development were accomplished in FY2004. Operation and evaluation testing will begin in FY2005. CFFX Technology development begins in FY2005.

R-1 SHOPPING LIST - Item No. 174-2

CLASSIFICATION:

UNCLASSIFIED

EXH	BIT R-2a, RD	T&E Projec	ct Justification	1		I	DATE:			
								FEBF	RUARY 2005	
APPROPRIATION/BUDGET ACTIVITY			ME AND NUMB		PROJECT NA	_				
RDT&E,N/BA7	0204413N/	Amphibiou	s Tactical S	upport	Amphibious Li	ghterage Dev	elopment/29	909		
C. Program Change Summary:										
			FY2004	FY2005	FY2006	FY2007				
FY2005 President's Budget			0.000	2.443	0.000	0.000				
FY2006 President's Budget			0.050	3.510	0.000	0.000				
Total Adjustments			0.050	1.067	0.000	0.000				
Summary of Adjustments										
Reprogrammings			0.050	0.000	0.000	0.000				
Other Reductions			0.000	-0.033	0.000	0.000				
INLS Congressional Add			0.000	1.100	0.000	0.000				
			0.050	1.067	0.000	0.000				
D. Other Program Funding Summary	(INLS Developm	ent)								
	EV0004	EV000E	EV0000	F)/0007	F) (0000	F) (0000	E) (00.40	F)/0044	T 0 11	T. 10 1
CESE Line 6033 Amphib Equip (OPN)	FY2004 4.2	FY2005 11.5	FY2006 149.7	FY2007 86.3	FY2008 104.8	FY2009 13.9	FY2010 0.0	FY2011 0.0	To Complete 0.0	Total Cost 370.4
(U) Related RDT&E: NA	7.2	11.0	140.7	00.5	104.0	13.3	0.0	0.0	0.0	370.4
E. Acquisition Strategy (JMLS/INLS)			Aug 03 with OPN t t will begin in FY0		on and evaluation	n testing will beg	jin in FY2005.			
	0.174.0010.0	gy dorolopilloll	20g							
F. Major Performer:										
Activities & Location	Work Performe	d								
OPTEVFOR, Norfolk, VA	OPEVAL of LR									
Art Anderson Associates	CFFX Techno	ology Develop	ment							

R-1 SHOPPING LIST - Item No. 174-3

CLASSIFICATION:

UNCLASSIFIED

Exhibit R-3 Cost Analysis (pag															
		1			1						FEBRUARY	2005			
APPROPRIATION/BUDGET ACTIV	ITY		GRAM ELEMENT			NAME AND I									
RDT&E,N/BA7				us Tactical Sup	port Uni Amphibiou		Development/29								
Cost Categories	Contract	Performing	Total			FY 04		FY 05		FY 06		FY 07			
Tailor to WBS, or System/Item	Method	Activity &	PY s		FY 04	Award	FY 05	Award	FY 06	Award	FY 07	Award	Cost to	Total	Target Value
Requirements)	& Type	Location	Cost		Cost	Date	Cost	Date	Cost	Date	Cost	Date	Complete	Cost	of Contract
Primary Hardware Development													0.000	0.000	
Ancillary Hardware Development													0.000	0.000	
Systems Engineering	RCP	AAA - CA	0.000				1.067	02/05					0.000	1.067	
icenses														0.000	
Γooling														0.000	
GFE .														0.000	
Award Fees														0.000	
Award Fees Subtotal Product Development Remarks:			0.000	0.000	0.000		1.067		0.000		0.000		0.000	1.067	
Subtotal Product Development		<u> </u>	0.000	0.000	0.000		1.067		0.000		0.000		0.000		
Subtotal Product Development Remarks:			0.000	0.000	0.000		1.067		0.000		0.000		0.000	1.067	
Subtotal Product Development Remarks: Development Support Equipment Software Development			0.000	0.000	0.000		1.067		0.000		0.000		0.000	0.000 0.000	
Subtotal Product Development Remarks: Development Support Equipment Software Development Training Development			0.000	0.000	0.000		1.067		0.000		0.000			0.000 0.000 0.000	
Subtotal Product Development Remarks: Development Support Equipment Software Development Training Development Integrated Logistics Support			0.000	0.000	0.000		1.067		0.000		0.000		0.000	0.000 0.000 0.000 0.000	
Subtotal Product Development Remarks: Development Support Equipment Software Development Training Development Integrated Logistics Support Configuration Management			0.000	0.000	0.000		1.067		0.000		0.000			0.000 0.000 0.000 0.000 0.000	
Subtotal Product Development Remarks: Development Support Equipment Software Development Training Development Integrated Logistics Support Configuration Management Fechnical Data			0.000	0.000	0.000		1.067		0.000		0.000			0.000 0.000 0.000 0.000 0.000 0.000	
Subtotal Product Development Remarks: Development Support Equipment Software Development Training Development			0.000	0.000	0.000		1.067		0.000		0.000			0.000 0.000 0.000 0.000 0.000	

R-1 SHOPPING LIST - Item No. 174-4

CLASSIFICATION:

UNCLASSIFIED

								DATE:								
Exhibit R-3 Cost Analysis (pa	ge 2)											FEBRUARY	2005			
APPROPRIATION/BUDGET ACTIV		l.	PROGRAM ELEMENT			PROJECT N	IAME AND N	NUMBER								
RDT&E,N			0204413N/Amphib	ious Tactic	al Support U	nii Amphibious	Lighterage Γ	Development/	2909							
Cost Categories	Contract	Performing	Total	1		pbiodo	FY 04	T	FY 05		FY 06		FY 07			Т
(Tailor to WBS, or System/Item	Method	Activity &	PY s			FY 04	Award	FY 05	Award	FY 06	Award	FY 07	Award	Cost to	Total	Target Value
Requirements)	& Type	Location	Cost			Cost	Date	Cost	Date	Cost	Date	Cost	Date	Complete	Cost	of Contract
Developmental Test & Evaluation	, , , ,							1					1	0.000	0.000	
Operational Test & Evaluation	WR	OPTEVFOR				0.050	03/04	2.443	03/05	\$0.000		0.000		0.000	2.493	1
Tooling															0.000	1
GFE															0.000	1
Subtotal T&E			0.000	0.000		0.050		2.443		0.000		0.000		0.000	2.493	1
Contractor Engineering Support									<u> </u>						0.000	
Government Engineering Support							+		+		1	_			0.000	+
Program Management Support															0.000	+
Travel															0.000	1
Labor (Research Personnel)															0.000	1
Overhead															0.000	
Subtotal Management			0.000	0.000		0.000		0.000		0.000		0.000		0.000	0.000	
Remarks:																
Total Cost			0.000	0.000		0.050		3.510		0.000		0.000		0.000	3.560	T
Remarks:	1		, 3.335	2.000	1	, 3.000	•	3.010	•	, 3.000	•	, 0.000		, 0.000	3.000	-

R-1 SHOPPING LIST - Item No. 174-5

CLASSIFICATION:

EXHIBIT R4, Schedule	Profile																								DATE	:	FEI	3RU/	ARY 2	2005		
APPROPRIATION/BUDGET RDT&E, N /	ACTIVI BA-7														NAM al Su		t Uni	ts			PROJ Amph						2909					
Fiscal Year	2004				2005				2006			2007			2008			2009			2010				2011							
Tioda Toda	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
INLS Acquisition Milestones								7	C FRI	Dec																						
Test & Evaluation Milestones							Q.	PEVAL																								
Operational Test																																
Production Milestones																																
LRIP AUG 2003									_	RP Sta	rt															FOC						
FRP FY 09											ail															\triangle						
Deliveries					LRIP [Deliverie	es																									

R-1 Shopping List - Item No. 174-6

CLASSIFICATION:

Exhibit R-4a, Schedule Detail	DATE: FEBRUARY 2005											
APPROPRIATION/BUDGET ACTIVITY	UMBER AND NAME											
RDT&E, N / BA-7	0204413N/	Amphibious	Tactical Su	pport	Amphibious Lighterage Development/2909							
Schedule Profile (MHP)	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011				
Start Low-Rate Initial Production I (LRIP) 4Q FY03												
Low-Rate Initial Production Delivery		1Q										
Operational Test & Evaluation (OPEVAL)		3Q/4Q										
Full Rate Production (FRP) Decision			1Q									
Full Rate Production Start			2Q									
Full Operation Capability							2Q					
CFFX - SBIR Phase III Continues		2Q										
CFFX Technology Final Report		4Q										

R-1 Shopping List - Item No 174-7