CLASSIFICATION:

EXHIBIT R-2, RDT&E Budget Item Justification							DATE:	
							Feburar	y 2005
APPROPRIATION/BUDGET ACTIVITY					R-1 ITEM NOMENO	CLATURE		
RESEARCH DEVELOPMENT TEST & EVALUA	TION, NAV\I	BA-5	T		Ship Contract Design	gn/Live Fire T&E PI	E 0604567N	
COST (\$ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
Total PE Cost	114.654	118.519	55.672	86.506	83.826	59.393	40.082	87.499
2301 / CVN-77 Design	20.520	0.010	0.000	0.000	0.000	0.000	0.000	0.000
4007 / CVN 21 LFT&E	8.657	8.490	7.533	7.576	7.473	8.480	7.639	3.550
4008 / CVN 21 Total Ship Integration	22.691	62.600	9.721	22.204	6.918	0.000	0.000	0.000
3108 / CVN (X) Total Ship Integration	0.000	0.000	0.000	0.000	0.000	0.000	0.000	57.882
1803 / Ship Contract Design	1.731	1.696	11.538	6.465	4.723	4.753	4.753	4.716
2198 / Life Fire Test and Evaluation	4.213	0.000	2.745	1.563	0.000	0.000	0.000	0.000
S2465/LHA Replacement Flight 0	53.572	43.753	22.194	46.451	32.657	15.781	12.001	18.254
9389 LHD 8 Performance Based Logistics (PBL)	1.347	0.000	0.000	0.000	0.000	0.000	0.000	0.000
9390 UNOLS Research Vessel*	1.923	0.000	0.000	0.000	0.000	0.000	0.000	0.000
9578 / Integrated Modernization Environment	0.000	1.970	0.000	0.000	0.000	0.000	0.000	0.000
3133 Sea Base to Shore Connector	0.000	0.000	0.000	0.000	18.156	22.395	8.816	1.719
3134 Intratheater Connectors (Contract Design)	0.000	0.000	1.941	2.247	13.899	7.984	6.873	1.378

A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

This Program Element (PE) directly supports the Navy's Shipbuilding Plan by providing for the development of engineering, programmatic and acquisition documentation including ship specifications (including performance specifications) and contractual documentation associated with acquisition of Navy ships. This PE also supports the Congressionally mandated Live Fire Test and Evaluation program for new ship designs.

Contract Design has traditionally been the engineering development of the technical and contractual definition of the ship design (including ship specifications and drawings) to a level of detail sufficient for shipbuilders to make a sound estimate of the construction cost and schedule. Additionally, the contract design package developed under this PE has provided the technical baseline from which the Navy selects the shipbuilder who then develops the detail design package required to support the construction and eventual delivery of the ship. This PE also supports the development of design methodologies/tools which facilitate and optimize the transition from ship design documents to efficient production of new ships and ship conversions, and supports engineering planning and ship affordability studies.

Under Acquisition Reform for new design ships, traditional distinct phasing of the design process has been replaced with a continuous concurrent engineering Integrated Product and Process Development (IPPD) process extending through and after contract award. This serves to maintain the focus of multi-discipline teams consisting of the government, shipbuilder, system programs, and suppliers. Government/Industry Integrated Product Team(s) (IPTs) will utilize the IPPD process to develop the design in an Integrated Product and Data Environment (IPDE). The design approach is part of an acquisition strategy that is based on commercial practices and incorporates a phased technical definition.

^{*} Funding in project 9390 applies to Office of Naval Research Program Element 0601153N.

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification							DATE:	
							Februa	ry 2005
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEME	ENT NUMBER AND	NAME		PROJECT NUMBE	ER AND NAME		
RDT&E, N / BA-5	Ship Contract I	Design/LFT&E	PE 0604567N		CVN 77 Design	2301		
COST (\$ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
Project Cost	20.520	0.010	0.000	0.000	0.000	0.000	0.000	0.000
RDT&E Articles Qty								

A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

This project encompasses CVN 77 design. For FY04 and earlier, the CVN 77 design approach was part of an acquisition strategy based on incorporating best available commercial practices and a phased technical definition. The CVN 77 research and development investment identified and validated transition technologies for incorporation into the CVN 77 design. The objectives of these technologies were to enhance warfighting capabilities, reduce shipboard workload and life cycle costs, provide benefits to the other nine ships of the NIMITZ class, and mitigate future risk for CVN 21. The pivotal investment area was transition technology insertion into, and the functional combining of, traditional Combat Systems; Command, Control, Computers and Communications, Intelligence, Surveillance and Reconnaissance (C4ISR); and aviation functions to achieve transiiton technology objectives. Technical insertion risk mitigation actions resulted in reverting back to a modified repeat of the CVN 76 design.

R-1 SHOPPING LIST - Item No.

116

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification	on			DATE:	
				Febr	uary 2005
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND	O NAME	PROJECT NUMBER AND I	NAME	
RDT&E, N / BA - 5	Ship Contract Design/LFT&E	PE 0604567N	CVN 77 Design 2301		
B. Accomplishments/Planned Program					
	FY 04	FY 05	FY 06	FY 07	7
Accomplishments/Effort/Subtotal Cost	20.520	0.010	0.000	0.000	
RDT&E Articles Quantity					
CVN 77 Design: – FY04 activities monitored improvem data exchange across operational areas, data fusion, Definition Packages (TDPs), including flexible island d new developmental technologies resulting from Congr strategy. Appropriate R&D funded efforts concluded in	and integrated displays for operators, Developed esign and other distributed system margin modific essional Plus Up and to insure warfare system int	Pre-Planned Product cations. Developed of	Improvement (P3I) design with the concurrent system software throu	he warfare system P3I Technical igh system managers to integrate	

CLASSIFICATION:

XHIBIT R-2a, RDT&E Project Justification					DATE:	
						February 2005
PPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AN			PROJECT NUMBER A		
DT&E, N / BA-5	Ship Contract Design/LFT&E	PE 060	4567N	CVN 77 Design 23	01	
C. PROGRAM CHANGE SUMMARY:						
Funding:	FY 2004	FY 2005	FY 2006	FY 2007		
FY05 President's Budget	28.674	25.495	5.858	0.733		
FY06 President's Budget	20.520	0.010	0.000	0.000		
Total Adjustments	-8.154	-25.485	-5.858	-0.733		
Summary of Adjustments						
misc reductions	-8.154	0.000	-0.004	0.000		
Programmatic/Other realignment		-25.485	-5.854	-0.733		
Subtotal	-8.154	-25.485	-5.858	-0.733		
Schedule:						
Not Applicable						
Technical:						
Not Applicable.						

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Proje	ct Justification			DATE:
				February 2005
APPROPRIATION/BUDGET ACTIV	/ITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND N	AME
RDT&E, N /	BA-5	Ship Contract Design/LFT&E PE 0604567N	CVN 77 Design 2301	

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	Complete	Cost
BLI 5300 Completion of PY Shipbuilding Pro	ograms		145,000	348 449	376.475					869.924

E. ACQUISITION STRATEGY:

CVN77 is the 10th and last ship of the CVN68 Nimitz class of aircraft carriers. A sole source FPIF contract for basic construction was awarded to NGNN in January 2001.

F. MAJOR PERFORMERS:

Northrop Grumman Newport News Shipbuilding , Newport News Virginia SPAWAR, San Diego Ca NAVSEA, Washington DC NAVAIR, Pax River Md

R-1 SHOPPING LIST - Item No. 116

T-4-1

CLASSIFICATION:

Exhibit R-3 Cost Analysis (pa	age 1)											DATE:	February 2	005
APPROPRIATION/BUDGET ACTI RDT&E, N / BA-5	VITY	PROGRAM ELE Ship Contrac		FT&E PE()604567N	PROJECT NU		NAME				<u> </u>	T COI Gary 2	
Cost Categories	Contract Method & Type	Performing	Total PY s Cost	FY 04 Cost	FY 04 Award Date	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
CVN 77 Product Development	PR,SS	NGNN, Newport News VA	123.206			0.000		0.000	Daio	0001	Build	Complete	126.206	
		Bettis Atomic Pwr Labs, Pa	42.691	0.000									42.691	
	WR	NAWCS Lakehurst NJ, Pax Md		0.398	12/03	0.000		0.000					6.036	
	WR	NSWC Dahlgren	22.420			0.000		0.000					24.255	
	PD/WR	SPAWAR, San Diego Ca	10.568			0.000		0.000					17.155	
	PD	NAVSEA Wash DC	6.949			0.000		0.000					9.552	
	Various	Miscellaneous	30.940	1.160		0.000		0.000					32.100	
	WR	NSWC Carderock	1.859		12/03	0.000	1	0.000		0.000			2.246	
		cost of war withhold	1.300										1.300	
CVNX Product Development	PR.SS	NGNN, Newport News VA	33.178										33.178	
	MIPR	Anteon Corp, Arlington Va	1.816										1.816	
	PD	NAVAIR, Pax River Md	7.091										7.091	
	Various	Miscellaneous	1.472										1.472	
Subtotal Product Development			289.128			0.000		0.000		0.000			305.098	
		I	Г	T	T		T		I				T	
Development Support					-			_				_		
Software Development	1													
Training Development	1													
Integrated Logistics Support														
Configuration Management	+													
Technical Data														
GFE														
Award Fees									1					
Subtotal Support	I	1	0.000	0.000	ol .	0.000	ıl	0.000	1	0.000	ıl	0.000		

CLASSIFICATION:

= 1 11 12 B 0 0 1 1 1 1 1 1	0)											DATE:		
Exhibit R-3 Cost Analysis (pa		Inn	OOD AM ELEMENT			DDO IFOT NII	IMPED AND	NIA NAT					February 2	2005
APPROPRIATION/BUDGET ACTIV RDT&E, N / BA-5	TIY		OGRAM ELEMENT ip Contract Design	// ETOE D	= 0604E67N	PROJECT NU								
Cost Categories	Contract	Performing	Total	LFIXE F	FY04		FY05		FY06		FY07		I	1
Cost Categories	Method	Activity &	PY s	FY04	Award	FY05	Award	FY06	Award	FY07	Award	Cost to	Total	Target Value
	& Type	Location	Cost	Cost	Date	Cost	Date	Cost	Date	Cost	Date		Cost	of Contract
Developmental Test & Evaluation														
Operational Test & Evaluation														
ive Fire Test & Evaluation	WR	NSWC Carderock	8.54	1									8.54	1
	Various	Miscellaneous	0.74	-3									0.74	3
Fooling														
GFE														
Award Fees														
Award Fees Subtotal T&E Remarks:			9.28	0.00	00	0.000)	0.000		0.000)	0.000	9.28	4
Subtotal T&E Remarks:			9.28	0.00	00	0.000		0.000		0.000)	0.000	9.28	4
Subtotal T&E Remarks: Contractor Engineering Support			9.24	0.00	00	0.000		0.000		0.000		0.000	9.28	4
Subtotal T&E Remarks: Contractor Engineering Support Government Engineering Support			9.24							0.000		0.000		
Subtotal T&E Remarks: Contractor Engineering Support Government Engineering Support Program Management Support		NAVSEA MAC		4.4	38	0.000		0.000		0.000		0.000	4.48	8
Subtotal T&E Remarks: Contractor Engineering Support Government Engineering Support Program Management Support		NAVSEA MAC	9.24	4.4	38					0.000		0.000		8
Subtotal T&E Remarks: Contractor Engineering Support Government Engineering Support Program Management Support Travel Labor (Research Personnel)		NAVSEA MAC		4.4	38	0.000		0.000		0.000		0.000	4.48	8
Remarks: Contractor Engineering Support Government Engineering Support Program Management Support Travel Labor (Research Personnel) SBIR Assessment		NAVSEA MAC	0.10	4.4	38	0.000		0.000		0.000			4.48	8 8
Subtotal T&E Remarks: Contractor Engineering Support Government Engineering Support Program Management Support Travel Labor (Research Personnel)		NAVSEA MAC		4.4	38	0.000		0.000		0.000		0.000	4.48	8 8
Subtotal T&E Remarks: Contractor Engineering Support Government Engineering Support Program Management Support Fravel Labor (Research Personnel) SBIR Assessment		NAVSEA MAC	0.10	4.4	38	0.000		0.000		0.000			4.48	8 8

CLASSIFICATION:

EXHIBIT R4, Schedule																									ATE:	F	ebrua	ary 20	05		
APPROPRIATION/BUDGE	T ACTIVI	ΓY							PROG	RAM	ELEM	ENT N	UMBE	R AND	NAME						PROJI	ECT N	UMBER	I DNA	NAME						
RDT&E, N /	BA-5								Ship	Con	tract	Desi	gn/LF	T&E	PE (06045	67N				CVN	77 De	esign 2	2301							
Fiscal Year		20	02			200	03			20	04			200	05			200	06			200)7			2008			200	9	
	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	
Contract Milestones Construction Contract								\wedge									Lan	d Islan	nd /\						De	livery			Δ		
onstruction Contract							ا	Keel La	ying										aunch istening	g)					Builde Trial			PSA Start	WLD		
Post Shakedown Availability																															
&E Milestones																							cs:	Δ							
																						Pre-de		BST DT&E	4	PD1	「&E	→			

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification								DATE:
								February 2005
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELE	MENT NAME AN	ND NUMBER		PROJECT NAM	E AND NUMBER		
RDT&E, N / BA 5	Ship Contrac	t Design/LFT	&E PE 0604	567N	CVN 21 LFT8	&E 4007		
COST (\$ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
Project Cost	8.657	8.490	7.533	7.576	7.473	8.480	7.639	3.550
RDT&E Articles Qty								

A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

This project encompasses LFT&E efforts for CVN 78 and CVN 79. Title 10, US Code, Section 2366, CVN 21 Operational Requirements Document (ORD) and the CVN 21 Test and Evaluation Master Plan, prescribe requirements for Live Fire Test and Evaluation (LFT&E). The purpose of LFT&E is to evaluate weapons and weapons systems in a realistic combat environment and to identify any mission threatening vulnerabilities early in the development process when there is time to take corrective action. The CVN 21 LFT&E Management Plan details the efforts, through testing and engineering analyses, to address potential design vulnerabilities.

The high unit cost of CVN 21 class and its shipboard systems preclude consideration of destructive testing of a full-up CVN 21 class hull with threats of the type that might be expected in combat. Consequently, the Navy must rely on other means to determine that CVN 21 class ships will be able to survive and carry out its missions in the face of the threats identified in the CVN 21 System Threat Assessment Report.

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE:
		February 2005
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME
RDT&E, N / BA-5	Ship Contract Design/LFT&E PE 0604567N	CVN 21 LFT&E 4007
D. Accomplish monte/Dlaward Ducasan		

B. Accomplishments/Planned Program

	FY04	FY05	FY 06	FY 07
Accomplishments/Effort/Subtotal Cost	8.657	8.490	7.533	7.576
RDT&E Articles Quantity				

- (U) FY04/05: Resolve low confidence areas in analytical models for LFT&E concerns and continue to conduct LFT&E surrogate test program. This includes continuation of testing underwater protection features (innerbottom structure and Torpedo Side Protection System), dynamic test of hull girder models and conduct of recoverability tests, and vulnerability modeling of the CVN 78 for Vulnerability Assessment Report #3. Initiate survivability modeling improvements. Conduct weapon debris full scale tests and analyses. Conduct underwater explosion and recoverability surrogate tests on the Large Test Asset (LTA). Continue with analytical bridge work between scaled model test results and analytical correlations. Update and develop new SVM models. Prepare, construct and test full and scaled surrogate model targets as required by TEMP 1610 and the LFT&E Management Plan. Conduct analyses and tests on ex-SHADWELL to evaluate ordnance in CVN 78 class representative locations, to review hangar bay fire spread, to determine desmoking and dewatering capabilities, data network system, and to assess fire main vulnerability. Continue intensive vulnerability modeling of CVN 78 for Vulnerability Assessment Report #3. Continue survivability model improvements to support CVN 78 vulnerability assessment. Begin analyses of CVN 21 class vulnerability for VAR 3. In support of ORD vulnerability requirements testing, begin planning efforts & begin representative CVN 21 class fire and smoke spread tests, and main drainage analyses; assess designed passive damage control features and conduct recoverability modeling tests.
- (U) FY06: Conduct susceptibility assessment of the CVN 21 class. Continue to resolve low confidence areas in analytical models for LFT&E concerns and continue to conduct LFT&E surrogate test program. This includes continuation of testing underwater protection features (innerbottom structure), and conduct of recoverability tests. Continue survivability modeling improvements. Continue with analytical bridge work between scaled model test results and analytical correlations. Continue update and develop new SVM/ASAP models. Prepare, construct and test full and scaled surrogate model targets as required by TEMP 1610 and the LFT&E Management Plan. Refurbish Flight Deck Model. Finalize vulnerability analyses and drafting of Vulnerability Assessment Report #3. Continue survivability model improvements to support CVN 21 class vulnerability assessment. In support of ORD vulnerability requirements testing, conduct representative CVN 21 class fire and smoke spread tests, flight deck fire tests, and main drainage tests; conduct test of the passive damage control features and conduct recoverability modeling tests.
- (U) FY07: Continue susceptibility assessment of the CVN 21 class. Continue to resolve low confidence areas in analytical models for LFT&E concerns and continue to conduct LFT&E surrogate test program. This includes testing Damage Prevention Protection System, System B components, & continuation of testing underwater protection features (innerbottom structure), and conduct of recoverability tests, and deliver the CVN 21 Vulnerability Assessment Report #3. Initiate survivability modeling improvements. Continue with analytical bridge work between scaled model test results and analytical correlations. Update and develop new SVM models Prepare, construct and test full and scaled surrogate model targets as required by TEMP 1610 and the LFT&E Management Plan. Conduct Flight Deck testing and analysis.

R-1 SHOPPING LIST - Item No. 116

UNCLASSIFIED

Exhibit R-2, RDTEN Budget Item Justification (Exhibit R-2, page 10 of 70)

CLASSIFICATION:

4 FY 20 7 8.6 7 8.4 0 -0.1 8 -0.1 0 -0.1	CVN 005 505 190 15	FY 2006 8.158 7.533 -0.625 -0.625	FY 2007 8.108 7.576 -0.532 -0.532	
4 FY 20 7 8.6 7 8.4 0 -0.1 8 -0.1 0 2 -0.0	005 605 190 15 05	FY 2006 8.158 7.533 -0.625	FY 2007 8.108 7.576 -0.532	
7 8.6 7 8.4 0 -0.1 8 -0.1 0 2 -0.6	005 190 15 05	8.158 7.533 -0.625	8.108 7.576 -0.532	
7 8.6 7 8.4 0 -0.1 8 -0.1 0 2 -0.6	005 190 15 05	8.158 7.533 -0.625	8.108 7.576 -0.532	
7 8.4 0 -0.1 8 -0.1 0 2 -0.0	90 15 05 010	7.533 -0.625 -0.625	7.576 -0.532 -0.532	
0 -0.1 8 -0.1 0 2 -0.0	15 05 010	-0.625 -0.625	-0.532 -0.532	
8 -0.1 0 2 -0.0	05	-0.625	-0.532	
0 2 -0.0)10		-0.532 -0.532	
0 2 -0.0)10		-0.532 -0.532	
2 -0.0			-0.532 -0.532	
			-0.532 -0.532	
0 -0.1	15	-0.625	-0.532	

CLASSIFICATION:

EXHIBIT R-2a, RDT&E	Project Justification								DATE:			
										Februa	ry 2005	
APPROPRIATION/BUDGET	T ACTIVITY		PROGRAM E	LEMENT NUM	BER AND NAI	ME	PROJECT NU	MBER AND N	IAME			
RDT&E, N /	BA-5		Ship Contr	act Design/	LFT&E PE	0604567N	CVN 21 LF	T&E 4007				
D OTHER PROGRA	AM FUNDING SUMMARY:											
D. OTTLER I ROOM	am i ondino odminatri.									To	Total	
Line Item No. & Na	<u>ame</u>	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	Complete	Cost	
BLI 200100 Carr	rier Replacement Program	1,162.905	623.551	564.913	795.994	3,689.413	3,730.407	1,657.362	539.680	Cont.	Cont.	
PE 0603512N C	Carrier System Development	145.490	161.930	167.823	198.395	160.688	155.120	146.126	85.451	Cont.	Cont.	
PE 0603570N A	Adv. Nuclear Power Systems	198.814	168.080	168.373	170.980	160.992	152.814	133.951	105.975	Cont.	Cont.	

^{*}Note: Only a portion of the funding in PE 0603570N is included in the CVN 21 Program

E. ACQUISITION STRATEGY:

The CVN 78 will be the first ship of the CVN 21 class of aircraft carriers. Due to the length and cost of construction, each carrier will be contracted for separately. The CVN 78 will feature a new nuclear propulsion and electrical generation/distribution system, new electromagnetic aircraft launching system, advanced arresting gear system, all electric auxiliaries, warfare system improvements, survivability enhancements, improved weapons handling, and improved aircraft servicing. These design features will result in lower manpower and total ownership costs as compared to the Nimitz Class. Additionally, the following warfighting benefits will be realized: increased sortie generation rate, improved ship self defense capability, increased launch and recovery capability/flexibility, increased operational availability, and increased flexibility to support future upgrades.

F. MAJOR PERFORMERS:

NSWC Carderock Maryland

CLASSIFICATION:

Exhibit R-3 Cost Analysis												DATE:	February 2	005
RPROPRIATION/BUDGET ACT BA-5	TIVITY	PROGRAM I Ship Cont	ELEMENT :ract Design/	LFT&E PE	0604567N			PROJECT NU		NAME				
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 04 Cost	FY 04 Award Date	FY 05 Cost	FY 05 Award Date	FY 06	FY 06 Award Date	FY 07 Cost	FY 07 Award Date	Cost to Complete	Total Cost	Target Value of Contract
ive Fire Test & Evaluation	WX	NSWC Carderock, MD	7.780	7.598	12/03 12/1/2003	7.225	12/04	7.005	12/05	7.046	12/06	Continuing	Continuing	
	Various	Miscellaneous	1.233	1.059	5/31/2004	1.265	12/04	0.528	12/05	0.530	12/06	Continuing	Continuing	
Subtotal T&E			9.013	8.657		8.490		7.533		7.576		Continuing	Continuing	
Remarks: Contractor Engineering Support			T	<u> </u>			<u> </u>	1	<u> </u>	1	<u> </u>	1	1	<u> </u>
Sovernment Engineering Support														
Program Management Support														
ravel														
abor (Research Personnel)														
BIR Assessment														
Subtotal Management			0.000	0.00	0	0.000		0.000		0.000		0.000	0.000	
Remarks:														
otal Cost			9.013	8.65	7	8.490		7.533		7.576		Continuing	Continuing	
Remarks:	•		•				•	•	•	•				

CLASSIFICATION:

EXHIBIT R4, Schedule	Profile																								DATE	:	F	ebrua	ry 20	05		
APPROPRIATION/BUDGET RDT&E, N /	ACTIVI BA-(R AND							PROJ CVN 2				D NAM	E						
Fiscal Year		20	004			20	05			20	06			20	07			20	800			20	09			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
Acquisition Milestones		MS B ∠	SRR				SFR		PDR				CDR	DAB	PR																	
Propulsion Plant																																
EMALS		SDD /	WARI)	SRR	SFR	PDI	R С	DR 1	CD	R 2	TRR	1		TR	R 2				LRIP												
DBR Radar Suite		PE /	OR.		CDR																											
Advanced Arresting Gear	SRR			PDR	MS B			CDR-1	-2				TRI	R 1						TF	R 2				мѕс							
Test & Evaluation Milestones						DT	A2									DT	B1					,			DT	B2				DT	В3	
Development Test Operational Test					<	ОТ	B1	}				(\ \	ОТ	B2		—	ОТ	B3)	B4		>					ОТ	B5	
Contract Milestones IPPD Contract CP Contract Construction Contract	C	ontrad	ct Awar	d												Cor	tract A	ward														
Full Funding (SCN)																	х															

^{*} Not required for Budget Activities 1, 2, 3, and 6

CLASSIFICATION:

							DATE:	
Exhibit R-4a, Schedule Detail	Innoonuu	EL ELIELIT			Inno Inno			uary 200
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-04	PROGRAM	ELEMENT I N - Carrier Sy s	stems Develor	nment	CVN 21 LF1	NUMBER AND	NAME	
Schedule Profile	FY04	FY05	FY06	FY07	FY08	FY09	FY10	FY11
Developmental Tests DT A-2	1-4Q	F103	F100	F107	F 1 00	F109	FTIU	FIII
Advanced Arresting Gear SRR	1-4Q							
EMALS SDD Phase Initiate	2Q							
Dual Band Radar PDR	2Q 2Q							
CVN 21 Milestone B	3Q							
CVN 21 Milestone B	3Q 3Q							
Construction Preparation Contract Award	3Q 3Q							
Advanced Arresting Gear PDR	3Q 4Q							
EMALS SRR	40	1Q						
Developmental Tests DT A-2 Dual Band Radar CDR		1-4Q 1Q	+					
Advanced Arresting Gear Milestone B		1Q 1Q						+
Operational Tests OT-B1		2-3Q				1		
Sperational Tests 01-81 EMALS SFR		2-3Q 2Q	+					+
CVN 21 SFR		3Q						
EMALSP PDR		3Q 3Q						
EMALS CDR 1		4Q						
Advanced Arresting Gear CDR 1		4Q 4Q						
CVN 21 PDR		40	1Q					
Developmental Tests DT A-2			1-4Q					
AAG CDR 2			1-4Q 1Q					
EMALS CDR 2			2Q					
EMALS CDR 2 EMALS TRR 1(HALT/HCT)			4Q					
CVN 21 CDR			40	1Q				
Developmental Tests DT-B1				1-4Q				
Operational Tests OT-B2				1-4Q 1-4Q				
CVN 21 DAB PR				2Q				
AAG TRR 1 (DT/OA)				2Q				
EMALS TRR 2 (DT/OA)				4Q				
CVN 21 Construction Contract Award				+0	1Q			
CVN 21 SCN Full Funding					1Q			
Developmental Tests DT-B1					1-4Q			
Operational Tests OT-B3					1-4Q			
EMALS LRIP					4Q			
AAG TRR 2 (DT/OA)					70	1Q		
Developmental Tests DT-B1						1Q 1Q		
Operational Tests OT-B4						1-4Q		
Developmental Tests DT-B2						3-4Q		
Developmental Tests DT-B2						J-4Q	1-4Q	1
AAG LRIP						1	1-40	10
Operational Tests OT-B5						1		1-4
		1	1	1	1			1-2
Developmental Tests DT-B3								2-4

UNCLASSIFIED Item No.

116

CLASSIFICATION:

	EXHIBIT R-2a,	RDT&E Projec	t Justification					DATE: February 2005
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELE	MENT NAME AN	D NUMBER		PROJECT NAM	E AND NUMBER	3	-
RDT&E, N / BA 5	Ship Contrac	t Design/LFT	RE PE 06045	67N	CVN 21 Tota	I Ship Integra	tion 4008	T
COST (\$ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
Project Cost	22.691	62.600	9.721	22.204	6.918	0.000	0.000	0.000
RDT&E Articles Qty								

A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

This project encompasses CVN 78 Total Ship Integration efforts. The traditional distinct phasing of the design process for aircraft carriers has been replaced with a continuous concurrent engineering regime incorporating the methodology, measurement, and management elements of the Navy's Integrated Product and Process Development (IPPD) process, extending it beyond contract award. The CVN 78 total ship integration effort will be managed within a technology change management process at contract award to allow further system development. This will ensure that the latest technologies are properly incorporated during the 8 year construction period for an aircraft carrier, without costly contract changes. The IPPD process serves to maintain the focus of multi-discipline teams consisting of the government, shipbuilder, aviation programs, and suppliers. Government/Industry Integrated Product Teams (IPTs) utilize the IPPD process within an Integrated Data Environment (IDE) to design and develop ship construction Contract Data Packages (CDPs). The CVN 21 class design approach is part of an acquisition strategy that is based on incorporating best available commercial practices and a phased technical definition.

CVN 78 Total Ship Integration, the integration of major systems into ship design, includes redesign and rearrangement of ship components; redesign of hull, mechanical and electrical (HM&E) and auxiliary systems (air-conditioning and ventilation, power distribution and generation, airborne noise management, reduction of steam, environmental safety and health (ESH) and interface control; redesign of water production and tankage; electric loads analysis; redesign of power distribution; analysis and redesign of structure; analysis, tracking and management of changes in weight distribution and stability; analysis and redesign of survivability systems, and analysis and design of all associated ship hull, mechanical, electrical, propulsion, combat/warfare system, survivability and other related components. This project also encompasses those tasks required to develop the contract data package necessary to support CVN 78 procurement, including, but not limited to engineering support, programmatic and program support, logistics support, modeling and simulation, manpower and program related studies.

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justifica	tion			DATE:	0005
PPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUME	RER AND NAME	PROJECT NUMBER AND N	February	2005
RDT&E, N / BA-5	Ship Contract Design/L		CVN 21 Total Ship Inte		
DA O	Omp Contract Design/E	1142 12 000 100111	OVIV 21 Total Ollip line	egration 4000	
3. Accomplishments/Planned Program					
				,	
	FY04	FY05	FY 06	FY 07	
Accomplishments/Effort/Subtotal Cost	22.691	62.600	9.721	22.204	ļ
RDT&E Articles Quantity					
FY04 - FY07					
(U) Continue to resolve CVN 78 whole ship de					
Update the contract data package, including de	esign drawings and specifications in a	reas where near- term LLTM	advanced purchase and early fa	brication work may be	
impacted. The update accommodates change	s to the chin, its systems and equinm	ent necessitated by equipmen	t obsolescence, operational nec	ad and incorporation of	
newer systems/technology. Provide required p			integration through the IPPD pro	ocess to incorporate the	
design changes required to the legacy baseline	e design for definition at the total syst	em level.			
	,				

CLASSIFICATION:

PROGRAM ELEMENT NUMBER AND NAME	HIBIT R-2a, RDT&E Project Justification					Di	ATE: February 2005
### C. PROGRAM CHANGE SUMMARY: Funding:	ROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AN	D NAME		PROJECT NUME	BER AND NAM	
Funding:	Г&E, N / ВА-5	Ship Contract Design/LFT&E	PE 0604	567N	CVN 21 Total	Ship Integr	ation 4008
Previous President's Budget (FY 05 Pres Controls) 23.730 37.905 35.100 21.970 FY06 President's Budget 22.690 62.800 9.721 22.204 Total Adjustments - 1.040 24.695 .25.379 0.234 Summary of Adjustments - 0.030 - 0.764	C. PROGRAM CHANGE SUMMARY:						
Previous President's Budget (FY 05 Pres Controls) 23.730 37.905 35.100 21.970 FY06 President's Budget 22.690 62.800 9.721 22.204 Total Adjustments - 1.040 24.695 .25.379 0.234 Summary of Adjustments - 0.030 - 0.764	Funding:		FY 2004	FY 2005	FY 2006	FY 2007	
FY06 President's Budget 22.690 62.800 9.721 22.204 Total Adjustments -1.040 24.695 -25.379 0.234 Summary of Adjustments Congressional Recissions -0.300 -0.764 -0.764 Inflation Adjustments -0.022 -0.380 -0.380 -0.380 Programmatic Adjustments -0.338 -0.338 -0.338 -0.338 -0.334 Subtotal -1.040 24.695 -25.379 0.234 Schedule: The CVN 78 Basic Construction contract will be awarded in FY08 with delivery in FY15.							
Total Adjustments							
Congressional Recissions Inflation Adjustments Inflation Adjustments Programmatic Adjustments Programmatic Adjustments Subtotal Subtotal Schedule: The CVN 78 Basic Construction contract will be awarded in FY08 with delivery in FY15.							
Congressional Recissions Inflation Adjustments Inflation Adjustments Programmatic Adjustments Programmatic Adjustments Subtotal Subtotal Schedule: The CVN 78 Basic Construction contract will be awarded in FY08 with delivery in FY15.	Summary of Adjustments						
Inflation Adjustments SBIR reductions Programmatic Adjustments Technical & Miscellaneous Adjustments Subtotal Schedule: The CVN 78 Basic Construction contract will be awarded in FY08 with delivery in FY15.			-0.300	-0.764			
SBIR reductions Programmatic Adjustments Technical: SBIR reductions Programmatic Adjustments 25,459 -25,379 0.234 25,459 -25,379 0.234 25,459 -25,379 0.234 26,495 -25,379 0.234 27,040 24,695 -25,379 0.234 Schedule: The CVN 78 Basic Construction contract will be awarded in FY08 with delivery in FY15.							
Programmatic Adjustments Technical & Miscellaneous Adjustments Subtotal Schedule: The CVN 78 Basic Construction contract will be awarded in FY08 with delivery in FY15. Technical:							
Technical & Miscellaneous Adjustments Subtotal -0.338 -1.040 24.695 -25.379 0.234 Schedule: The CVN 78 Basic Construction contract will be awarded in FY08 with delivery in FY15. Technical:			0.000	25 459	-25 379	0.234	
Subtotal -1.040 24.695 -25.379 0.234 Schedule: The CVN 78 Basic Construction contract will be awarded in FY08 with delivery in FY15. Technical:			-0.338	201.00	20.0.0	0.20	
Schedule: The CVN 78 Basic Construction contract will be awarded in FY08 with delivery in FY15. Technical:				24.695	-25.379	0.234	
Technical:							
	The CVN 78 Basic Construction contract will be	e awarded in FY08 with delivery in FY15					
Not Applicable							
•••	Technical:						

CLASSIFICATION:

EXHIBIT R-2a, RDT&E	Project Justification								DATE:	Echrus	ary 2005
APPROPRIATION/BUDGET	T ACTIVITY		PROGRAM EI	LEMENT NUM	BER AND NAI	ME	PROJECT NU	MBER AND N	I IAME	i ebiud	ary 2005
RDT&E, N /	BA-5		Ship Contr	act Design/	LFT&E PE	0604567N	CVN 21 Tot	al Ship Inte	egration 400	8	
D. OTHER PROGRA	AM FUNDING SUMMARY:										
										То	Total
Line Item No. & Na	<u>ame</u>	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	Complete	Cost
BLI 200100 Carr	rier Replacement Program	1,162.905	623.551	564.913	795.994	3,689.413	3,730.407	1,657.362	539.680	Cont.	Cont.
PE 0603512N C	Carrier System Development	145.490	161.930	167.823	198.395	160.688	155.120	146.126	85.451	Cont.	Cont.
PE 0603570N A	Adv. Nuclear Power Systems	198.814	168.080	168.373	170.980	160.992	152.814	133.951	105.975	Cont.	Cont.

^{*}Note: Only a portion of the funding in PE 0603570N is included in the CVN 21 Program

E. ACQUISITION STRATEGY:

The CVN 78 will be the first ship of the CVN 21 class of aircraft carriers. Due to the length and cost of construction, each carrier will be contracted for separately. The CVN 78 will feature a new nuclear propulsion and electrical generation/distribution system, new electromagnetic aircraft launching system, advanced arresting gear system, all electric auxiliaries, warfare system improvements, survivability enhancements, improved weapons handling, and improved aircraft servicing. These design features will result in lower manpower and total ownership costs as compared to the Nimitz Class. Additionally, the following warfighting benefits will be realized: increased sortie generation rate, improved ship self defense capability, increased launch and recovery capability/flexibility, increased operational availability, and increased flexibility to support future upgrades.

F. MAJOR PERFORMERS:

Northrop Grumman Newport News NSWC Carderock NAWC Lakehurst NAVSEA

CLASSIFICATION:

	4)											DATE:		
Exhibit R-3 Cost Analysis (PROGRAM E	LEMENT					PROJECT NU	IMPED AND I	1445			February 2	005
APPROPRIATION/BUDGET AC	IIVIIY			TETOE DE	00045071						20			
RDT&E, N / BA-5			ract Design/	LFI&E PE		ı	IE) (05			egration 400		1	1	1
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 04 Cost	FY 04 Award Date	FY 05 Cost	FY 05 Award Date	FY 06	FY 06 Award Date		FY 07 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Total Ship Integration	WX	NSWC Carderock	10.480	1.602	12/03	3.003	12/04		12/05	7.200	12/06	Continuing	Continuing	
	SS, CPAF	NGNN, Newport News Va	33.043	5.870	12/03	23.417	12/04	1.000	12/05		12/06	Continuing	Continuing	
	IPR	GSA	5.550	0.338									_	
	WX	NAWC, Lakehurst	3.855	0.268	12/03							Continuing	Continuing	
	WX	NSWC Dahlgren		2.554	12/03	5.740	12/04			3.500	12/06			
	WX	NSWC, Port Hueneme	4.000									Continuing	Continuing	
	PR	NAVSEA SEAPORT		8.135	12/03	14.534	12/04	6.490	12/05	4.071	12/06	Continuing	Continuing	
	WX	NAWC AD, PAX River		2.383		6.445	12/04			4.000	12/06			
	PD	SPAWAR, San Diego	8.766			1.960	12/04					Continuing	Continuing	
	Various	Miscellaneous	8.766	1.390	12/03	7.351	12/04	2.081	12/05	3.283	12/06	Continuing	Continuing	
Subtotal Product Development			74.460	22.540		62.450		9.571		22.054		Continuing	Continuing	
Remarks: For FY02 and prior t	his effort was a	ccomplished under PE 06035	12N, projects 4	2208 and 4269	3									
evelopment Support														
oftware Development			1					1						
raining Development														
ntegrated Logistics Support			1					1						
	I		1					1						
onfiguration Management						1			İ		1	1	1	
								_		_	ļ			
Configuration Management echnical Data SFE														
echnical Data														

CLASSIFICATION:

Fullibit D. O. Cast Analysis (see	0\												DATE:	F-1	0005
Exhibit R-3 Cost Analysis (pa APPROPRIATION/BUDGET ACTIV			PROGRAM ELEMEN	т					PROJECT NU	MDED AND N	IAME			Februar	y 2005
RDT&E, N / BA-5	/11 1		Ship Contract De		FT&F PF	0604567N			CVN 21 Tot			8			
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost		FY 04 Cost	FY 04 Award Date	FY 05 Cost	FY 05 Award Date	FY 06	FY 06 Award Date	FY 07 Cost	FY 07 Award Date	Cost to	Total Cost	Target Value of Contract
Developmental Test & Evaluation															
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				
Contractor Engineering Support						1		<u> </u>			<u> </u>			1	
Government Engineering Support															
Program Management Support															
Travel				0.102	0.150)	0.150		0.150		0.150				
Labor (Research Personnel)															
SBIR Assessment															
Subtotal Management				0.102	0.150		0.150		0.150		0.150				
Remarks:		•	·						·						·
				74.562	22.690)	62.600		9.721		22.204				
Total Cost															

CLASSIFICATION:

EXHIBIT R4, Schedul	e Profile																								DATE	:	F	ebrua	ary 20	05		
APPROPRIATION/BUDGE														R AND							PROJ											
RDT&E, N /	BA-0)4							PE 06	03512	N - Ca	irrier S	System	s Deve	elopm	ent					CVN	21 10	otal S	hip ii	ntegr	ation	4008	}				
Fiscal Year		20	004			20	05			20	06			200	07			20	800			20	09			20)10			20	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
Acquisition Milestones		MS B	SRR				SFR		PDR				CDR	DAB	PR																	
Propulsion Plant																																
EMALS		SDD /	WAR)	SRR	SFR	PDI	R CI	DR 1	CD	R 2	TRR	1		TR	R 2				LRIP												
DBR Radar Suite		PE	DR		CDR																											
Advanced Arresting Gear	SRR			PDR	мѕ в			CDR-1	-2 				TRI	R 1						TF	RR 2				мѕс							
Test & Evaluation Milestones						DT	A2						_			DT	B1								DT	B2				DT	В3	
Development Test Operational Test					<	ОТ	B1	>						ОТ	B2		>	ОТ	В3			ОТ	B4		>					ОТ	B5	
Contract Milestones IPPD Contract CP Contract Construction Contract	C	ontrac	Awar	d												Cor	itract A	ward														
Full Funding (SCN)																	х															

^{*} Not required for Budget Activities 1, 2, 3, and 6

CLASSIFICATION:

								DATE:	
Exhibit R-4a, Schedule Detail						1			ary 2005
APPROPRIATION/BUDGET ACTIVITY	.4	PROGRAM					UMBER AND N		4000
RDT&E, N / BA-0	4		N - Carrier Sys			_	21 Total Sh		
Schedule Profile		FY04	FY05	FY06	FY07	FY08	FY09	FY10	FY11
Developmental Tests DT A-2		1-4Q							
Advanced Arresting Gear SRR		1Q							
EMALS SDD Phase Initiate		2Q							
Dual Band Radar PDR		2Q							
CVN 21 Milestone B		3Q							
CVN 21 SRR		3Q							
Construction Preparation Contract Award		3Q							
Advanced Arresting Gear PDR		4Q							
EMALS SRR			1Q						
Developmental Tests DT A-2			1-4Q						
Dual Band Radar CDR			1Q						
Advanced Arresting Gear Milestone B			1Q						
Operational Tests OT-B1			2-3Q						
EMALS SFR			2Q						
CVN 21 SFR			3Q						
EMALSP PDR			3Q						
EMALS CDR 1			4Q						
Advanced Arresting Gear CDR 1			4Q						
CVN 21 PDR				1Q					
Developmental Tests DT A-2				1-4Q					
AAG CDR 2				1Q					
EMALS CDR 2				2Q					
EMALS TRR 1(HALT/HCT)				4Q					
CVN 21 CDR					1Q				
Developmental Tests DT-B1					1-4Q				
Operational Tests OT-B2					1-4Q				
CVN 21 DAB PR					2Q				
AAG TRR 1 (DT/OA)					2Q				
EMALS TRR 2 (DT/OA)					4Q				
CVN 21 Construction Contract Award				1	70	1Q			
CVN 21 SCN Full Funding				1	+	1Q			
Developmental Tests DT-B1						1-4Q	1		
Operational Tests OT-B3						1-4Q	1		
EMALS LRIP			+			1-4Q 4Q			
AAG TRR 2 (DT/OA)						40	1Q		
Developmental Tests DT-B1			+		+	+	1Q 1Q	+	
-							1-4Q		
Operational Tests OT-B4 Developmental Tests DT-B2							1-4Q 3-4Q		
			+		+	+	3-44	4.40	
Developmental Tests DT-B2		-	-		+	+	-	1-4Q	1
AAG LRIP				+	+		-		10
Operational Tests OT-B5			+		_	+	+		1-4
Developmental Tests DT-B3			+			+	+		2-40

UNCLASSIFIED Item No.

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CLASSIFICATION:

EXHIBIT R-2	a, RDT&E Project Justific	cation						DATE:	
								Febura	ry 2005
APPROPRIATION	ON/BUDGET ACTIVITY	PROGRAM ELEM	ENT NUMBER ANI	O NAME		PROJECT NUMBE	R AND NAME		
RDT&E, N /	BA-5	Ship Contract Desi	gn/LFT&E 0604567	7N		1803 Ship Contrac	t Design		
	COST (\$ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
Project Cost		1.731	1.696	11.538	6.465	4.723	4.753	4.753	4.716
RDT&E Articl	les Qty			_			_		

A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

Mission Description and Budget Item Justification: This project supports development of all technical, programmatic and contractual documentation required for the acquisition of various ships in the Navy's Shipbuilding Program. The major effort is the engineering development of the technical and contractual definition of the ship's design (e.g. ship specifications and drawings), with sufficient details for the prospective shipbuilder to make a sound estimate of construction cost and schedule. It also serves as the technical definition from which the shipbuilder develops the shipbuilding detailed design and testing package required to build and test the ship. This funding also provides for Navy retention of unique ship design knowledge. It provides the Navy with a digital, ship design knowledge base, including lessons learned, required to ensure that a proper development, analysis and evaluation can be conducted of any current or future planned Navy ship. This data base will serve as the basis to evaluate and qualify any future ship design. Another area this project funds is the development of specific Navy ship criteria and standards for newly developed technologies. Additionally, as new laws are passed, new safety regulations and environmental criteria are developed and other legal/Congressional requirements identified, this project funds the translation into Navy ship design criteria and standards. This project also funds the translation of the traditional Ship Specifications into performance-based criteria, which will serve for the future acquisition of Navy Ship and supports the development of design methodologies/tools which facilitate and optimize the transition from ship design documents to efficient production of new ships and ship conversions.

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification

				Fel	burary 2005
PPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NA	.ME PROJECT N	JMBER AND N	IAME	-
RDT&E, N / BA5	Ship Contract Design/LFT&E 0604567N	1803 Ship Co	ntract Design		
3. Accomplishments/Planned Program					
Cruiser Modernization Program	F	/ 04 FY	05	FY 06	FY 07
Accomplishments/Effort/Subtotal Cost	1.	731 0.0	000	11.538	6.465
RDT&E Articles Quantity					

Sea Base Connector	FY 04	FY 05	FY 06	FY 07
Accomplishments/Effort/Subtotal Cost	0.000	1.696	0.000	0.000
RDT&E Articles Quantity				

This profile provides for pre-systems acquisition efforts to include: Functional Area Analysis, Concept Studies, the development of an Initial Capabilities Document (ICD), Feasibility Studies and the Analysis of Alternatives that supports the Capabilities Development phase leading to Systems Acquisition and Milestone A.

R-1 SHOPPING LIST - Item No. 116

DATE:

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification					[DATE:
						Feburary 2005
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMEN	IT NUMBER AND NAME		PROJECT NUMI	BER AND NA	ME
RDT&E, N / BA-5	Ship Contract Design	n/LFT&E 0604567N		1803 Ship Contra	act Design	
C. PROGRAM CHANGE SUMMARY:						
		FY 2004	FY 2005	FY 2006	FY 2007	
Previous President's Budget:		7.549	10.249	18.792	18.813	
Current President's Budget:		1.731	1.696	11.538	6.465	
Total Adjustments		-5.818	-8.553	-7.254	-12.348	
Summary of Adjustments						
Congressional undistributed r	eductions	-0.031	-0.015			
SBIR reductions		-0.033				
Inflation Adjustments						
Programmatic Adjustments			-8.538	-7.254	-12.348	
LCAC Program restructure and F	PE realignment	-5.750				
Cancelled Accounts		-0.004				
NSWC Rate Adjustments						
Subtotal		-5.818	-8.553	-7.254	-12.348	

Schedule:

CG Modernization procurement contract awards reflect Baseline 2 lead ship funded for long lead equipment procurement in FY06 and modernization availability in FY08. Baseline 3 and Baseline 4 lead ships are funded for procurement in the outyears. Design efforts funded in RDT&E,N leading to procurement contract awards have been scheduled accordingly.

Technical:

Not Applicable.

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		·	·				D	ATE:		
									Feburary	2005
APPROPRIATION/BUDGET ACTIVITY	P	ROGRAM ELE	MENT NUMBE	R AND NAME		PROJECT NUME	BER AND NAM	ΛΕ		
RDT&E, N / BA-5	SI	hip Contract De	sign/LFT&E 06	604567N		1803 Ship Contra	ct Design			
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
OPN 096000 CG Modernization	42	0	135	238	296	298	399	475	900	2,783
WPN 422300 CG Modernization	9	0	5	16	21	45	47	48	300	492
O&MN 1B5B CG Modernization	8	0	44	141	150	137	130	128	1,800	2,538
Sea Base Connector										
RDT&E 0603564 3127	0.000	0.000	14.415	13.849	13.569	0.000	0.000	0.000	0.000	41.833
RDT&E 0603564 3133	0.000	0.000	0.000	0.000	18.156	22.395	8.816	1.719	0.000	51.086
SCN 0204411N 5112	0.000	0.000	0.000	0.000	0.000	0.000	99.088	209.027	0.000	308.115

E. ACQUISITION STRATEGY:

N/A

F. MAJOR PERFORMERS:

N/A

CLASSIFICATION:

Exhibit R-3 Cost Analysis (pa	ge 1)											Feburary 20	05	
APPROPRIATION/BUDGET ACTIV	/ITY	PROGRAM I				PROJECT NU		NAME						
RDT&E, N / BA-5				T&E 0604567N		1803 Ship Cor								
Cost Categories	Method	Performing Activity &	Total PY s	FY 04	FY 04 Award	FY 05	FY 05 Award	FY 06	FY 06 Award	FY 07	FY 07 Award	Cost to	Total	Target Value
		Location	Cost		Date		Date	Cost	Date	Cost	Date	Complete	Cost	of Contract
CG Mod Class Design/Integration		Northrop Grumman, Pascaç	goula, MS	0.768		0.000	11/04	8.725		5.790			15.283	
CG Mod Electronic Systems Eng	_	LMGES, Moorestown, NJ		0.963	02/04	0.000	11/04	2.813	11/05	0.675	11/06		4.451	
B B Connector Conc. Dev./AoA	C/CPFF	TBD				1.696	12/04						1.696	6
													0.000)
													0.000)
													0.000)
													0.000)
				1.731		1.696		11.538		6.465		0.000	21.430)
Subtotal Product Development Remarks:		<u> </u>		1.731		1.000		,				,		1
	- Augo	NOWO DD. Danner City	<u> </u>	1.731		1.000		1		3.7.00		1		
<u>.</u>	pIMISC	NSWC DD: Panama City		1.731		1.550				3.100			0.000	
Remarks:	p MISC	NSWC DD: Panama City		1./31									0.000	
Remarks:	p MISC	NSWC DD: Panama City		1./31									0.000 0.000 0.000	
Remarks:	p MISC	NSWC DD: Panama City		1./31									0.000 0.000 0.000 0.000	
Remarks:	pt MISC	NSWC DD: Panama City		1./31									0.000 0.000 0.000 0.000	
Remarks:	pi MISC	NSWC DD: Panama City		1./31									0.000 0.000 0.000 0.000	
Remarks:	pi MISC	NSWC DD: Panama City		1./31									0.000 0.000 0.000 0.000 0.000	
Remarks:	pi MISC	NSWC DD: Panama City		0.000		0.000		0.000		0.000		0.000	0.000 0.000 0.000 0.000 0.000 0.000	
Remarks: HLCAC Government Engineering S Subtotal Support	p MISC	NSWC DD: Panama City											0.000 0.000 0.000 0.000 0.000 0.000	
Remarks: HLCAC Government Engineering S Subtotal Support	p MISC	NSWC DD: Panama City											0.000 0.000 0.000 0.000 0.000 0.000	
Remarks: HLCAC Government Engineering S	pi MISC	NSWC DD: Panama City											0.000 0.000 0.000 0.000 0.000 0.000	

CLASSIFICATION:

xhibit R-3 Cost Analys	sis (page 2)									DATE:		Feburary 20	05	
PPROPRIATION/BUDGET DT&E, N / BA-5	ACTIVITY		PROGRAM ELEMENT Ship Contract Design LFT8	&E 0604567N			NUMBER AND Contract Design							
ost Categories	Method	Performing Activity & Location	Total PY s Cost	FY 04 Cost	FY 04 Award Date	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 Valu
													0.000	
													0.000)
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													0.000	_
Subtotal T&E			0.00	0.00	0	0.0	000	0.0	000	0.000	0	0.000	0.000)
									1				1	
.CACTravel													0.000	
.CACTravel													0.000)
LCACTravel													0.000)
.CACTravel													0.000)
													0.000 0.000 0.000	
LCACTravel Subtotal Management			0.00	0.00	0	0.0	000	0.0	000	0.000		0.000	0.000 0.000 0.000 0.000	
			0.00	00.00	0	0.0	000	0.0	000	0.000	D	0.000	0.000 0.000 0.000 0.000	
Subtotal Management			0.00			0.0		0.0		0.000		0.000	0.000 0.000 0.000 0.000 0.000	
Subtotal Management Remarks:													0.000 0.000 0.000 0.000 0.000	

CLASSIFICATION:

EXHIBIT R4, Schedule Pro																									DATE:	:	Fe	bura	ry 20	05		
APPROPRIATION/BUDGET ACT	ΓΙVΙΤΥ								D NAM	E				ECT N				IE														
RDT&E, N / BA-5			Ship (Contra	ct Desi	gn/LF	T&E 06	504567	7N				1803	Ship C	ontract	Desig	ın															
Fiscal Year		20	04			20	05			20	06			200	07			20	80			200	09			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
Acquisition Milestones																																
CG Baseline 4 Contract Design																																
CG Baseline 2 Contract Design																																
CG Baseline 3 Contract Design																																
Sea Base Connector ICD and AoA PE realignment in FY06 and beyond																																
Test & Evaluation Milestones																																
CG Modernization: Susceptibility & Vulnerability Analyse	s																															
Recoverability Analyses Total Ship Survivability Trial																						Δ										
Vulnerability Analysis Report																							\triangle									
Production Milestones																																
CG Modernization: System Procurement Awards		Δ.											\triangle	7			\triangle					7				7						
Deliveries																					1				2				2			

CLASSIFICATION:

Exhibit R-4a, Schedule Detail						DATE:		
						F	eburary 20	05
APPROPRIATION/BUDGET ACTIVITY	PROGRAM EI	LEMENT			PROJECT NU	MBER AND NA	AME	
RDT&E, N / BA-5	Ship Contract	Design/LFT&E	0604567N		1803 Ship Cor	ntract Design		
Schedule Profile	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
Cruiser Moderinization								
Continue CG Baseline 4 Engineering	1Q	1Q	1Q	1Q	1Q	1Q	1Q	1Q
Continue CG Baseline 2 Engineering		1Q	1Q	1Q	1Q	1Q	1Q	1Q
Continue CG Baseline 3 Engineering			1Q	1Q	1Q	1Q	1Q	1Q
Initiate CG Susceptibility and Vulnerability Analyses	1Q							
Initiate CG Recoverability Analyses	1Q							
CGM Procurement Award	1Q							
CGM Procurement Award			1Q					
CGM Procurement Award				1Q				
CGM Procurement Award				1Q				
CGM Procurement Award					1Q			
CGM Procurement Award					1Q			
CGM Procurement Award						1Q		
CGM Procurement Award						1Q		
CGM Procurement Award							1Q	
CGM Procurement Award							1Q	
CGM Procurement Award							1Q	
CGM Procurement Award								1Q
CGM Procurement Award								1Q
CGM Procurement Award								1Q
Con Dana Connector								
Sea Base Connector		10						
Initiate/Complete ICD and AoA		1Q						

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Jus	tification						DATE:	
							Febura	ary 2005
APPROPRIATION/BUDGET ACTIVITY	PROGRAM	∕I ELEMEN	T NUMBER	R AND NAI	PROJECT	NUMBER	AND NAME	
RDT&E, N / BA-5	Ship Contr	act Design/	LFT&E 06	04567N	2198 LFT	&E		
COST (\$ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
Project Cost	4.213	0.000	2.745	1.563	0.000	0.000	0.000	0.000
RDT&E Articles Qty								

A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

This project provides for the development and performance of Live Fire Test and Evaluation analyses, tests, trials, and other engineering inofrmation required to fulfill statutory and programmatic requirements for combat effective naval warfare for the Cruiser Modernization Program.

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justifica	ıtion			DATE:	
				Fel	burary 2005
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUM	IBER AND NAME	PROJECT NUMBER AND N	AME	
RDT&E, N / BA-5	Ship Contract Design/LFT&E	E 0604567N	2198 LFT&E		
B. Accomplishments/Planned Program Cruiser Modernization Program		FY 04	FY 05	FY 06	FY 07
		FY U4	FY U5	FY U6	FY 07
Accomplishments/Effort/Subtotal Cost		4.213	0.000	2.745	1.563
RDT&E Articles Quantity	7				

Perform suseptibility, vulnerability, and recoverability analyses for the Cruiser Modernization Program. Continue planning and preparations for the Total Ship Survivability Trial planned for FY09.

CLASSIFICATION:

BIT R-2a, RDT&E Project Justification	1				ا	PATE:
ROPRIATION/BUDGET ACTIVITY	IDDOCDAM ELEMENT	T NUMBER AND NAME	Ini	ROJECT NUMI		Feburary 2005
					BER AND NAM	VIE
Г&E, N / EBA-5	Ship Contract Design/	LFT&E 0604567N	21	2198 LFT&E		
C. PROGRAM CHANGE SUMMARY:						
		EV 0004	EV 000E	FV 2000	EV 0007	
Previous President's Budget:		FY 2004 4.394	FY 2005 4.474	FY 2006 2.722	FY 2007 1.545	
Current President's Budget:		4.213	0.000	2.745	1.563	
Total Adjustments		-0.181	-4.474	0.023	0.018	
Total Adjustifients		-0.101	-4.474	0.023	0.010	
Summary of Adjustments						
Congressional undistributed	l reductions	-0.049				
SBIR reduction		-0.121				
Congressional reduction			-4.474			
Misc. Adjustments				0.023	0.018	
Cancelled Account		-0.011				
Subtotal		-0.181	-4.474	0.023	0.018	
Schedule: CG Modernization LFT&E efforts are	funded in RDT&E,N and have bee	en scheduled consistent wit	h the lead ship	o Total Ship Sur	vivability Trial	and Vulnerability Analysis Report in FY09.
Technical: Not Applicable.						

CLASSIFICATION:

PPROPRIATION/BUDGET ACTIVITY	P	ROGRAM ELE	MENT NUMBE	R AND NAME		PROJECT NUME	BER AND NAM	E	-	
DT&E, N / BA-5	S	Ship Contract Design/LFT&E 0604567N								
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	<u>Complete</u>	<u>Cost</u>
OPN 096000 CG Modernization	42	0	135	238	296	298	399	475	900	2,783
WPN 422300 CG Modernization	9	0	5	16	21	45	47	48	300	492
O&MN 1B5B CG Modernization	8	0	44	141	150	137	130	128	1,800	2,538

F. MAJOR PERFORMERS:

Coast wide competitive procurement.

TBD

CLASSIFICATION:

											DATE:				
Exhibit R-3 Cost Analysis (page 1) APPROPRIATION/BUDGET ACTIVITY PROGRAM ELEMENT						Feburary 2005									
				PROJECT NUMBER AND NAME											
RDT&E, N / BA-5 Ship Contract Design/LF					0604567N	1	2198 LFT&E							1	1
	Contract Method	Performing Activity &		Total PY s	FY 04	FY 04 Award	FY 05	FY 05 Award	FY 06	FY 06 Award		FY 07 Award	Cost to	Total	Target Value
		Location			Cost	Date			Cost	Date		Date		Cost	of Contract
	и турс	Location		0001	CCSt	Date	Cost	Date	Cool	Bato	0001	Date	Complete	0.000	or contract
														0.000	
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										+				0.000	
Subtotal Product Development				0.000	0.000		0.000		0.000		0.000		0.000	0.000	
Remarks:															
														0.000	
														0.000	
														0.000	
														0.000	
														0.000	
														0.000	
														0.000	
														0.000	
Subtotal Support				0.000	0.000		0.000		0.000)	0.000		0.000	0.000	
Remarks:					IDING LIGT										

CLASSIFICATION:

Turk this DOO on as American	(O)										DATE:		Falson	2005		
Exhibit R-3 Cost Analysis APPROPRIATION/BUDGET A	(page 2)		PROGRAM ELEME	NT.			PROJECT NU	IMPED AND	NAME				Feburary	2005		
RDT&E, N / BA-5	CIIVIII		Ship Contract Desig		0604567N		2198 LFT&E	JIVIDER AND I	NAIVIE							
Cost Categories		Performing	Total PY s		FY 04	FY 04 Award		FY 05 Award	FY 06	FY 06 Award		FY 07 Award	Cost to	Tota	-1	T 1\/-l-
	Method & Type	Activity & Location	Cost		Cost	Date		Date	Cost	Date		Date	Cost to	Cost	ai st	Target Valu of Contract
CG Modernization LFT&E		NRL/Grayhav			4.213		0.000		2.74	-	1.563			.000	8.521	or contract
70 Modernization Er Tal	IVIIGO	INICEGIayilav	WK.		4.210	10/03	0.000	10/03	2.11	+5 10/03	1.303	10/04	-	.000	0.000	
		 													0.000	
															0.000	
															0.000	
		 											+			
											+		1		0.000	
									+						0.000	
Subtotal T&E		<u> </u>		0.000	4.213	3	0.000		2.7	45	1.563		(.000	8.521	
					ı	T		T	T			T			0.000	
							1						1		0.000	
															0.000	
															0.000 0.000	
															0.000 0.000 0.000	
Subtotal Management				0.000	0.000		0.000		0.0	000	0.000			.000	0.000 0.000 0.000 0.000	
Subtotal Management Remarks:				0.000	0.000		0.000		0.00	000	0.000			.000	0.000 0.000 0.000 0.000 0.000	
<u> </u>				0.000	0.000		0.000		0.00	000	0.000			.000	0.000 0.000 0.000 0.000 0.000	
<u> </u>				0.000	0.000		0.000		0.00	000	0.000			.000	0.000 0.000 0.000 0.000 0.000	
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Remarks:															0.000 0.000 0.000 0.000 0.000	
Remarks:															0.000 0.000 0.000 0.000 0.000	

CLASSIFICATION:

EXHIBIT R4, Schedule F	Profile																								DATE	:	Fe	ebura	ry 20	05		
APPROPRIATION/BUDGET RDT&E, N / BA-5	ACTIVI	TY				MENT N sign/LF				E				ECT N LFT&E		R ANI	MAN C	E							•				_			
Fiscal Year		20	004	<u> </u>			05	30 1001		20	06		2100	200				200	08			20	09			20	10			201	1	
1.000.100.	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																																
Test & Evaluation Milestones																																
Susceptibility & Vulnerability Analyses Recoverability Analyses																																
Total Ship Survivability Trial Vulnerability Analysis Report																						Δ	Δ									
Production Milestones CG Modernization System Procurement Awards		7							\wedge				\triangle				\triangle								^				***			
Deliveries																					1				2	<u>, </u>			2			

CLASSIFICATION:

Exhibit R-4a, Schedule Detail						DATE:	Feburary 20	05
APPROPRIATION/BUDGET ACTIVITY	PROGRAM E	I FMFNT			PROJECT NU	MBER AND N		
RDT&E, N / BA-5		Design/LFT&E	0604567N		2198 LFT&E			
Schedule Profile	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
Continue CG Susceptibility and Vulnerability Analyses	1Q	1Q	1Q	1Q	1Q			
Continue CG Recoverability Analyses	1Q	1Q	1Q	1Q	1Q			
CG Total Ship Survivability Trial						2Q		
CG Vulnerability Analysis Report						3Q		
	+							
					1			

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification							DATE:	
							Februa	ry 2005
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMI	ENT NUMBER AND	NAME		PROJECT NUMBE	R AND NAME		
RDT&E, N / BA-5	0604567N Ship Co	ontract Design / LF	T&E		2465 LHA(R)			
COST (\$ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
Project Cost	53.572	43.753	22.194	46.451	32.657	15.781	12.001	18.254
RDT&E Articles Qty								

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

FY 2004 LHA(R) FLIGHT 0 EXECUTION:

(U) (\$53.572M): Complete requirements trades and feasibility studies toward a more aviation focused LHA(R) Flight 0 configuration. Continue resolution of engineering/design issues and development of the Preliminary and Contract Designs. Continue improvements targeted at reducing operating and support costs. Continue warfare system design refinement. Resolve low confidence areas in analytical models for Live Fire Test and Evaluation (LFT&E) concerns and continue the LFT&E surrogate test program.

FY 2005-2007 LHA(R) FLIGHT 0/1 PLAN:

(U) (\$112.398M): Continue the integration of design improvements into the Total Ship Design. Continue developing functional and system level design and transition these efforts into the total ship engineering package that forms the basis for the solicitation package for the detail design and construction of the ships. Tasks to include analysis and engineering to support ship design management; design integration; hull systems; machinery; warfare systems; command, control, communication, computers, intelligence (C4I) systems; human system integration; mission systems; aviaition systems and total ship survivability. Tasks will also include LFT&E analysis of surrogate test data and determining feasibility of incorporating lessons learned on LHA(R) Flight 0 or Flight 1.

CLASSIFICATION:

	ation				DATE: FEBRUARY 2005	
PROPRIATION/BUDGET ACTIVITY	PROGRAM ELEM	ENT NUMBER AND	NAME	PROJECT NUMB		
T&E, N / BA5	0604567N Ship C	ontract Design / LF1	-&E	2465 LHA(R)		
Accomplishments/Planned Program	,	J				
LHA(R) Flt 0	FY 04	FY 05	FY 06	FY 07	٦	
Accomplishments/Effort/Subtotal Cost	53.572	39.053	3.500	0.000	-	
RDT&E Articles Quantity						
Continue development of system decision (LFT&E) concerns and continue the LFT&			ssessments. Re	solve low confidence	oment (IPPD) process to incorporate design improvements areas in analytical models for Live Fire Test and Evaluati	
(LFT&E) concerns and continue the LFT& LHA(R) Flt 1 Accomplishments/Effort/Subtotal Cost			FY 06 18.694	FY 07 46.451		
(LFT&E) concerns and continue the LFT& LHA(R) Flt 1 Accomplishments/Effort/Subtotal Cost RDT&E Articles Quantity	FY 04 0.000	FY 05 4.700	FY 06	FY 07		
(LFT&E) concerns and continue the LFT& LHA(R) Flt 1 Accomplishments/Effort/Subtotal Cost	FY 04 0.000	FY 05 4.700	FY 06	FY 07		
(LFT&E) concerns and continue the LFT& LHA(R) Flt 1 Accomplishments/Effort/Subtotal Cost RDT&E Articles Quantity	FY 04 0.000	FY 05 4.700	FY 06	FY 07		
(LFT&E) concerns and continue the LFT& LHA(R) Flt 1 Accomplishments/Effort/Subtotal Cost RDT&E Articles Quantity	FY 04 0.000 ts definition for LHA(F	FY 05 4.700	FY 06 18.694	FY 07 46.451		

CLASSIFICATION:

FY10.

Technical:

PROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMB	ER AND NAME	F	PROJECT NUM	BER AND NAME	
DT&E, N / BA-5	0604567N Ship Contract Desi	gn / LFT&E	2	2465 LHA(R)		
C. PROGRAM CHANGE SUMMARY:						
Funding:		FY 2004	FY 2005	FY 2006	FY 2007	
FY 2005 President's Budget		64.137	44.180	40.232	45.991	
FY 2006 President's Budget		53.572	43.753	22.194	46.451	
Total Adjustments		-10.565	-0.427	-18.038	0.460	
Summary of Adjustments						
Non-Pay Inflation Savings		-0.060				
FY04 SBIR		-1.242				
Programmatic/Other Adjustments		0.000	-0.427	-18.038	0.460	
Cancelled Account Liability		-0.163				
Omnibus Reprogramming		-9.100				
Subtotal		-10.565	-0.427	-18.038	0.460	

CLASSIFICATION:

EXHIBIT R-2a, RDT&E	E Project Justification						D	ATE:			
	•								Februa	ary 2005	
APPROPRIATION/BUDGE	T ACTIVITY	PROGRAM ELE	MENT NUMBE	R AND NAME		PROJECT NUM	BER AND NAM	ИE		_	
RDT&E, N /	BA-5	0604567N Ship	Contract Design	gn / LFT&E		2465 LHA(R)					
D. OTHER PROGR	AM FUNDING SUMMARY:										
Line Item No. & N	<u>ame</u>	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 304100 LF	HA(R) Flight 0	0.0	149.4	150.4	1,215.1	1,233.5	0.0	0.0	0.0	0.0	2,748.4
SCN 304100 LF	HA(R) Flight 0 (Outfitting)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SCN 304100 LF	HA(R) Flight 1	0.0	0.0	0.0	0.0	0.0	0.0	1,994.5	1,788.4	0.0	3,782.9

E. ACQUISITION STRATEGY:

Preliminary design for Flight 0 will be conducted 3QFY04 through 4QFY05. Milestone B is currently scheduled for 1QFY06. Construction contract award is planned 1QFY07 for Flight 0.

F. MAJOR PERFORMERS:

NSWC, Carderock (Bethesda, MD) - Funds have been provided for preliminary and contract design. Specific efforts include ship design management, design integration, hull systems engineering, machinery control, human system integration, mission systems and total ship survivability analysis for preliminary and contract design. Additionally, the activity will function as Live Fire Test and Evaluation (LFT&E) manager, perform/conduct surrogate tests and develop survivability analysis.

CSC Corp. - Funds have been provided for preliminary and contract design. Specific efforts include ship design management, design integration, hull systems engineering, machinery control, human system integration, mission systems and total ship survivability analysis for preliminary and contract design.

NGSS - Funds have been provided for preliminary and contract design including ship design management, design integration, hull systems engineering, machinery control, human system integration, mission systems and total ship survivability analysis for preliminary and contract design.

CLASSIFICATION:

Full-lik it D. O. Cart. Amelyoria (may	4)								DATE:		-	·	0005		
Exhibit R-3 Cost Analysis (paga APPROPRIATION/BUDGET ACTIV			PROGRAM E	LEMENT			PROJECT NU	IMPED AND	D NIAME			ebruary	2005		
RDT&E, N / BA-5	/11 Y		0604567N Sh		sian /I FTOF		2465 LHA(R)	JIVIDEK AINL	NAIVIE						
Cost Categories	Contract	Performing	U0U43071V SI	Total	Sign / LF I &E	FY 04	2400 LHA(K)	FY 05	1	FY 06		FY 07			
Cost Gategories	Method	Activity &		PY s	FY 04	Award	FY 05	Award		Award	FY 07	Award	Cost to	Total	Target Value
	& Type	Location		Cost	Cost	Date	Cost	Date		Date	Cost	Date	Complete	Cost	of Contract
Primary Hardware Development															
Ancillary Hardware Development															
Component Development															
Ship Design	Various	Various		0.000	31.625	12/03	20.729	10/04	10.790	10/05	25.143	10/06			
Ship Suitability															
Systems Engineering	Various	Various		0.000	9.047	12/03	17.490	10/04	7.583	10/05	18.536	10/06			
Training Development															
Licenses															
Tooling															
GFE															
Award Fees															
Subtotal Product Development				0.000	40.672		38.219		18.373		43.679				
Development Support															
Software Development															
Training Development															
Integrated Logistics Support															
Configuration Management															
Technical Data															
GFE															
Award Fees															
Subtotal Support				0.000	0.000)	0.000)	0.000		0.000				
Remarks:															

CLASSIFICATION:

									DATE:							
Exhibit R-3 Cost Analysis (pa	age 2)											F	ebruary	2005		
APPROPRIATION/BUDGET ACT	IVITY		PROGRAM ELE	MENT			PROJECT N	JMBER AND	NAME							
RDT&E, N / BA-5			0604567N Ship		esign / LFT&E	_	2465 LHA(R)									
Cost Categories	Contract Method & Type	Performing Activity & Location	P,	otal Y s ost	FY 04 Cost	FY 04 Award Date	FY 05 Cost	FY 05 Award Date		FY 06 Award Date	FY 07 Cost		FY 07 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Developmental Test & Evaluation	и турс	Location	0.	031	0031	Date	0031	Date	0031	Date	0031		Date	Complete	0031	Or Contract
Operational Test & Evaluation	Reimb.	NSWC/Carde	rock				0.438	10/04	0.473	10/05		0.401	10/06			
Live Fire Test & Evaluation	Reimb.	NSWC/Carde			12.900	12/03	5.096	+	3.348		+	2.371	10/06			
Test Assets	Troinib.	110110/04/04/40	TOOK		12.000	12/00	0.000	10/01	0.010	10/00		2.071	10/00			
Tooling																
GFE																
Award Fees																
7.Wala 1 000																
Subtotal T&E				0.000	12.900		5.534		3.821			2.772				
Contractor Engineering Support																
Government Engineering Support																
Program Management Support																
Travel																
Labor (Research Personnel)																
SBIR Assessment																
Subtotal Management				0.000	0.000)	0.000		0.000			0.000				
Remarks:	·		·													
Total Cost				0.000	53.572	2	43.753	в	22.194			16.451				
	1		I			1		1							1	1
Remarks:																

CLASSIFICATION:

EXHIBIT R4, Schedule F																									DATE		Fe	ebrua	ry 20	05		
APPROPRIATION/BUDGET . RDT&E, N /	ACTIVI BA-5													R AND		E					PROJ 2465		IUMBE	R AN	D NAM	1E			_			
			004			20	05		00043	20		ontrac	Desig	200				200	08		2403	20				20	10			201	11	
Fiscal Year	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																																
Overarching Integrated Product Team Review						\triangle										\triangle																
Preliminary Design - Flight 0								\triangle																								
Detailed Design - Flight 0										\triangle										\triangle												
Feasibility Studies - Flight 1							\triangle		\triangle																							
Trade Studies and Point Design - Flight 1					Δ		Λ																									
Milestones									\triangle	Mile	estone	B I									P	rogram	Reviev	v								
Preliminary/ Contract Design - Flight 1										Δ											\triangle											
Test & Evaluation Milestones						٨																										
Flt 0/1 Surrogate Testing																																
Production Milestones																																
Shipbuilding Contract Award - Flight 0													Δ																			
Lay Keel - Flight 0																				\triangle												

CLASSIFICATION:

Exhibit R-4a, Schedule Detail						DATE:	February 20	05
APPROPRIATION/BUDGET ACTIVITY	PROGRAM EI	LEMENT			PROJECT NU			
RDT&E, N / BA-5		nip Contract De	sign / LFT&E		2465 LHA(R)			
Schedule Profile	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
Overarching Integrated Product Team		2Q		4Q				
Preliminary Design - Flight 0	3Q-4Q	1Q-4Q						
Detail Design - Flight 0			2Q-4Q	1Q-4Q	1Q-4Q			
Feasibility Studies - Flight 0		3Q-4Q	1Q					
Trade Studies and Point Design - Flight 1		1Q-3Q						
Milestone B			1Q					
Program Review						1Q		
Preliminary/ Contract Design - Flight 1			2Q-4Q	1Q-4Q	1Q-4Q	1Q		
Flight 0/1 Surrogate Testing	2Q-4Q	1Q-2Q						
Shipbuilding Contract Award - Flight 0				1Q				
Lay Keel - Flight 0					4Q			
•								
				<u> </u>				

CLASSIFICATION: UNLASSIFIED

EXHIBIT R-2a, RDT&E Project Justi	fication		DATE:
			FEBRUARY 2005
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER	R AND NAME
RDT&E, N / BA5	0604567N Ship Contract Design / LFT&E	9389/LHD 8 Perforn	nance Based Logisitics (PBL)
B. Accomplishments/Planned Program			

	FY 04	FY 05	FY 06	FY 07	FY 08	FY 09	FY 10	FY 11
Accomplishments/Effort/Subtotal Cost	1.347	0.000	0.000	0.000	0.000	0.000	0.000	0.000
RDT&E Articles Quantity								

Establish and operate a PBL Working Group to develop and implement the PBL strategy and plan for LHD 8. LHD 8 Propulsion, Power Generation, and Power Management systems are comprised primarily of new development items and Commercial Off The Shelf (COTS) items that are not presently supported in the Navy's existing logistics support system infrastructure. The integrated logistics support requirements for these systems including material, technical documentation, training, maintenance, system engineering and life cycle support processes and deliverables that must be in place at the time of the LHD 8 delivery to ensure adequate post-delivery and life cycle support of the vessel must be adequately defined.

	FY 04	FY 05	FY 06	FY 07	FY 08	FY 09	FY 10	FY 11
Accomplishments/Effort/Subtotal Cost	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
RDT&E Articles Quantity								

	FY 04	FY 05	FY 06	FY 07	FY 08	FY 09	FY 10	FY 11
Accomplishments/Effort/Subtotal Cost	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
RDT&E Articles Quantity								

CLASSIFICATION: UNLASSIFIED

EXHIBIT R-2a, RDT&E Project Justification					DATE:
A DDD ODDIATION/DUDGET A CTIVITY	DDOCDAM ELEMENT NUMBER	AND NAME		IDDO IDOT NUMBED AND	FEBRUARY 2005
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER			PROJECT NUMBER AN	
RDT&E, N / BA-5	0604567N Ship Contract Design	/ LFT&E		9389/LHD 8 Performance	e Based Logisitics (PBL)
C. PROGRAM CHANGE SUMMARY:					
Funding:	FY 2004	FY 2005	FY 2006	FY 2007	
FY05 President's Budget	1.384	0.000	0.000		
FY06 President's Budget	1.347	0.000	0.000		
Total Adjustments	-0.037	0.000	0.000	0.000	
Summary of Adjustments					
Non-Pay Inflation Savings	-0.001				
FY04 SBIR	-0.036				
Subtotal	-0.037	0.000	0.000	0.000	
Schedule:					
Not Applicable					
(νοι πρριισασίο					
Technical:					
Not Applicable.					
Not Applicable.					

CLASSIFICATION: UNLASSIFIED

HIBIT R-2a, RDT&E Project Justification							DATE:		February 2005	
ROPRIATION/BUDGET ACTIVITY	PROGRAM EI	EMENT NUM	BER AND NAM	ИΕ	PROJECT NU	MBER AND N	L AME		1 Coldary 2000	—
T&E, N / BA-5	0604567N Shi				9389/LHD 8 P			(PBL)		
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		Tota Cos
SCN 303500 LHD 8 *	351.7	235.1	197.8	0	0	0	0	0		784.
*LHD 8 is an incrementally funded program with fu	nding in FY99-06.									
E. ACQUISITION STRATEGY:										
The acquisition strategy for this effort includes part	icipation from both Gove	rnment activition	es and industry	(Northrop Gru	umman Ship Sy	stems (NGSS)).			
F. MAJOR PERFORMERS:										
Northrop Grumman Ship Systems (NGSS)										

CLASSIFICATION: UNLASSIFIED

Evhibit D. 2 Coot Analysis (no	ac 1\								DATE:	FERRU	ADV 200E				
Exhibit R-3 Cost Analysis (pa APPROPRIATION/BUDGET ACTIV	ge 1)		PROGRAM	EL EMENT			DDO IECT	NUMBER AN	ID NAME	FEBRU	ARY 2005				
RDT&E, N / BA-5	/11 1				Design / LFT	Ω .⊏		RUMBER AN B Performanc		icitice (DRI)					
Cost Categories	Contract	Performing	000430711	Total	Design / LF 10	FY 04	9309/LND	FY 05	e based Log	FY 06		FY 07			
	Method & Type	Activity & Location		PY s Cost	FY 04 Cost	Award Date	FY 05 Cost	Award Date	FY 06 Cost	Award Date	FY 07 Cost	Award Date	Cost to Complete	Total Cost	Target Value of Contract
Primary Hardware Development															
Ancillary Hardware Development															
Component Development															
Ship Design															
Ship Suitability															
Systems Engineering															
Training Development															
Licenses															
Tooling															
GFE															
Award Fees															
Subtotal Product Development				0.000	0.000		0.000		0.000		0.000		0.000	0.000	
ı															
Development Support															
Software Development															
Training Development															
Integrated Logistics Support	Various	NGSS/Gov't A	ctivities		1.347	Various								1.347	0.970
Configuration Management															
Technical Data															
GFE															
Award Fees															
Subtotal Support				0.000	1.347		0.000		0.000		0.000		0.000	1.347	
	g shipbuildir	ng contract to N	NGSS	0.000	1.347		0.000		0.000		0.000		0.000	1.347	

CLASSIFICATION: UNLASSIFIED

APPROPRIATION/BUDGET ACTIVITY BA-5	Exhibit R-3 Cost Analysis	s (nage 1) (co	ntinued)							DATE:	FERR	UARY 2005				
Part			illillueu)	PROGRAM	FLEMENT	•		PROJECT N	ILIMBER AI	ND NAME	ILDI	OAK 1 2003				
Cost Categories Cost							FT&F				es (PBL)					
Developmental Test & Evaluation		Contract Method	Activity &	To P'	otal Y s	FY 04	FY 04 Award	FY 05	FY 05 Award	FY 06	FY 06 Award		Award			Target Value of Contract
Live First & Evaluation	Developmental Test & Evalua															
Test Assets Tooling GPE Awrad Fees Subtotal T&E Contractor Engineering Support Government Engineering Support Transportation Subtotal Subt	Operational Test & Evaluation	ı														
Tooling GFE Avrad Fees	Live Fire Test & Evaluation															
Avriad Fees	Test Assets															
Awad Fees	Tooling															
Contractor Engineering Support	GFE															
Remarks: Contractor Engineering Support Contractor Engineering Support Contractor Engineering Support Contractor Engineering Support Program Management Engineering Support Program Management Support Travel Travel Travel Transportation SBIR Assessment GFE Subtotal Management O,000	Awrad Fees															
Remarks: Contractor Engineering Support Government Engineering Support Program Management Support Travel Travel Transportation SBIR Assessment GFE Subtotal Management 0.000																
Remarks: Contractor Engineering Support Contractor Engineering Support Contractor Engineering Support Contractor Engineering Support Program Management Engineering Support Program Management Support Travel Travel Travel Transportation SBIR Assessment GFE Subtotal Management O,000																
Remarks: Contractor Engineering Support Contractor Engineering Support Contractor Engineering Support Contractor Engineering Support Program Management Engineering Support Program Management Support Travel Travel Travel Transportation SBIR Assessment GFE Subtotal Management O,000																
Remarks: Contractor Engineering Support Contractor Engineering Support Contractor Engineering Support Contractor Engineering Support Program Management Engineering Support Program Management Support Travel Travel Travel Transportation SBIR Assessment GFE Subtotal Management O,000																
Remarks: Contractor Engineering Support Contractor Engineering Support Contractor Engineering Support Contractor Engineering Support Program Management Engineering Support Program Management Support Travel Travel Travel Transportation SBIR Assessment GFE Subtotal Management O,000	Subtotal T&E				0.000	0.000)	0.000)	0.000		0.000		0.000	0.000	
Government Engineering Support																
Program Management Support Image: Control of the control	Contractor Engineering Support															
Travel Image: Control of the control of t	Government Engineering Suppor	t														
Transportation SBIR Assessment Image: Control of the c	Program Management Support															
SBIR Assessment Image: Control of the con	Travel															
GFE	Transportation															
Subtotal Management 0.000 <td>SBIR Assessment</td> <td></td>	SBIR Assessment															
Remarks:	GFE															
Remarks:																
	Subtotal Management				0.000	0.000)	0.000)	0.000		0.000		0.000	0.000)
Total Cost 0.000 1.347 0.000 0.000 0.000 0.000 1.347	Remarks:															
	Total Cost			I	0.000	1.347	·	0.000)	0.000		0.00	00	0.000	1.347	7
		•	•	•		•	•	•	•	•	•	•		•	•	•

CLASSIFICATION: UNLASSIFIED

EXHIBIT R4, Schedule	Profile																									Date:			FEBR	UAR	Y 200)5
APPROPRIATION/BUDGET	ACTIV	ITY			PROC	SRAM	ELEM	ENT N	UMBE	R AND	NAM	E													PRO	JECT N	NUMBE					
RDT&E, N / BA-5					06045	67N S	hip Co	ntract	Desigr	/LFT	&E														9389/	LHD 8	Perfor	mance	Base	d Logis	sitics (F	PBL)
Fiscal Year		2004				2005				2006				2007				2008				2009				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	1	2	3	4
Acquisition Milestones																																
Test & Evaluation Milestones																																
Production Milestones Establish Working Group Initiate Plan/Req Determination	Δ_	△ △—																														
Final Report									7																							
Deliveries																																

CLASSIFICATION: UNLASSIFIED

Exhibit R-4a, Schedule Detail						DATE:	EEDDII	ARY 2005	
APPROPRIATION/BUDGET ACTIVITY	PROGRAM EI	EMENIT			PROJECT NU	MRED AND N		AR 1 2005	
RDT&E, N / BA-5	0604567N Shi		sign / LETSE			erformance Ba		(DDI)	
				->:					
Schedule Profile	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY2010	FY 2011
Establish Working Group Initiate Planning/Requirements Determination		1Q-2Q							
Initiate Planning/Requirements Determination		2Q-4Q	1Q-4Q						
Final Report			4Q						

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Jus	tification						DATE:	
							Febura	ary 2005
APPROPRIATION/BUDGET ACTIVITY	PROGRAM	/I ELEMEN	T NUMBER	R AND NAI	PROJECT	NUMBER	AND NAME	
RDT&E, N / BA-5	Ship Contr	act Design/	LFT&E 06	04567N	9578 Integ	grated Mode	ernization Enviro	nment
COST (\$ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
Project Cost	0.000	1.970	0.000	0.000	0.000	0.000	0.000	0.000
RDT&E Articles Qty								

A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

This project will develop an NMCI compatible Integrated Modernization Environment (IME) with a real time information sharing capability to improve the ability to manage program information and facilitate collaboration engineering. Post implementation Planning efforts in developing future system upgrade and maintenance requirements after completion of the initial phase will also be completed.

CLASSIFICATION:

RDT&E Articles Quantity

EXHIBIT R-2a, RDT&E Project Justification	า			DATE:		
				Fel	burary 2005	
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUM	MBER AND NAME	PROJECT NUMBER AND N	AME		
RDT&E, N / BA-5	Ship Contract Design/LFT&I	E 0604567N	9578 Integrated Modernization	on Environment		
B. Accomplishments/Planned Program		,				1
Cruiser Modernization Program		FY 04	FY 05	FY 06	FY 07	
Accomplishments/Effort/Subtotal Cost		0.000	1.970	0.000	0.000	

Develop a web based IME, define initial configuration requirements, configure Integrated Modernization Environment and develop a long-term implementation plan. Initial CG Modernization populated web based IME will be accomplished before the end of FY 07.

CLASSIFICATION:

BIT R-2a, RDT&E Project Justification						DATE:	
							ary 2005
PRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMB	BER AND NAME		PROJECT NUM	BER AND NA	ME	
E, N / EBA-5	Ship Contract Design/LFT&E (0604567N		9578 Integrated I	Modernizatio	n Environment	
C. PROGRAM CHANGE SUMMARY:							
		FY 2004	FY 2005	FY 2006	FY 2007		
Previous President's Budget:		0.000	0.000	0.000	0.000		
Current President's Budget:		0.000	1.970	0.000	0.000		
Total Adjustments		0.000	1.970	0.000	0.000		
Summary of Adjustments							
Undistributed Congressional Reduc	tions		-0.030				
Congressional Add			2.000				
Subtotal		0.000	1.970	0.000	0.000		
Schedule:							
CG Modernization IME efforts are funded	in RDT&F N and have been schedule	ed consistent with t	ne lead shin	CG52 Denot Mo	ndernization F	Period that will be executed in	FY 08
OG MODERNIZATION INVESTIGATE AND TANAGE	in No rae, it and have been senedale	od domoiotom with the	ic icad ship,	OGOZ, Dopot Wie	odernization i	chod that will be excedded in	1 1 00.
Technical:							
Not Applicable.							
	D 4 CHO	DDINC LIST 1	om No. 11	6			

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification							D	ATE:		
									Feburary	2005
APPROPRIATION/BUDGET ACTIVITY	P	ROGRAM ELE	MENT NUMBE	R AND NAME		PROJECT NUME	BER AND NAM	ИE		
RDT&E, N / BA-5	S	hip Contract De	esign/LFT&E 06	604567N		Environment				
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	<u>Complete</u>	Cost
OPN 096000 CG Modernization	42	0	135	238	296	298	399	475	900	2,783
WPN 422300 CG Modernization	9	0	5	16	21	45	47	48	300	492
O&MN 1B5B CG Modernization	8	0	44	141	150	137	130	128	1,800	2,538
Sea Base Connector										
RDT&E 0603564 3127	0.000	0.000	14.415	13.849	13.569	0.000	0.000	0.000	0.000	41.833
RDT&E 0603564 3133	0.000	0.000	0.000	0.000	18.156	22.395	8.816	1.719	0.000	51.086
SCN 0204411N 5112	0.000	0.000	0.000	0.000	0.000	0.000	99.088	209.027	0.000	308.115

E. ACQUISITION STRATEGY:

N/A

F. MAJOR PERFORMERS:

N/A

CLASSIFICATION:

											DATE:				
Exhibit R-3 Cost Analysis (pag APPROPRIATION/BUDGET ACTIVI)	e 1)												Feburary 200)5	
APPROPRIATION/BUDGET ACTIVITY	ΓY		PROGRAM EI				PROJECT NU								
RDT&E, N / BA-5			Ship Contract		0604567N		9578 Integrate		on Environmen						
	Contract	Performing		Total	E) (0 4	FY 04		FY 05	F)/ 00	FY 06		FY 07	0	T	T
		Activity & Location			FY 04 Cost	Award Date		Award Date	FY 06 Cost	Award Date		Award Date		Total Cost	Target Value of Contract
	α rype	Location		Cost	Cost	Date	Cost	Date	Cost	Date	Cosi	Date	Complete	0.000	OI COINTACT
														0.000	
						+	+							0.000	
						+	+								
														0.000	
														0.000	
														0.000	
						1								0.000	
						1								0.000	
														0.000	
														0.000	
														0.000	
Subtotal Product Development				0.000	0.000		0.000		0.000)	0.000		0.000	0.000	
Remarks:															
														0.000	
														0.000	
														0.000	
														0.000	
														0.000	
														0.000	
														0.000	
														0.000	
Subtotal Support				0.000	0.000		0.000		0.000		0.000		0.000		
Remarks:															

CLASSIFICATION:

Exhibit R-3 Cost Analysi	- (0)									DATE:		F-1	0.5	
	s (page ∠)		PROGRAM ELEMENT			PROJECT N	NUMBER AND	NAME				Feburary 20	U5	
RDT&E, N / BA-5			Ship Contract Design/LFT&	E 0604567N			ated Moderniza		ent		FY 07			
Cost Categories	Contract Method	Performing Activity &	Total PY s	FY 04	FY 04 Award	FY 05	FY 05 Award	FY 06	FY 06 Award	FY 07	Award	vard Cost to Total Target Value		
	& Type	Location	Cost	Cost	Date	Cost	Date	Cost	Date	Cost	Date			_
ntegrated Modernization Envi	ronmen MISC	TBD		0.00	0	1.97	70 03/05	0.0	00	0.000)	0.000		
													0.00	
													0.00	
													0.00	_
													0.00	
													0.00	
													0.00	
Subtotal			0.00	0.00	0	1.9	70	0.0	000	0.000)	0.000	1.97	0
													_	
													0.00	
													0.00	00
													0.00	00
													0.00 0.00 0.00	00
													0.00 0.00 0.00	00
Subtotal Management			0.00	0 0 0.00	0	0.00	000	0.0	000	0.000		0.000	0.00 0.00 0.00 0.00	00 00 00 00 00 00 00 00 00 00 00 00 00
Subtotal Management Remarks:			0.00	0 0.00	0	0.00	300	0.0	000	0.000		0.000	0.00 0.00 0.00 0.00	00 00 00 00 00 00 00 00 00 00 00 00 00
-			0.00			0.00		0.0		0.000		0.000	0.00 0.00 0.00 0.00 0.00 0.00	00 00 00 00 00 00
Remarks:													0.00 0.00 0.00 0.00 0.00 0.00	00 00 00 00 00 00

CLASSIFICATION:

EXHIBIT R4, Schedule P																									DATE	<u>:</u>	F	ebura	ry 20	05		
APPROPRIATION/BUDGET	ACTIV	ITY				MENT I				E				IECT N																		
RDT&E, N / BA-5			Ship	Contra	ct De	sign/LF	T&E 06	504567	/N				9578	Integra	ted Mo	oderniz	zation I	Enviror	nment		1											
Fiscal Year		20	004			20	005			20	06			200	07			20	08	1		20	09			20	10			201	l1	1
	1	2	3	4		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																																
						_																										
Test & Evaluation Milestones																																
Develop IME								l																								
Configure IME									I		l I																					
Write Implementation Plan																																
Populate Data												Ī	l																			
Lead Ship DMP Start																	Δ															
Production Milestones																																
CG Modernization System Procurement Awards																										↓ Ţ Ţ				<u>,</u>		
Deliveries																					1				2				2			

CLASSIFICATION:

Exhibit R-4a, Schedule Detail						DATE:		
,							Feburary 20	05
APPROPRIATION/BUDGET ACTIVITY	PROGRAM E	LEMENT			PROJECT NU			
RDT&E, N / BA-5		Design/LFT&E	0604567N				n Environment	
Schedule Profile	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
Develop IME	112001	3Q	1 1 2000	1 1 2007	1 1 2000	1 1 2000	1 1 2010	1 1 201
Configure IME		4Q						
Write Implementation Plan		. ~	1Q					
Populate Data			2Q					
Lead Ship DMP Start					1Q			
Lead Ship Divil Start					i i Q			
		-						
		<u> </u>						

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification	FY 2006/200	7 PRESIDENT'S	BUDGET SUBM	ISSION (\$M)	DATE:			
						Feb 2005		
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMI	ENT NUMBER AN	D NAME		PROJECT NUMBE	R AND NAME		
RDTE NAVY	PE 0604567N (U)SHIP CONTRA	CT DESIGN/LIVE	FIRE T&E	3134 Intratheate	er Connectors (C	Contract Design)	
COST (\$ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
Project Cost	0.000	0.000	1.941	2.24	13.899	7.984	6.873	1.378
RDT&E Articles Qty								

A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION: 3134 - concept studies 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 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.

The primary mission will be to provide logistical military lift from the advanced base to the sea base. The secondary missions will include the ability to provide logistical military lift from the seabase to the shore (either an austere port facility or possibly an unimproved beach), and movement within the seabase.

The Intratheater connector will have the following characteristics:

- * Moderate payload capacity (100's to 1,000's of short tons)
- * Shallow draft
- * Self deploying and sustaining for short periods
- * Cross-theater laden ranges

Beachable and non-beachable options will be investigated.

CLASSIFICATION:

				Feb 2005	
ROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUM	IBER AND NAME		PROJECT NUMBER AND NA	ME
ΓΕ NAVY	PE 0604567N (U)SHIP Co	ONTRACT DESIGN/LIVE	FIRE T&E	3134 Intratheater Connect	tors (Contract Design
Accomplishments/Planned Program					
	FY 04	FY 05	FY 06	FY 07	
Accomplishments/Effort/Subtotal Cost	0.000	0.000	1.941	2.247	
RDT&E Articles Quantity					
Program Acquisition Efforts for Non-Beachal		uding pre-acquisition studie	s, Initial Capabilities Doc	ument development, initial shipbui	lder downselect,
Capability Development Document preparation,	and milestone A preparation.				
	FY 04	FY 05	FY 06	FY 07	
Accomplishments/Effort/Subtotal Cost					
RDT&E Articles Quantity					
·	•			·	
		EV 05	E)/ 00	FV 07	
A	FY 04	FY 05	FY 06	FY 07	
Accomplishments/Effort/Subtotal Cost					
RDT&E Articles Quantity					
	FY 04	FY 05	FY 06	FY 07	
RDT&E Articles Quantity	FY 04	FY 05	FY 06	FY 07	
	FY 04	FY 05	FY 06	FY 07	
RDT&E Articles Quantity Accomplishments/Effort/Subtotal Cost	FY 04	FY 05	FY 06	FY 07	
RDT&E Articles Quantity Accomplishments/Effort/Subtotal Cost					
RDT&E Articles Quantity Accomplishments/Effort/Subtotal Cost RDT&E Articles Quantity	FY 04	FY 05	FY 06	FY 07	
RDT&E Articles Quantity Accomplishments/Effort/Subtotal Cost					

CLASSIFICATION:

XHIBIT R-2, RDT&E Budget Item Justification	FY 2006/2007 PRESI	DENT'S BUDG	ET SUBMISS	ON (\$M)	DATE:
					Feb 2005
PPROPRIATION/BUDGET ACTIVITY P	ROGRAM ELEMENT NUMB	SER AND NAME			PROJECT NUMBER AND NAME
DTE NAVY P	E 0604567N (U)SHIP CO	NTRACT DESI	GN/LIVE FIRE	T&E	3134 Intratheater Connectors (Contract Design)
C. PROGRAM CHANGE SUMMARY:					
Funding:	FY 200	4 FY 2005	FY 2006	FY 2007	,
FY05 President's Budget	0.00	0.000	0.000	0.000	
FY06President's Budget	0.00	0.000	1.941	2.247	, -
Total Adjustments	0.00	0.000	1.941	2.247	,
Programmatic Adjustments					
ADJUSTMENT TO ADD INTRATHEATER CON	INECTORS <u>0.00</u>	0.000	<u>1.941</u>	2.247	<u>'</u>
Total Adjustment	0.00	0.000	1.941	2.247	,
Schedule:					
Not Applicable					
Technical:					
Not Applicable					

CLASSIFICATION:

EXHIBIT R-2, RDT&E Budget Item Justification	n	F	Y 2006/2007 PRE	SIDENT'S BU	DGET SUBMIS	SION (\$M)				DATE:	
										Feb 2005	5
APPROPRIATION/BUDGET ACTIVITY		P	ROGRAM ELEMEN	NT NUMBER AND	O NAME		PF	ROJECT NUMBER	AND NAME		
RDTE NAVY			PE 060456	7N (U)SHIP CO	NTRACT DES	GN/LIVE FIRE	T&E	3134 Intra	theater Conne	ctors (Contract Des	ign)
D. Other Program Funding Summary PE 0204228N SCN/BLI3043 Intratheater Connector Surface Support	FY2004	FY2005	FY2006	FY2007	FY2008	FY2009 204.622	FY2010 176.873	FY2011 180.609	To Complete TBD	Total Cost 562.104	
(U) Related RDT&E: PE 0603564N/SHIP PRELIM DESIGN & FEASIBILITY STUDIES/3131 Intratheater Connectors	0.000	0.000	4.848	11.850	5.094	3.983	1.824	2.540	0.000	30.139	

E. Acquisition Strategy:

Feasibility studies will be conducted to determine the best designs to meet new Navy requirements.

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 (pag-	e 2)										Feb 2005	i		
APPROPRIATION/BUDGET ACTIVIT	TY	PROGRAM ELE	MENT					PROJECT N	UMBER AND	NAME				
RDT&E, N / BA-5		PE 0604567N (U)SHIP CONTR	ACT DESIGN	V/LIVE FIRE	%E		3134 Intrati	neater Conr	nectors (Cont	ract Design)			
Cost Categories	Contract	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													0.000	
Ancillary Hardware Development													0.000	
Aircraft Integration													0.000	
Ship Integration													0.000	
Ship Suitability													0.000	
Systems Engineering Training Development													0.000	
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		0.000		0.000		0.000	0.000	
Development Support	Various	Various						0.700		0.000			0.700	
Software Development													0.000	
Integrated Logistics Support													0.000	
Configuration Management													0.000	
Technical Data								0.000					0.000	
Studies & Analyses													0.000	
GFE													0.000	
Award Fees													0.000	
Subtotal Support			0.000			0.000		0.700		0.000		0.000	0.700	
Remarks:					R-1 SHOPI	PING LIST	· Item No.	116						
														_

CLASSIFICATION:

									DATE:						
Exhibit R-3 Cost Analysis (pag	e 2)											Feb 2005	5		
APPROPRIATION/BUDGET ACTIVI	TY		PROGRAM ELEM	MENT					PROJECT N	JMBER AND	NAME				
RDT&E, N / BA-5			PE 0603564N/SH	IP PRELIM DI	ESIGN & FEA	SIBILITY ST	UDIES		3134 Intrath	neater Conr	nectors (Cont	ract Design)		
Cost Categories	Contract	Performing		Total		FY 04		FY 05		FY 06		FY 07			
		Activity &		PY s	FY 04	Award	FY 05	Award		Award		Award	Cost to		Target Value
	& Type	Location		Cost	Cost	Date	Cost	Date	Cost	Date	Cost	Date	Complete		of Contract
Developmental Test & Evaluation														0.000	
Operational Test & Evaluation														0.000	
Live Fire Test & Evaluation Test Assets														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							0.000		0.400	1Q		0.400	
Government Engineering Support Program management Support	WX	Various							0.000		0.400	1Q		0.400	
Program management Support	MAC	CSC							1.224	1Q	1.432	1Q		2.656	
Travel	PD	NAVSEA							0.017		0.015			0.032	
Transportation														0.000	
SBIR Assessment														0.000	
Subtotal Management				0.000	0.000		0.00)	1.241		2.247		0.000	3.488	
Remarks:															
Total Cost				0.000	0.000		0.00)	1.941		2.247		0.000	4.188	
Remarks:															

R-1 SHOPPING LIST - Item No.

116

CLASSIFICATION:

Design)	ract Des	(Cont	ctors				JMBEF 34 Int		DJEC	PRO		&E	RE T	IVE F								PROG PE 06								CTIVIT BA-5	APPROPRIATION/BUDGET A RDT&E, N /
2011			.0	201			9	200				8	200)7	200			06	200)5	200			04	200		Fiscal Year
2 3	1	4	3	2	1	4	3	2	1	1	4	3	2	1	4	3	2	1	4	3	2	1	4	3	2	1	4	3	2	1	i local i oal
												△ MSB	ı																		Acquisition filestones
			\triangle						4																						DD&C Contract Award First Follow Ship Second Follow Ship
																															•

 $^{^{\}star}$ Not required for Budget Activities 1, 2, 3, and 6

CLASSIFICATION:

Exhibit R-4a, Schedule Detail						DATE:			
					Feb 2005				
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELE	PROGRAM ELEMENT P				PROJECT NUMBER AND NAME			
RDT&BA-5	PE 0604567N	PE 0604567N (U)SHIP CONTRACT DESIGN/LIVE FIRE T&E 3134 Intr					ratheater Connectors (Contract Design)		
Schedule Profile	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	
AoA Completion				2Q					
Milestone B					3Q				
Contract Award						2Q			
1									