

DEPARTMENT OF THE NAVY  
FISCAL YEAR (FY) 2010  
BUDGET ESTIMATES



JUSTIFICATION OF ESTIMATES  
MAY 2009

NATIONAL DEFENSE SEALIFT FUND

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## Department of Defense Appropriations Act, 2010

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### National Defense Sealift Fund

For National Defense Sealift Fund programs, projects, and activities, and for expenses of the National Defense Reserve Fleet, as established by section 11 of the Merchant Ship Sales Act of 1946 (50 U.S.C. App. 1744), and for the necessary expenses to maintain and preserve a U.S.-flag merchant fleet to serve the national security needs of the United States, \$1,642,758,000, to remain available until expended: *Provided*, That none of the funds provided in this paragraph shall be used to award a new contract that provides for the acquisition of any of the following major components unless such components are manufactured in the United States: auxiliary equipment, including pumps, for all shipboard services; propulsion system components (that is; engines, reduction gears, and propellers); shipboard cranes; and spreaders for shipboard cranes: *Provided further*, That the exercise of an option in a contract awarded through the obligation of previously appropriated funds shall not be considered to be the award of a new contract: *Provided further*, That the Secretary of the military department responsible for such procurement may waive the restrictions in the first proviso on a case-by-case basis by certifying in writing to the Committees on Appropriations of the House of Representatives and the Senate that adequate domestic supplies are not available to meet Department of Defense requirements on a timely basis and that such an acquisition must be made in order to acquire capability for national security purposes.

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**NDSF SUMMARY NARRATIVE  
FY 2010 PRESIDENT'S BUDGET  
MAY 2009**

The request for \$1,642.8 million in FY 2010 for NDSF includes \$940.1 million for the procurement of 2 T-AKEs, \$120.0 million in advance procurement for a Maritime Prepositioning Force (Future) Mobile Landing Platform (MPF(F) MLP), \$73.0 million for multiple research and development efforts and \$29.7 million for outfitting and post delivery. The FY 2010 request also includes \$134.0 million for costs associated with the operation, maintenance and alterations of Large Medium Speed Roll-on/Roll-off vessels and Fleet Hospital Ships (T-AH). There is \$275.5 million in FY 2010 for costs associated with the maintenance of the National Defense Reserve Fleet (NDRF), which includes the Ready Reserve Fleet (RRF).

The request also includes \$1.4 million in FY 2010 for sealift operations and maintenance requirements for shipping and tanker contingency contracts under DoD mobilization assets for the National Defense Sealift vessels. This requirement addresses the mobility capabilities of the sealift operations and maintenance requirements and tanker capacity requirements upon demand at preset readiness.

The request also includes \$4.8 million in FY 2010 for National Defense Features (NDF) under NDSF Budget Activity (BA) 03. The NDF program provides funding to ship owners such that specific features can be built into or added to current sealift and commercial ships to make them more capable of supporting the military in a contingency.

The request also includes \$64.2 million in FY 2010 for DoD Mobilization Alterations, which provides for Maritime Prepositioning Ship Buyouts, T-AOE 6 modernization and Heavy Underway Replenishment. Of this funding, \$43.5 million is to procure the remaining Waterman class ship, SS OREGON.

The NDSF funds the operation, maintenance, and support (O&S) of current strategic sealift assets. These operations, other than RRF vessels, are funded on a reimbursable basis to the NDSF appropriation. The individual Defense components order these services from the NDSF vice a funded Economy Act Order. The NDSF purchases these O&S services by issuing reimbursable orders to the Navy Working Capital Fund (NWCF).

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**NDSF INDEX  
FY 2010 PRESIDENT'S BUDGET  
MAY 2009**

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**NDSF SUMMARY FINANCIAL DATA  
FY 2010 PRESIDENT'S BUDGET  
MAY 2009**

	( TOA \$ Millions)		
	<b>FY2008</b>	<b>FY2009</b>	<b>FY2010</b>
<b>NDSF BA 01: Strategic Ship Acquisition</b>	<b>804.7</b>	<b>998.7</b>	<b>1,089.9</b>
0120: T-AKE	753.3	962.4	940.1
0401: MLP	0.0	0.0	120.0
5000: Outfitting and Post Delivery	51.4	36.3	29.7
<b>NDSF BA 02: DoD Mobilization Assets</b>	<b>273.8</b>	<b>269.5</b>	<b>199.6</b>
0200: National Defense Sealift Vessel	6.5	6.5	1.4
0210: Fast Sealift Ship Maintenance	77.2	0.0	0.0
0220: LMSR Maintenance	116.4	94.0	96.4
0230: DoD Mobilization Alterations	49.9	142.7	64.2
0250: T-AH Maintenance	23.8	26.2	37.6
<b>NDSF BA 03: Strategic Sealift Support</b>	<b>0.0</b>	<b>0.0</b>	<b>4.8</b>
0300: Strategic Sealift Support	0.0	0.0	4.8
<b>NDSF BA 04: Sealift Research and Development</b>	<b>66.4</b>	<b>63.3</b>	<b>73.0</b>
0900: Research and Development	66.4	63.3	73.0
<b>NDSF BA 05: Ready Reserve Force</b>	<b>232.6</b>	<b>335.2</b>	<b>275.5</b>
0500: Ready Reserve Force	232.6	335.2	275.5
<b>Total NDSF</b>	<b>1,377.5</b>	<b>1,666.6</b>	<b>1,642.8</b>

Note: NDSF BA 01 FY08 funding reflects actuals. An inadvertent database error resulted in a \$32.6 million discrepancy between the FACT II system (\$772.1 million) and the accounting system (\$804.7 million).

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BUDGET ITEM JUSTIFICATION SHEET (P-40) FY 2010 President's Budget					DATE: May 2009
APPROPRIATION/BUDGET ACTIVITY National Defense Sealift Fund/BA 01				P-1 LINE ITEM NOMENCLATURE T-AKE BLI: 0120 / SUBHEAD NO. VARIOUS	
(Dollars in Millions)	PRIOR YR	FY 2008	FY 2009	FY 2010	
QUANTITY	10	0	2	2	
End Cost	4,272.7	0.0	1,054.4	1,140.1	
Less Advance Procurement	0.0	0.0	200.0	200.0	
Less Cost to Complete	477.3	0.0	0.0	0.0	
Less Subsequent Full Funding	329.3	0.0	0.0	0.0	
Full Funding TOA	3,466.2	0.0	854.4	940.1	
Plus Advance Procurement	0.0	400.0	0.0	0.0	
Plus Cost To Complete	345.3	24.0	108.0	0.0	
Plus T-AKE 10 Full Funding	0.0	329.3	0.0	0.0	
Plus Outfitting / Post Delivery	86.8	0.0	0.0	0.0	
Plus Hurricane Supplemental	10.0	0.0	0.0	0.0	
Total Obligational Authority	3,908.3	753.3	962.4	940.1	
Plus Outfitting / Plus Post Delivery	88.1	51.4	36.3	29.7	
Total	3,996.4	804.7	998.7	969.9	
Unit Cost (Ave. End Cost)	428.3	0.0	527.2	570.1	
<b>MISSION:</b>					
The Dry Cargo/Ammunition Ship (T-AKE) Acquisition Program will replace the aging fleet of refrigerated cargo and food stores ships (designated AFS Class) and ammunition ships (designated AE Class) in the Navy's Combat Logistics Force (CLF). The primary mission of the T-AKE is to provide a steady stream of ammunition, spare parts and provisions (dry, refrigerated and frozen) to naval forces at sea in its role as a shuttle ship.					
<b>Characteristics:</b>		<b>Armament:</b>		<b>Major Electronics:</b>	
Overall Length	689 FT	N/A		GCCS-M	HFIP DMS
Max Beam	106 FT			ISNS	ADNS IFF/TACAN
Displacement	40,539 LT			DMR	RCS Turnkey Military GPS
				NTCSS/SUADPS	CND CBSP
				HF ALE	TVS/TVT Fleet Broadcast
<b>Production Status</b>	FY09	FY09	FY10	FY10	
Contract Award Date	T-AKE 11 12/08	T-AKE 12 12/08	T-AKE 13 1/10	T-AKE 14 1/10	
<b>Months to Completion</b>					
a) Contract Award to Delivery	37 months	48 months	48 months	59 months	
b) Construction Start to Delivery	24 months	23 months	25 months	24 months	
Delivery Date	2/12	1/13	12/13	11/14	
Completion of Fitting Out	4/12	3/13	2/14	1/15	

WEAPON SYSTEM COST ANALYSIS (EXHIBIT P-5)  
 (Dollars in Thousands)

BUDGET ACTIVITY: 1	P-1 LINE ITEM NOMENCLATURE				SUBHEAD NO. VARIOUS BLI: 0120								
	T-AKE				FY 2005		FY 2006		FY 2007		FY 2009		FY 2010
ELEMENT OF COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	
PLAN COSTS	2		1		1		2		2				
BASIC CONST/CONVERSION		708,621		356,531		481,781		964,468				1,043,841	
CHANGE ORDERS		17,200		9,300		9,576		19,584				21,240	
ELECTRONICS		33,433		19,680		19,710		42,531				44,841	
HM&E		36,366		5,471		11,506		22,998				24,790	
OTHER COST		1,735		2,360		1,953		4,779				5,403	
TOTAL SHIP ESTIMATE		797,355		393,342		524,526		1,054,360				1,140,115	
LESS COST TO COMPLETE		91,088		17,000		12,000							
LESS SUBSEQUENT FULL FUNDING						329,301							
LESS ADVANCE PROCUREMENT								200,000				200,000	
PLUS COST TO COMPLETE		3,323				270,304		108,000					
PLUS OUTFITTING/POST DELIVERY		57,094		1/									
PLUS HURRICANE SUPPLEMENTAL				10,000									
NET P-1 LINE ITEM:		767,772		386,342		453,529		962,360				940,115	

1/ NDSF Outfitting/Post Delivery established under BLI 5000 starting in FY06

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P-5B Exhibit  
 FY 2010 President's Budget  
 DATE:  
 May 2009

National Defense Sealift Fund  
 Analysis of Ship Cost Estimate - Basic/Escalation  
 Ship Type: T-AKE

<u>I. Design/Schedule</u>	<u>Start/Issue</u>	<u>Complete</u> <u>/Response</u>	<u>Reissue</u>	<u>Complete</u> <u>/Response</u>						
Issue date for TLR	N/A			N/A						
Issue date for TLS										
Preliminary Design	OCT 2001			FEB 2003						
Contract Design	AUG 2002			DEC 2004						
Detail Design	APR 2003			JAN 2005						
Request for Proposals										
Design Agent										
<u>II. Classification of Cost Estimate</u>	CLASS C									
<u>III. Basic Construction/Conversion</u>	FY03, T-AKE 4	FY04, T-AKE 5/6	FY05, T-AKE 7/8	FY06, T-AKE 9	FY07, T-AKE 10	FY09, T-AKE 11	FY09, T-AKE 12	FY10, T-AKE 13	FY10, T-AKE14	
A. Actual Award Date	JUL 2003	JAN 2004	JAN 2005	JAN 2006	JAN 2008	DEC 2008	DEC 2008	JAN 2010	JAN 2010	
B. Contract Type ( and Share Line if applicable )	FPI, 50/50	FPI, 50/50	FPI, 50/50	FPI, 50/50	FPI, 30/70					
<u>IV. Escalation</u>	FY03, T-AKE 4	FY04, T-AKE 5/6	FY05, T-AKE 7/8	FY06, T-AKE 9	FY07, T-AKE 10	FY09, T-AKE 11	FY09, T-AKE 12	FY10, T-AKE 13	FY10, T-AKE 14	
Escalation Termination Date										
Escalation Requirement	FWD PRICED	FWD PRICED	FWD PRICED	FWD PRICED	FWD PRICED	FWD PRICED	FWD PRICED	FWD PRICED	FWD PRICED	
Labor/Material Split										
Allowable Overhead Rate										
<u>V. Other Basic(Reserves/Miscellaneous)</u>	<u>Amount</u>									

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National Defense Sealift Fund  
SHIP PRODUCTION SCHEDULE

EXHIBIT P-27  
FY 2010 President's Budget  
DATE:  
May 2009

SHIP TYPE	HULL NUMBER	SHIPBUILDER	FISCAL YEAR AUTHORIZED	CONTRACT AWARD	START OF CONSTRUCTION	DELIVERY DATE	
T-AKE	0005	GD/NASSCO	04	JAN-04	JUL-06	JUN-08	
T-AKE	0006	GD/NASSCO	04	JAN-04	DEC-06	OCT-08	
T-AKE	0007	GD/NASSCO	05	JAN-05	MAY-07	MAR-09	
T-AKE	0008	GD/NASSCO	05	JAN-05	OCT-07	OCT-09	*
T-AKE	0009	GD/NASSCO	06	JAN-06	APR-08	MAR-10	*
T-AKE	0010	GD/NASSCO	07	JAN-08	OCT-08	MAR-11	*
T-AKE	0011	GD/NASSCO	09	DEC-08	MAR-09	FEB-12	*
T-AKE	0012	GD/NASSCO	09	DEC-08	FEB-11	JAN-13	*
T-AKE	0013	GD/NASSCO	10	JAN-10	NOV-11	DEC-13	*
T-AKE	0014	GD/NASSCO	10	JAN-10	NOV-12	NOV-14	*

\*NOTE: The Delivery Dates shown above for T-AKE 8 - 14 reflect the Construction Contract Delivery Dates. The shipbuilder has formally transmitted and the Program Manager has concurred with the following revised dates:

T-AKE 8	SEP-09
T-AKE 9	FEB-10
T-AKE 10	JUL-10
T-AKE 11	FEB-11
T-AKE 12	AUG-11
T-AKE 13	FEB-12
T-AKE 14	AUG-12

**National Defense Sealift Fund**  
 Analysis of Ship Cost Estimates - Major Equipment  
 (Dollars in Thousands)

Ship Type: T-AKE

	FY 2005		FY 2006		FY 2007		FY 2009		FY 2010	
	<u>QTY</u>	<u>COST</u>								
<b>ELECTRONICS</b>										
a. P-35 Items										
DMR	2	6,970	1	3,880	1	4,509	2	8,862	2	8,912
RCS TURNKEY	2	9,000	1	5,487	1	5,759	2	11,040	2	12,853
Subtotal		15,970		9,367		10,268		19,902		21,765
b. Major Items										
ISNS	2	5,355	1	2,880	1	3,078	2	6,899	2	7,132
NTCSS/SUADPS	2	788	1	450	1	413	2	950	2	957
NAVMACS/SMS	2	718	1	380	1	436	2	265	2	300
GCCSM TERMINAL	2	569	1	122	1	363	2	989	2	1,000
INFOSEC/INFORMATION	2	579	1	285	1	341	2	493	2	500
INTRUSION DETECTION/EMBEDDED FIREWALL	2	696	1	700	0	0	0	0	0	0
HFIP	2	190	1	115	1	70	2	386	2	402
INMARSAT HSD	2	92	1	55	1	66	0	0	0	0
FLEET BROADCAST	2	258	1	131	1	129	2	272	2	298
TACTICAL VARIANT SWITCH/ TVT	2	2,250	1	1,170	1	1,195	2	1,778	2	1,798
ADNS	2	740	1	360	1	358	2	1,346	2	1,359
MILITARY GPS	2	790	1	460	1	468	2	1,000	2	1,080
HEADQUARTERS COORDINATION	2	1,360	1	880	1	975	2	2,115	2	2,256
HF ALE	2	1,336	1	1,575	0	795	2	1,992	2	2,051
CBSP	0	0	0	0	0	0	2	1,732	2	1,756
CND	0	0	0	0	0	0	2	865	2	900
MISC ELECTRONICS	2	1,742	1	750	1	755	2	1,547	2	1,287
Subtotal		17,463		10,313		9,442		22,629		23,076
c. Other ELECTRONICS										
Subtotal		0		0		0		0		0
Total ELECTRONICS		33,433		19,680		19,710		42,531		44,841

**National Defense Sealift Fund**  
 Analysis of Ship Cost Estimates - Major Equipment  
 (Dollars in Thousands)

Ship Type: T-AKE

	FY 2005		FY 2006		FY 2007		FY 2009		FY 2010	
	<u>QTY</u>	<u>COST</u>								
<b>HM&amp;E</b>										
a. P-35 Items										
Subtotal		0		0		0		0		0
b. Major Items										
1. HM&E TEST & INSTRUMENTATION	2	843	1	654	1	1,208	2	2,449	2	3,114
2. HME& ENGINEERING SERVICES	2	34,131	1	3,914	1	8,855	2	17,707	2	18,835
3. SUPSHIP MATERIAL/SERVICES	2	323	1	600	1	824	2	1,609	2	1,609
4. LOGISTCS SUPPORT SERVICES	2	1,069	1	303	1	619	2	1,233	2	1,232
Subtotal		36,366		5,471		11,506		22,998		24,790
c. Other HM&E										
Subtotal		0		0		0		0		0
Total HM&E		36,366		5,471		11,506		22,998		24,790

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**National Defense Sealift Fund**  
 MAJOR SHIP COMPONENT FACT SHEET  
 (Dollars in Thousands)

**P-35 EXHIBIT**  
**FY 2010 President's Budget**  
 May 2009

Ship Type: T-AKE  
 Equipment Item: DMR  
 PARM Code: E8/3Z

**I. DESCRIPTION/CHARACTERISTICS/PURPOSE:**

AN/SRC-XX(V)X communications suite includes digital and analog interfaces and modulation and demodulation (modem) functionality. Each DMR includes four independent full-duplex RF channels.

Each RF channel can be configured at a Data Processing Group (DPG) via a Human Machine Interface (HMI). The DMR radio is capable of transmitting and receiving on four RF channels simultaneously. It is based on an Open System Architecture and will be interoperable Over-the-Air (OTA) with existing VHF-UHF LOS/UHF SATCOM circuits such as DAMA, UHF LOS, VHF, and other circuits utilizing legacy radios. Each RF channel will be capable of transmitting anywhere in the 30-2000 HMz frequency band and receiving anywhere in the 30-2000 MHz frequency band with HF capabilities to be added with future upgrades. The system detailed here will meet the ORD requirement by providing 10 UHF/VHF LOS channels and 4 SATCOM channels.

**II. CURRENT FUNDING:**

**P-35 Category**

	FY 2005		FY 2006		FY 2007		FY 2009		FY 2010	
	QTY	COST								
Major Hardware	2	6,303	1	3,434	1	3,990	2	7,632	2	7,654
Ancillary Equipment		27		17		21		60		68
Spares		60		36		42		93		98
Technical Engineering Services		420		293		338		777		783
Other Costs		160		100		118		300		309
Total		6,970		3,880		4,509		8,862		8,912

**III. CONTRACT DATA:**

PROGRAM YEAR	SHIP TYPE	PRIME CONTRACTOR	CONTRACT TYPE	AWARD DATE	NEW /OPTION	QTY	HARDWARE UNIT COST
06	T-AKE 9	SSC SAN DIEGO		TBD		1	3,434
07	T-AKE 10	SSC SAN DIEGO		TBD		1	3,990
09	T-AKE 11	SSC SAN DIEGO		TBD		1	3,816
09	T-AKE 12	SSC SAN DIEGO		TBD		1	3,816
10	T-AKE 13	SSC SAN DIEGO		TBD		1	3,827
10	T-AKE 14	SSC SAN DIEGO		TBD		1	3,827

**IV. DELIVERY DATE:**

PROGRAM YEAR	SHIP TYPE	EARLIEST SHIP DELIVERY DATE	MONTHS REQUIRED BEFORE DELIVERY	PRODUCTION LEADTIME	REQUIRED AWARD DATE
06	T-AKE 9	MAR-10	5	12	OCT-08
07	T-AKE 10	MAR-11	5	12	OCT-09
09	T-AKE 11	FEB-12	5	12	SEP-10
09	T-AKE 12	JAN-13	5	12	AUG-11
10	T-AKE 13	DEC-13	5	12	JUL-12
10	T-AKE 14	NOV-14	5	12	JUN-13

**V. COMPETITION/SECOND SOURCE INITIATIVES:**

N/A

**NOTE:**

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**National Defense Sealift Fund**  
 MAJOR SHIP COMPONENT FACT SHEET  
 (Dollars in Thousands)

**P-35 EXHIBIT**  
**FY 2010 President's Budget**  
 May 2009

Ship Type: T-AKE  
 Equipment Item: RCS TURNKEY  
 PARM Code: E8/3Z

**I. DESCRIPTION/CHARACTERISTICS/PURPOSE:**

The Radio Communication System (RCS) consists of the subsystems that provide data and voice communications across the RF spectrum. The RCS will be comprised of subsystems provided from various sources, including SPAWAR Program of Record systems, commercial systems, and associated ancillary equipment that can be obtained through the stock system and bought commercially. These subsystems will be integrated into one system and will include the automated and manual patching equipment required to configure these subsystems. The subsystems included in the RCS include the Harris HF System, Digital Modular Radio (DMR), NAVMACS (SMS), Battle Force E-mail (BFEM), Tactical Variant Switch (TVS), Tactical Voice Terminal (TVT), Automated Digital Networks System (ADNS), INMARSAT High Speed Data (HSD), Fleet Broadcast, Navy Orderwire (NOW) Terminals, Portable Communications Equipment and Cryptologic equipment. The subsystems are integrated by SPAWAR Systems Center at the Charleston Test and Integration Facility with the proper interfaces to operate as an overall system. The RCS subsystems and interfaces will be tested prior to shipment for installation on board the T-AKE ships.

**II. CURRENT FUNDING:**

**P-35 Category**

	FY 2005		FY 2006		FY 2007		FY 2009		FY 2010	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
Ancillary Equipment	2	3,800	1	2,085	1	2,203	2	4,200	2	4,855
System Engineering		1,820		1,058		1,108		2,990		3,215
Technical Engineering Services		2,360		1,637		1,703		3,640		4,189
Other Costs		1,020		707		745		210		594
Total		9,000		5,487		5,759		11,040		12,853

**III. CONTRACT DATA:**

PROGRAM	SHIP	PRIME	CONTRACT	AWARD	NEW	HARDWARE
YEAR	TYPE	CONTRACTOR	TYPE	DATE	/OPTION	UNIT COST
06	T-AKE 9	N/A		N/A		0
07	T-AKE 10	N/A		N/A		0
09	T-AKE 11	N/A		N/A		0
09	T-AKE 12	N/A		N/A		0
10	T-AKE 13	N/A		N/A		0
10	T-AKE 14	N/A		TBD		0

**IV. DELIVERY DATE:**

PROGRAM	SHIP	EARLIEST SHIP	MONTHS REQUIRED	PRODUCTION	REQUIRED
YEAR	TYPE	DELIVERY DATE	BEFORE DELIVERY	LEADTIME	AWARD DATE
06	T-AKE 9	MAR-10	5	18	APR-08
07	T-AKE 10	MAR-11	5	18	APR-09
09	T-AKE 11	FEB-12	5	18	MAR-10
09	T-AKE 12	JAN-13	5	18	FEB-11
10	T-AKE 13	DEC-13	5	18	JAN-12
10	T-AKE 14	NOV-14	5	18	DEC-12

**V. COMPETITION/SECOND SOURCE INITIATIVES:**

N/A

**NOTE:**

<b>CLASSIFICATION:</b>			<b>UNCLASSIFIED</b>										
Exhibit P-10, Advance Procurement Requirements Analysis Funding								FY 2010 President's Budget May 2009					
Appropriation (Treasury)Code/CC/BA/BSA/Item Control Number <b>NDSF / BA 01</b>							P-1 Line Item Nomenclature <b>BLI 0401: MPF(F) MLP</b>						
Weapon System			First System (BY1) Award Date and Completion Date <b>JANUARY 2011</b>				Interval Between Systems						
BLI	PLT	When Req'd	Prior Years	FY08	FY09	FY10							
Plans			0.0	0.0	0.0	30.0							
Basic Construction			0.0	0.0	0.0	85.0							
Other			0.0	0.0	0.0	5.0							
<b>Total AP</b>			0.0	0.0	0.0	120.0							
<b>Description:</b> FY10 Advance Procurement in support of lead Mobile Landing Platform (MLP). <b>Plans (Design)</b> Detail Design <b>Basic Construction</b> Procurement of Long Lead Time Contractor Furnished Equipment <b>Other (Detail Design Efforts)</b> Ship Design Manager engineering support cost													

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<b>CLASSIFICATION:</b>				<b>UNCLASSIFIED</b>					
Exhibit P-10, Advance Procurement Requirements Analysis (Budget Justification)							<b>FY 2010 President's Budget May 2009</b>		
Appropriation (Treasury)Code/CC/BA/BSA/Item Control Number <b>NDSF / BA 01</b>					Weapon System		P-1 Line Item Nomenclature <b>BLI 0401: MPF(F) MLP</b>		
(TOA \$ in Millions)				<b>FY10</b>					
	PLT	QPA	Unit Cost	Qty	Contract Forecast Date	Total Cost Request			
End Item									
Plans					Various	30.0			
Basic Construction	Various				MAR-10	85.0			
Other	Various				Various	5.0			
Total AP						120.0			

<b>CLASSIFICATION: UNCLASSIFIED</b>										
<b>BUDGET ITEM JUSTIFICATION SHEET (P-40)</b>								DATE: May 2009		
<b>FY 2010 President's Budget</b>										
<b>APPROPRIATION/BUDGET ACTIVITY</b>						<b>P-1 LINE ITEM NOMENCLATURE</b>				
<b>National Defense Sealift Fund/BA 01</b>						<b>NDSF OUTFITTING AND POST DELIVERY</b>				
						<b>SUBHEAD NO. VARIOUS BLI: 5000</b>				
(Dollars in Millions)	PRIOR YR	FY 2008	FY 2009	FY 2010						
Full Funding TOA-Outfitting	39.1	29.5	21.4	24.2						
Full Funding TOA-Post Delivery	49.1	21.9	14.9	5.6						
Total Obligational Authority	88.1	51.4	36.3	29.7						
<b>MISSION:</b>										
<p>NDSF BLI 5000 supports Post Delivery and Outfitting requirements for T-AKE and MPF(F) squadron ship programs.</p> <p>Outfitting funds are used to acquire on board repair parts, other secondary items, equipage, recreation items, precommissioning crew support and general use consumables furnished to the shipbuilder or the fitting-out activity to fill the ship's initial allowances as defined by the baseline Coordinated Shipboard Allowance List (COSAL). The program also budgets for contractor-furnished spares, lead-time away from delivery. The program ensures operational readiness of ships undergoing new construction. It ensures these ships receive their full allowances of spare parts and equipment which are vitally required to support the shipboard maintenance process; ensures ships are equipped with operating space items (tools, test equipment, damage control), personnel safety and survivability commodities for successful completion builder sea trials; supports shipboard maintenance and therefore achieving the OPNAV-directed Supply Readiness goals for material on board ship at delivery.</p> <p>Post Delivery funding covers the fixing of government-responsible items which were believed to have been complete to standard and/or operable at delivery. It is essential to deliver to the Fleet complete ships, free from both contractor and government responsible deficiencies, capable of supporting the Navy's mission from the first day of service. The Post Shakedown Availability (PSA) is a shipyard availability assigned to commence after delivery. It is during this time that Acceptance and Final Contract Trials deficiencies will be corrected. The purpose of the PSA is to accomplish correction of new construction deficiencies found during the shakedown period which are authorized; correction of other contractor and government responsible deficiencies previously authorized; and accomplishment of other improvements or class items as authorized. Funding is used for corrections authorized by the Ship Program Manager as a result of builders trials (pre-delivery), acceptance or underway trials, final contract trials, trial board items, and correction of production-related defects or deficiencies which develop during the Post Delivery period.</p>										

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<b>CLASSIFICATION:</b>		<b>UNCLASSIFIED</b>																	
<b>BUDGET ITEM JUSTIFICATION SHEET(P-29)</b>													<b>DATE</b>						
<b>FY 2010 President's Budget</b>													<b>May 2009</b>						
<b>APPROPRIATION/BUDGET ACTIVITY</b>										<b>P-1 LINE ITEM NOMENCLATURE</b>									
<b>National Defense Sealift Fund/BA 01</b>										<b>NDSF OUTFITTING AND POST DELIVERY</b>									
										<b>BLI: 5000/SUBHEAD NO. VARIOUS</b>									
Ship Type	HULL NO	PROG YEAR	Contract Award	Start of Constr.	DEL DATE	CFO DATE	PSA START	PSA FINISH	OWLD	PRIOR YEARS	FY 2008	FY 2009	FY 2010						
T-AKE	0004	03	JUL-03	FEB-05	DEC-06	JAN-08	MAY-08	AUG-08	N/A	6564	4000	0	0						
T-AKE	0005	04	JAN-04	JUL-06	JUN-08	AUG-08	DEC-08	MAR-09	N/A	5589	4141	0	0						
T-AKE	0006	04	JAN-04	DEC-06	OCT-08	JAN-09	FEB-09	MAY-09	N/A	11928	2072	0	0						
T-AKE	0007	05	JAN-05	MAY-07	MAR-09	MAY-09	JUL-09	SEP-09	N/A	7205	4863	1932	0						
T-AKE	0008	05	JAN-05	OCT-07	OCT-09	DEC-09	APR-10	JUL-10	N/A	4150	6601	3249	0						
T-AKE	0009	06	JAN-06	APR-08	MAR-10	MAY-10	SEP-10	DEC-10	N/A	3650	3327	7023	0						
T-AKE	0010	07	JAN-08	OCT-08	MAR-11	MAY-11	SEP-11	DEC-11	N/A	0	2000	7173	4827						
T-AKE	0011	09	DEC-08	MAR-09	FEB-12	APR-12	AUG-12	NOV-12	N/A	0	2484	2000	7358						
T-AKE	0012	09	DEC-08	FEB-11	JAN-13	MAR-13	JUL-13	OCT-13	N/A	0	0	0	6000						
T-AKE	0013	10	JAN-10	NOV-11	DEC-13	FEB-14	JUN-14	SEP-14	N/A	0	0	0	6000						
<b>T-AKE Total</b>										<b>39086</b>	<b>29488</b>	<b>21377</b>	<b>24185</b>						
<b>Full Funding TOA-Outfitting Total</b>										<b>39086</b>	<b>29488</b>	<b>21377</b>	<b>24185</b>						

NOTE: The Delivery Dates shown above for T-AKE 8 - 13 reflect the Construction Contract Delivery Dates. The shipbuilder has formally transmitted and the Program Manager has concurred with the following revised dates:

T-AKE 8	SEP-09
T-AKE 9	FEB-10
T-AKE 10	JUL-10
T-AKE 11	FEB-11
T-AKE 12	AUG-11
T-AKE 13	FEB-12

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<b>CLASSIFICATION:</b>		<b>UNCLASSIFIED</b>																	
<b>BUDGET ITEM JUSTIFICATION SHEET(P-30)</b>											<b>DATE</b>								
FY 2010 President's Budget											May 2009								
<b>APPROPRIATION/BUDGET ACTIVITY</b>										<b>P-1 LINE ITEM NOMENCLATURE</b>									
National Defense Sealift Fund/BA 01										NDSF OUTFITTING AND POST DELIVERY BLI: 5000/SUBHEAD NO. VARIOUS									
Ship Type	HULL NO	PROG YEAR	Contract Award	Start of Constr.	DEL DATE	CFO DATE	PSA START	PSA FINISH	OWLD	PRIOR YEARS	FY 2008	FY 2009	FY 2010						
T-AKE	0002	01	OCT-01	SEP-04	DEC-05	APR-07	AUG-07	NOV-07	N/A	6884	0	0	0						
T-AKE	0003	02	JUL-02	SEP-05	MAY-06	AUG-07	DEC-07	MAR-08	N/A	10000	0	0	0						
T-AKE	0004	03	JUL-03	FEB-05	DEC-06	JAN-08	MAY-08	AUG-08	N/A	12321	2000	0	0						
T-AKE	0005	04	JAN-04	JUL-06	JUN-08	AUG-08	DEC-08	MAR-09	N/A	3000	6600	0	0						
T-AKE	0006	04	JAN-04	DEC-06	OCT-08	JAN-09	FEB-09	MAY-09	N/A	3350	6000	650	0						
T-AKE	0007	05	JAN-05	MAY-07	MAR-09	MAY-09	JUL-09	SEP-09	N/A	6519	2669	812	0						
T-AKE	0008	05	JAN-05	OCT-07	OCT-09	DEC-09	APR-10	JUL-10	N/A	3488	2319	5193	0						
T-AKE	0009	06	JAN-06	APR-08	MAR-10	MAY-10	SEP-10	DEC-10	N/A	3488	2324	5188	0						
T-AKE	0010	07	JAN-08	OCT-08	MAR-11	MAY-11	SEP-11	DEC-11	N/A	0	0	3092	5555						
<b>T-AKE Total</b>										<b>49050</b>	<b>21912</b>	<b>14935</b>	<b>5555</b>						
<b>Full Funding TOA-Outfitting Total</b>										<b>39086</b>	<b>29488</b>	<b>21377</b>	<b>24185</b>						
<b>Full Funding TOA-Post Delivery Total</b>										<b>49050</b>	<b>21912</b>	<b>14935</b>	<b>5555</b>						
<b>Total Obligational Authority Total</b>										<b>88136</b>	<b>51400</b>	<b>36312</b>	<b>29740</b>						
<b>NET P-1 Total</b>										<b>88136</b>	<b>51400</b>	<b>36312</b>	<b>29740</b>						

NOTE: The Delivery Dates shown above for T-AKE 8 - 10 reflect the Construction Contract Delivery Dates. The shipbuilder has formally transmitted and the Program Manager has concurred with the following revised dates:

T-AKE 8                    SEP-09  
T-AKE 9                    FEB-10  
T-AKE 10                   JUL-10

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**NATIONAL DEFENSE SEALIFT FUND**  
**Exhibit P-40**  
**FY 2010 President's Budget**

**MAY 2009**  
**BA 02**  
**BLI 0200**

**National Defense Sealift Vessels**  
**(\$M)**

<b><u>National Defense Sealift</u></b>	<b><u>FY 2008</u></b>	<b><u>FY 2009</u></b>	<b><u>FY 2010</u></b>
Total National Defense Sealift	6.5	6.5	1.4

Justification:

Through FY 2009, this line item funds shipping and tanker contingency contracts. In FY 2010, this line item funds only tanker contingency contracts. The contracts would require companies to provide ships to fulfill tanker capacity requirements upon demand at preset readiness requirements. Navy and USTRANSCOM review of Ready Reserve Force (RRF) requirements following the 2005 Mobility Capabilities Study determined that RRF Tankers could be inactivated by the end of FY 2006. These reductions increase risk by creating a 90,000 barrel petroleum capacity shortfall. This risk was addressed by funding the tanker contingency contracts.

UNCLASSIFIED

**NATIONAL DEFENSE SEALIFT FUND**  
**Exhibit P-40**  
**FY 2010 President's Budget**

**MAY 2009**  
**BA 02**  
**BLI 0210**

**Fast Sealift Ships (FSS)**  
**(\$M)**

<u>FSS</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>
Total FSS	77.2	0.0	0.0

Justification:

Fast Sealift Ships are roll-on/roll-off and lift-on/lift-off ships equipped with on-board cranes and self-contained ramps which enable the ships to off-load onto lighterage while anchored at sea or in ports where shore facilities for unloading equipment are unavailable. The vessels are specially suited to transport heavy or bulky unit equipment such as tanks, large wheeled vehicles and helicopters.

Beginning in FY 2009, these ships transfer to the cognizance of the Maritime Administration (MARAD).

**NATIONAL DEFENSE SEALIFT FUND****Exhibit P-40****FY 2010 President's Budget****MAY 2009****BA 02****BLI 0220****Large Medium Speed RO/RO (LMSR)  
(\$M)**

<u>LMSR</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>
Total, LMSR	116.4	94.0	96.4

## Justification:

Large, Medium-speed, Roll-on/Roll-off Ships, or LMSRs, can carry an entire U.S. Army Task Force, including 58 tanks, 48 other track vehicles, plus more than 900 trucks and other wheeled vehicles. The ship carries vehicles and equipment to support humanitarian missions, as well as combat missions. These ships have a cargo carrying capacity of more than 380,000 square feet, equivalent to almost eight football fields. In addition, LMSRs have a slewing stern ramp and a removable ramp which services two side ports making it easy to drive vehicles on and off the ship. Interior ramps between decks ease traffic flow once cargo is loaded aboard ship. Two 110-ton single pedestal twin cranes make it possible to load and unload cargo where shore side infrastructure is limited or nonexistent. A commercial helicopter deck was added for emergency, daytime landing.

Eleven LMSRs are maintained in a 4-day Reduced Operating Status (ROS-4) as recommended by the OSD published Mobility Requirements Study (MRS) and the MRS Bottom-Up Review Update (MRS BURU). These ships provide the initial surge sealift capacity required to transport the lead combat forces from CONUS to a given area of operations and satisfy time critical war fighting requirements. The criteria for each readiness status was also specified in the MRS (i.e. Outporting, Sea/Dock Trials, Maintenance). ROS-4 ships have a cadre crew assigned, outported at a layberth, and undergo annual sea trials, periodic dock trials, and required periodic regulatory dry dockings/inspections.

Four LMSRs, formerly in prepositioning status for the Army, are maintained in a ROS-30 status beginning in FY 2008. Beginning in FY 2010, two LMSRs will be maintained in ROS-30 status. The remaining two LMSRs will be a part of the Maritime Prepositioning Force Future (MPF(F)).

**NATIONAL DEFENSE SEALIFT FUND**  
**Exhibit P-40**  
**FY 2010 President's Budget**

**MAY 2009**  
**BA 02**  
**BLI 0230**

**DOD Strategic Vessel Modernization**  
**(\$M)**

<u>Modernization</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>
MPS Lease Buyout/Terminations	28.3	119.7	43.5
LMSR Mods for Prepo	0.0	22.6	0.0
T-AOE-6 Modernization	12.4	0.0	17.7
MPS Shipalt for INLS integration/T-Alts	9.2	0.4	0.0
Heavy UnRep	0.0	0.0	3.0
<b>Total, Modernization</b>	<b>49.9</b>	<b>142.7</b>	<b>64.2</b>

**Justification:**

General: Vessel modernization replaces obsolete equipment and responds to emergent fleet and COCOM requirements. Requirements are prioritized annually and fiscal resources are allocated to complete the most important safety and operational requirements when resources become available.

Maritime Prepositioning Ship (MPS) Buyout: Three leased MPS ships were purchased in FY 2006 and one leased MPS was purchased in FY 2007. In FY 2009, three additional ships were procured -- the MV BUTTON, the last of the four Amsea class ships, and two Waterman class vessel, the KOCAK and PLESS. FY 2009 also included funding to terminate the capital leases on 3 Maersk class (foreign-built) vessels. The termination of the Maersk class leases, along with the utilization of Large Medium-Speed Roll-on/roll-off (LMSR) ships, formerly used by the Army for prepositioning, comprise parts of a restructuring of USMC Afloat Prepositioning ship assets. In FY 2010, funding is budgeted to procure the remaining Waterman class ship -- the OBREGON.

T-AOE Civilan Crew Modifications (CivMod) are required to accommodate civilian mariner crews for the former AOE-6 class ships transferred to Military Sealift Command (MSC).

MPS ShipAlts are required to prepare the current MPS force for the introduction of the Improved Navy Lighterage System (INLS).

Heavy Underway Replenishment capability provides safety and process improvements, interoperates with existing STREAM, and doubles lift capacity and transfer rate over current STREAM to 12K lbs lift and 70ST/HR/rig transfer rate. It is required by CVN 78 and follow-on aircraft carriers. Installation is planned on the Combat Logistics Force T-AOEs.

**NATIONAL DEFENSE SEALIFT FUND  
Exhibit P-40  
FY 2010 President's Budget**

**MAY 2009  
BA 02  
BLI 0250**

**Hospital Ships (T-AH)  
(\$M)**

<u>T-AH</u>		<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>
	Total T-AH ROS Operations	23.8	26.2	37.6

**Justification:**

Two T-AHs are maintained in a 5-day Reduced Operating Status (ROS-5) as required by Defense Planning Guidance and CINC OPLANS. These ships provide the critical initial surge field hospital capability to support war fighting, humanitarian, and Operations Other Than War. T-AH ships have a cadre crew assigned, are out ported at a layberth, and undergo annual sea trials, periodic dock trials, and required periodic regulatory dry dockings/inspections.

Funding supports the following areas:

Crew costs -- CIVMAR wages & salaries.

Maintenance & Repair -- daily maintenance and regulatory inspections, dry dockings, and overhauls.

Layberth -- berth lease, utilities, tugs, pilots, and in port fuel.

Other costs -- ADP support, supplies, subsistence, spare parts, consumables, and NWCF profit/loss.

**NATIONAL DEFENSE SEALIFT FUND**

**Exhibit P-40**

**FY 2010 President's Budget**

**MAY 2009**

**BA 03**

**BLI 0300**

**National Defense Features (NDF)**

**(\$M)**

<u>NDF</u>		<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>
	Total NDF	0.0	0.0	4.8

**Justification:**

The National Defense Features (NDF) program will provide funds for the installation and maintenance of critical defense features on privately owned and operated, U.S.-built, U.S.-flagged merchant vessels. NDF are features built into or added to commercial vessels to make them more capable of supporting the military in a contingency. Examples include enhancing a vessel's ability to carry military equipment or ammunition or to enhance a vessel's characteristics such as speed, range, or deck strength. Vessel construction cost, except for the cost of NDF, will be borne by commercial interest who will contract directly with a U.S. shipyard for conversion or construction of the ship.

<b>CLASSIFICATION:</b>		<b>UNCLASSIFIED</b>					
<b>EXHIBIT R-2, RDT&amp;E BUDGET ITEM JUSTIFICATION</b>						DATE May 2009	
<b>APPROPRIATION/BUDGET ACTIVITY</b> <b>RD TEN/BA 4</b>			<b>R-1 ITEM NOMENCLATURE</b> <b>0408042N/NATIONAL DEFENSE SEALIFT FUND</b>				
COST (In Millions)	FY 2008	FY 2009	FY 2010				
Total PE Cost	66.400	63.263	72.983				
3110 / Maritime Prepositioning Force (Future)	37.722	36.426	52.459				
3116 / Strategic Sealift Research & Development	6.166	6.197	6.023				
3117 / Naval Operational Logistics Integration	22.512	20.640	14.501				

**A. MISSION DESCRIPTION:**

This Program Element supports multiple NDSF R&D efforts under various project units. Project Unit efforts are as follows:

- (1) Maritime Prepositioning Force (Future) - MPF(F) (3110) - concept studies, preliminary, contract designs and technology development leading to detail design and construction award of ship systems that will provide a highly flexible, operational and logistics support capability to enable Expeditionary Maneuver Warfare concepts and to meet required operational capabilities with respect to Force Closure, Amphibious Task Force Integration, Sustainment and Reconstitution/Redeployment.
- (2) Strategic Sealift Research and Development (3116) - develops new concepts and technologies which can be applied to or will enable future strategic sealift, combat logistics force, and seabasing systems. The technologies include ship configuration concepts, equipments to increase cargo handling and cargo loading/unloading rates (including commercial and merchant ship systems), improved man/machine interfaces, improved structural configurations and materials, and Logistics-Over-the-Shore (LOTS) equipment and system improvements to enable LOTS operations to satisfy JFC sea state and operational requirements.
- (3) Naval Operational Logistics Integration (OPLOG) (3117) - develops enabling technologies for future and in-service afloat operational logistics and integrated supply systems; defines integrated combat logistics force and combatant logistics requirements; and provides a forum for cooperative initiatives of acquisition programs, program sponsors, engineering managers, the Navy science and technology community and fleet customers.

**B. PROGRAM CHANGE SUMMARY:**

Funding:	FY 2008	FY 2009	FY 2010
FY09 President's Budget	66.400	68.663	45.538
FY10 President's Budget	66.400	63.263	72.983
Total Adjustments	0.000	-5.400	27.445
(U) Summary of Adjustments			
Congressional Rescissions	0.000	0.000	0.000
Congressional Adjustments	0.000	-5.400	0.000
SBIR/STTR/FTT Assessment	0.000	0.000	0.000
Program Adjustments	0.000	0.000	30.500
Rate/Misc Adjustments	0.000	0.000	-3.055
Total	0.000	-5.400	27.445

<b>CLASSIFICATION:</b>		<b>UNCLASSIFIED</b>					
<b>EXHIBIT R-2a, RDT&amp;E PROJECT JUSTIFICATION</b>					<b>DATE</b> May 2009		
<b>APPROPRIATION/BUDGET ACTIVITY</b> <b>RD TEN/BA 4</b>		<b>PROGRAM ELEMENT NUMBER AND NAME</b> <b>0408042N/NATIONAL DEFENSE SEALIFT FUND</b>			<b>PROJECT NUMBER AND NAME</b> <b>3110/Maritime Prepositioning Force (Future)</b>		
<b>COST (In Millions)</b>	<b>FY 2008</b>	<b>FY 2009</b>	<b>FY 2010</b>				
Project Cost	37.722	36.426	52.459				
RDT&E Articles Qty	0	0	0				
<b>A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:</b>							
MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION: Maritime Prepositioning Force (Future) - MPF(F) (3110) - concept studies, preliminary, contract designs and technology development leading to detail design and construction award of ship systems that will provide a highly flexible, operational and logistics support capability to enable Expeditionary Maneuver Warfare and to meet required operational capabilities with respect to Force Closure, Assemble, Employment, Sustainment and Reconstitution/Redeployment.							

<b>CLASSIFICATION:</b>		<b>UNCLASSIFIED</b>		
<b>EXHIBIT R-2a, RDT&amp;E PROJECT JUSTIFICATION</b>				DATE May 2009
APPROPRIATION/BUDGET ACTIVITY <b>RD TEN/BA 4</b>	PROGRAM ELEMENT NUMBER AND NAME <b>0408042N/NATIONAL DEFENSE SEALIFT FUND</b>	PROJECT NUMBER AND NAME <b>3110/Maritime Prepositioning Force (Future)</b>		
<b>B. ACCOMPLISHMENTS/PLANNED PROGRAM:</b>				
		FY 2008	FY 2009	FY 2010
<b>Accomplishments/Effort/Subtotal Cost</b>		0.000	1.000	3.450
RDT&E Articles Quantity		0	0	0
<p>Landing Platform (LP) Technologies: Develop and validate external surface craft interfaces including mobile landing platform (MLP) to permit at-sea arrival, assembly and deployment of forces and equipment. External interfaces maximize the use of ship volume for cargo stowage and handling, resulting in reduction in procurement and life cycle cost. Development team will include commercial design agents, equipment vendors and shipyards/fabricators. Development team will include commercial design agents, equipment vendors and shipyards/fabricators.</p> <p>FY09 - Complete fabrication of test ramp(TAVTS), complete test planning and acquisition of test support assets.                      FY10 - Conduct computer modeling to establish ABS approved test operating limits and conduct wave basin model tests of early design MLP with LMSR.</p>				
		FY 2008	FY 2009	FY 2010
<b>Accomplishments/Effort/Subtotal Cost</b>		1.000	14.653	21.050
RDT&E Articles Quantity		0	0	0
<p>Ship to Ship (STS) Technologies: Define and develop systems and validate ability of LMSRs and Heavy Lift ships (Surrogate MLP) to transfer cargo and personnel at sea, by building on commercial-off-the-shelf technology used in the offshore oil industry. Demonstrate dynamic positioning (DP) and ship to ship vehicle transfer test article at-sea in SS3. Development team will include commercial design agents, equipment vendors and shipyards/fabricators.</p> <p>FY08 - Analyze model test data for validation of modeling and simulation efforts.                      FY09 - Continue planning and preparation for at-sea testing including contracting for preparation of LMSR and support tugs, wave buoy boats, instrumentation, power and cooling water for test ramp systems.                      FY10 - Conduct at-sea testing of test ramp (TAVTS) on DP capable MLP surrogate transferring USMC vehicles from/to an LMSR in sea state 3. Develop final design information.</p>				
		FY 2008	FY 2009	FY 2010
<b>Accomplishments/Effort/Subtotal Cost</b>		0.200	0.500	6.000
RDT&E Articles Quantity		0	0	0
<p>Assembly and Cargo Handling (ACH): Define, develop and validate technologies and procedures to improve at-sea cargo handling to facilitate selective offload and expeditionary force assembly, employment, sustainment, and reconstitution. Investigation and testing of assembly and reconstitution processes, equipment, and personnel will be used to validate proposed procedures. Systems to be investigated include commercial loading and unloading systems for handling and stowage of joint intermodal modular container (JIMC) and pallets. Systems will be adapted and tested for at-sea use. Development team will include commercial design agents, equipment vendors and shipyards/fabricators.</p>				

<b>CLASSIFICATION:</b>		<b>UNCLASSIFIED</b>		
<b>EXHIBIT R-2a, RDT&amp;E PROJECT JUSTIFICATION (CONTINUATION)</b>				DATE May 2009
APPROPRIATION/BUDGET ACTIVITY <b>RD TEN/BA 4</b>	PROGRAM ELEMENT NUMBER AND NAME <b>0408042N/NATIONAL DEFENSE SEALIFT FUND</b>	PROJECT NUMBER AND NAME <b>3110/Maritime Prepositioning Force (Future)</b>		
FY08 - Continue analysis of test data.				
FY09 - Support USMC MCCDC planning and execution of shipboard vehicle and personnel assembly test as part of Cobra Gold 09. Coordinate with ONR for the transition testing of applicable FNC developed technologies including High Rate Vertical/Horizontal Material Mover.				
FY10 - Conduct PCS integration with commercial crane vendor. Transition ONR LVI Lo/Lo advanced crane system technologies for use in MLP.				
		FY 2008	FY 2009	FY 2010
<b>Accomplishments/Effort/Subtotal Cost</b>		28.694	12.143	12.798
RDT&E Articles Quantity		0	0	0
Primary Hardware Development (Mobile Landing Platform): Industry naval architecture, ship design and engineering support for the engineering and design development of the Mobile Landing Platform (MLP).				
FY08 - Award MLP shipyard contracts and begin preliminary design. Continue coordination with NOSSA, WSESRB, NAVAIR and SPAWAR. Award TAVTS contract.				
FY09 - Begin MLP contract design with shipyards. Continue coordination with NOSSA, WSESRB, NAVAIR and SPAWAR. Complete Test Article Vehicle Transfer System (TAVTS) design and fabrication and update Vehicle Transfer System (VTS) Installation Control Drawings (ICD).				
FY10 - Continue MLP contract design. Prepare VTS Government Furnished Information (GFI) package.				
		FY 2008	FY 2009	FY 2010
<b>Accomplishments/Effort/Subtotal Cost</b>		0.500	2.330	6.161
RDT&E Articles Quantity		0	0	0
Primary Hardware Development (MPF(F) Large Medium Speed Roll-on/Roll-off Ship (LMSR)): Industry naval architecture, ship design and engineering support for engineering and design development of the MPF(F) Large Medium Speed Roll-on/Roll-off (LMSR) Ship.				
FY08 - Align spec and RFP with updated performance and technical requirements.				
FY09 - Complete and verify System Specification and RFP documentation.				
FY10 - Update cost estimates. Continue coordination with NOSSA, WSESRB, NAVAIR and SPAWAR. Support LMSR CDD development.				
		FY 2008	FY 2009	FY 2010
<b>Accomplishments/Effort/Subtotal Cost</b>		5.100	0.000	0.000
RDT&E Articles Quantity		0	0	0
Primary Hardware Development (MPF(F) LHA (R)): Industry naval architecture, ship design and engineering support for the engineering and design development of the MPF(F)LHA(R).				
FY08 - Coordinate with the LHA 6 Shipbuilder and begin definition of updates to LHA 6 contract design package to be incorporated into MPF(F) LHA(R) contract package.				
		FY 2008	FY 2009	FY 2010
<b>Accomplishments/Effort/Subtotal Cost</b>		2.228	5.800	3.000
RDT&E Articles Quantity		0	0	0

<b>CLASSIFICATION:</b>	<b>UNCLASSIFIED</b>		
<b>EXHIBIT R-2a, RDT&amp;E PROJECT JUSTIFICATION (CONTINUATION)</b>			DATE May 2009
<b>APPROPRIATION/BUDGET ACTIVITY</b> <b>RD TEN/BA 4</b>	<b>PROGRAM ELEMENT NUMBER AND NAME</b> <b>0408042N/NATIONAL DEFENSE SEALIFT FUND</b>	<b>PROJECT NUMBER AND NAME</b> <b>3110/Maritime Prepositioning Force (Future)</b>	
<p>Engineering and Acquisition Support: Engineering integration and acquisition support including acquisition requirements definition, test and evaluation, Naval Ordnance Safety and Security Activity (NOSSA) and Weapon System Explosive Safety Review Board (WSESRB) support, NAVAIR aviation system support and SPAWAR C4I system support, Naval Surface Warfare Center (NSWC) engineering and acquisition milestone documentation development for the MPF(F) Squadron.</p> <p>FY08 - Review and provide engineering and technical comments on preliminary design deliverables for MPF(F) MLP from shipyards. Complete MLP RFP documentation. Begin development of acquisition products to support MPF(F) DAB PR and continue to support test and evaluation requirements. Continue coordination with NOSSA, WSESRB, NAVAIR and SPAWAR.</p> <p>FY09 - Review and provide engineering comments on contract design deliverables for MPF(F) MLP from shipyards. Continue to address ordnance, aviation and C4I system issues and support test and evaluation requirements to support MLP Gate Reviews and LMSR DAB PR.</p> <p>FY10 - Provide engineering and technical support to complete documentation to support the MPF(F) MLP Milestone B.</p>			
<b>C. OTHER PROGRAM FUNDING SUMMARY:</b>			
Line Item and Name	FY 2008	FY 2009	FY 2010
NDSF: (\$M)	0.000	0.000	0.000
NDSF Line 0120, MPF T-AKE	300.000	434.000	940.115
NDSF Line 0401, MPF MLP	0.000	0.000	120.047
(U) Related RDT&E: Not Applicable	0.000	0.000	0.000
<b>D. ACQUISITION STRATEGY:</b>			
MPF(F) - The acquisition strategy includes a 3 increment procurement strategy. Increment 1 consists of 3 MPF(F) T-AKE and 3 Mobile Landing Platform (MLP) ships.			

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EXHIBIT R-3, RDT&E PROJECT COST ANALYSIS							DATE May 2009			
APPROPRIATION/BUDGET ACTIVITY RD TEN/BA 4		PROGRAM ELEMENT NUMBER AND NAME 0408042N/NATIONAL DEFENSE SEALIFT FUND			PROJECT NUMBER AND NAME 3110/Maritime Prepositioning Force (Future)					
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY Cost (\$000)	FY 2009 Cost (\$000)	FY 2009 Award Date	FY 2010 Cost (\$000)	FY 2010 Award Date			
Primary Hardware Development			8.100	0.000		0.000				
MLP	Various	Various	9.279	0.000		0.000				
MLP PD/CD, Eng Tech Spt	Various	Various	39.799	12.143	VAR	12.798	VAR			
MPF(F) LMSR	Various	Various	7.300	0.000		0.000				
LMSR PD/CD, Eng Tech Spt	Various	Various	8.070	2.330	VAR	6.161	VAR			
MPF(F) LHA(R)	Various	Various	5.100	0.000		0.000				
MPF(F) T-AKE	Various	Various	3.200	0.000		0.000				
Landing Platform Technologies Development			30.895	0.000		0.000				
At-sea Demonstrations	WX	NSWCPC	2.760	0.000		0.000				
At-sea Demonstrations	WX	NSWCCD	2.000	0.075	JAN-09	3.000	JAN-10			
At-sea Demonstrations	Various	Various	2.460	0.000		0.000				
Engineering Design Support	MAC-CPFF	CSC	2.710	0.925	JAN-09	0.450	JAN-10			
Test Article Vehicle Transfer Sys	FFP	MacGregor USA, Inc.	19.500	0.000		0.000				
Ship to Ship Development			5.690	0.000		0.000				
At-sea Demonstrations	WX	MSC	29.300	10.858	JAN-09	19.360	JAN-10			
At-sea Demonstrations	WX	NSWCCD	0.250	2.525	JAN-09	0.940	JAN-10			
Engineering Design support	MAC-CPFF	CSC	2.558	1.270	JAN-09	0.750	JAN-10			
Automated Cargo Handling Development			3.905	0.000		0.000				
At-sea Demonstrations	WX	MSC	0.020	0.000		5.000	JAN-10			
At-sea Demonstrations	WX	NSWCCD	3.391	0.250	JAN-09	0.800	JAN-10			
At-sea Demonstrations	Various	Various	0.472	0.000		0.000				
Engineering Design Support	MAC-CPFF	CSC	1.489	0.250	JAN-09	0.200	JAN-10			
Engineering Design Support	Various	Various	0.000	0.000		0.000				
<b>Subtotal Product Development</b>			<b>188.248</b>	<b>30.626</b>		<b>49.459</b>				
Remarks:										
Development Support			0.000	0.000		0.000				
Software Development			0.000	0.000		0.000				
Integrated Logistics Support	VAR	VARIOUS	0.000	0.250	VAR	0.000				

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EXHIBIT R-3, RDT&E PROJECT COST ANALYSIS								DATE			
								May 2009			
APPROPRIATION/BUDGET ACTIVITY		PROGRAM ELEMENT NUMBER AND NAME			PROJECT NUMBER AND NAME						
RD TEN/BA 4		0408042N/NATIONAL DEFENSE SEALIFT FUND			3110/Maritime Prepositioning Force (Future)						
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY Cost (\$000)	FY 2009 Cost (\$000)	FY 2009 Award Date	FY 2010 Cost (\$000)	FY 2010 Award Date				
Configuration Management			0.000	0.000		0.000					
Technical Data			0.000	0.000		0.000					
Studies & Analyses			0.000	0.000		0.000					
GFE			0.000	0.000		0.000					
Award Fees			0.000	0.000		0.000					
<b>Subtotal Development Support</b>			<b>0.000</b>	<b>0.250</b>		<b>0.000</b>					
Remarks:											
Test and Evaluation			0.000	0.000		0.000					
Developmental Test & Evaluation	Various	Various	0.000	0.640	VAR	0.640	VAR				
Operational Test & Evaluation	Various	Various	0.000	1.020	VAR	1.000	VAR				
Live Fire Test & Evaluation	Various	Various	0.000	0.640	VAR	0.100	VAR				
Test Assets			0.000	0.000		0.000					
Tooling			0.000	0.000		0.000					
GFE			0.000	0.000		0.000					
Awards Fees			0.000	0.000		0.000					
<b>Subtotal Development Test &amp; Evaluation</b>			<b>0.000</b>	<b>2.300</b>		<b>1.740</b>					
Remarks:											
Government Engineering Support			12.155	0.000		0.000					
Engineering Integration and Design	WX	SPAWAR	0.576	0.536	JAN-09	0.100	JAN-10				
Engineering Integration and Design	WX	NSWCCD	0.735	0.683	JAN-09	0.150	JAN-10				
Engineering Integration and Design	WX	NAVAIR	0.684	0.636	JAN-09	0.110	JAN-10				
Engineering Integration and Design	WX	Other (includes NOSSA, WSESRB, and OPTEVFOR)	0.330	0.306	VAR	0.000					
Program Management Support	MAC-CPFF	CSC	17.102	1.089	JAN-09	0.900	JAN-10				
<b>Subtotal Management Services</b>			<b>31.582</b>	<b>3.250</b>		<b>1.260</b>					
Remarks:											
<b>Total Cost</b>			<b>219.830</b>	<b>36.426</b>		<b>52.459</b>					

<b>CLASSIFICATION:</b>		<b>UNCLASSIFIED</b>		
<b>EXHIBIT R-4, SCHEDULE PROFILE</b>				DATE May 2009
APPROPRIATION/BUDGET ACTIVITY <b>RD TEN/BA 4</b>		PROGRAM ELEMENT NUMBER AND NAME <b>0408042N/NATIONAL DEFENSE SEALIFT FUND</b>		PROJECT NUMBER AND NAME <b>3110/Maritime Prepositioning Force (Future)</b>
<b>Fiscal Year</b>	<b>FY08</b>	<b>FY09</b>	<b>FY10</b>	
MLP System Design Award		▲		
<b>DD&amp;C Contract Awards</b>				
MPF(F) T-AKE 1		▲		
MPF(F) T-AKE 2			▲	
MPF(F) T-AKE 3			▲	

<b>CLASSIFICATION:</b>		<b>UNCLASSIFIED</b>					
<b>EXHIBIT R-4a, SCHEDULE DETAIL</b>						DATE May 2009	
<b>APPROPRIATION/BUDGET ACTIVITY</b> <b>RD TEN/BA 4</b>		<b>PROGRAM ELEMENT NUMBER AND NAME</b> <b>0408042N/NATIONAL DEFENSE SEALIFT FUND</b>			<b>PROJECT NUMBER AND NAME</b> <b>3110/Maritime Prepositioning Force (Future)</b>		
Schedule Profile		FY 2008	FY 2009	FY 2010			
MLP System Design Award			2Q				
T-AKE Variant Lead			1Q				
T-AKE 2				2Q			
T-AKE 3				2Q			

<b>CLASSIFICATION:</b>		<b>UNCLASSIFIED</b>					
<b>EXHIBIT R-2a, RDT&amp;E PROJECT JUSTIFICATION</b>					<b>DATE</b> May 2009		
<b>APPROPRIATION/BUDGET ACTIVITY</b> <b>RD TEN/BA 4</b>		<b>PROGRAM ELEMENT NUMBER AND NAME</b> <b>0408042N/NATIONAL DEFENSE SEALIFT FUND</b>			<b>PROJECT NUMBER AND NAME</b> <b>3116/Strategic Sealift Research &amp; Development</b>		
<b>COST (In Millions)</b>	<b>FY 2008</b>	<b>FY 2009</b>	<b>FY 2010</b>				
Project Cost	6.166	6.197	6.023				
RDT&E Articles Qty	0	0	0				

**A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:**  
 Strategic Sealift Research and Development (3116) - develops new concepts and technologies which can be applied to or will enable future strategic sealift, and Seabasing systems. The technologies include ship configuration concepts, equipments to increase cargo handling and cargo loading/unloading rates (including commercial and merchant ship systems), improved man/machine interfaces, improved structural configurations and materials, and Logistics-Over-the-Shore (LOTS) equipment and system improvements.

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<b>EXHIBIT R-2a, RDT&amp;E PROJECT JUSTIFICATION</b>				DATE May 2009
APPROPRIATION/BUDGET ACTIVITY <b>RD TEN/BA 4</b>	PROGRAM ELEMENT NUMBER AND NAME <b>0408042N/NATIONAL DEFENSE SEALIFT FUND</b>	PROJECT NUMBER AND NAME <b>3116/Strategic Sealift Research &amp; Development</b>		
<b>B. ACCOMPLISHMENTS/PLANNED PROGRAM:</b>				
	FY 2008	FY 2009	FY 2010	
<b>Accomplishments/Effort/Subtotal Cost</b>	0.100	0.300	0.750	
RDT&E Articles Quantity	0	0	0	
<p>MERSHIP Systems Development - Develop analysis and report on the feasibility of utilizing two of the current SL7 Class HSS vessels to support the USMC JHSS mission on an interim basis in support of SeaBasing Operations. Investigate advanced and industry proven technologies/systems for application to Strategic Sealift Fleet.</p> <p>FY08 - Investigation of Marine evacuation systems for large numbers of personnel and evaluation for use aboard MSC operated vessels.                      FY09 - Conduct demonstration of commercial evacuation system.                      FY10 - Conduct analysis and concept development of advanced MERSHIP enhancements to fulfill DOD missions.</p>				
	FY 2008	FY 2009	FY 2010	
<b>Accomplishments/Effort/Subtotal Cost</b>	1.450	3.900	2.800	
RDT&E Articles Quantity	0	0	0	
<p>Shipboard Crane Systems/Shipboard Cargo Systems - Shipboard crane and cargo systems at-sea operations capability development/testing/demonstration.</p> <p>FY08 - Modify design and conduct at-sea demonstration of the shipboard crane Pendulation Control System with ARBTS. Investigate and demonstrate shipboard crane system performance and classification improvements.                      FY09 - Support advanced ONR LVI Lo/Lo crane at-sea demonstration. Continue investigation of shipboard crane system improvements.                      FY10 - Continue support of ONR LVI Lo/Lo crane development. Continue investigation and demonstration of shipboard crane system improvements.</p>				
	FY 2008	FY 2009	FY 2010	
<b>Accomplishments/Effort/Subtotal Cost</b>	2.027	0.400	0.000	
RDT&E Articles Quantity	0	0	0	
<p>Sealift Ship Design Validation - Develop capability to validate future sealift ship designs in the areas of propulsion, structure, seakeeping, and hull designs to reduce the technical risks of ship sealift ship acquisition. Propulsion includes advanced and future water jet, podded propulsion, thrusters, and combination systems. Hull designs include monohull, catamaran, trimaran, and other displacement and non displacement hull variants. Structures include steel, aluminum and lightweight materials.</p> <p>FY08 - Complete verification of waterjet powering experiments and integrated discharge waterjet propulsion tasks. Continue high-speed hybrid pod evaluation (final design cavitation and maneuver tests). Continue overcoming wave slamming effects study (development of slam pressure reduction concepts and CFD modeling). Develop capability to evaluate multi-hull ship performance.                      FY09 - Complete design validation tasks and multi-hull ship performance evaluation capability.</p>				

<b>CLASSIFICATION:</b>		<b>UNCLASSIFIED</b>		
<b>EXHIBIT R-2a, RDT&amp;E PROJECT JUSTIFICATION (CONTINUATION)</b>				DATE May 2009
<b>APPROPRIATION/BUDGET ACTIVITY</b> <b>RDTEN/BA 4</b>		<b>PROGRAM ELEMENT NUMBER AND NAME</b> <b>0408042N/NATIONAL DEFENSE SEALIFT FUND</b>		<b>PROJECT NUMBER AND NAME</b> <b>3116/Strategic Sealift Research &amp; Development</b>
		FY 2008	FY 2009	FY 2010
<b>Accomplishments/Effort/Subtotal Cost</b>		1.539	1.572	1.573
RDT&E Articles Quantity		0	0	0
<p>Sealift Concept Development - Develop Sealift and system concepts for future sealift missions, advanced strategic mobility concepts, sealift logistics modeling and analysis. Concept development includes future naval capabilities exploration via small business innovative technology development, tracking navy-wide R7D programs and benchmarking of best industry practices and capabilities to enhance future DOD Sealift.</p> <p>FY08 - Continue development of Sealift Decision Support Tools and subject matter expertise. Extend C4I Systems planning tool to seabasing. scenarios supporting armed conflict asset support. Develop R&amp;D Technology development Roadmap.</p> <p>FY09 - Analysis and Modeling support, Advanced Planning, Sealift Compendium, Technology Roadmap, SBIR tracking and guidance.</p> <p>FY10 - Continue Analysis and Modeling support, Advanced Planning, Sealift Compendium, Technology Roadmap, SBIR tracking and guidance.</p>				
		FY 2008	FY 2009	FY 2010
<b>Accomplishments/Effort/Subtotal Cost</b>		0.900	0.000	0.400
RDT&E Articles Quantity		0	0	0
<p>Ship to Ship/Lighter Interfaces - Testing and demonstrations of ship/lighter and ship/ship motion control, mooring and platform interface systems.</p> <p>FY08 - Detailed design and detailed concept development, preparation of RFP to industry to build prototype, prototype construction, simulation demonstration (dry run). Demonstration of surrogate FRP using LMSR deployed sideport ramp, data measurement, data distillation and reduction, final demonstration and technology report. Contract for fabrication and conduct tests of FRP.</p> <p>FY10 - Conduct analysis and concept development of advanced interface systems.</p>				
		FY 2008	FY 2009	FY 2010
<b>Accomplishments/Effort/Subtotal Cost</b>		0.150	0.025	0.000
RDT&E Articles Quantity		0	0	0
<p>Planning Tools and C4I Systems - Validate/update Planning/Training Systems. Continue development of Sealift Decision Support tools.</p> <p>FY08 - Continue development of scenario-specific models. Develop operations impact study (student thesis).</p> <p>FY09 - Continue support at reduced level for NPS Operations.</p>				

**EXHIBIT R-2a**  
**RDT&E PROJECT JUSTIFICATION**

<b>CLASSIFICATION:</b>		<b>UNCLASSIFIED</b>		
<b>EXHIBIT R-2a, RDT&amp;E PROJECT JUSTIFICATION (CONTINUATION)</b>				DATE May 2009
<b>APPROPRIATION/BUDGET ACTIVITY</b> <b>RDTEN/BA 4</b>	<b>PROGRAM ELEMENT NUMBER AND NAME</b> <b>0408042N/NATIONAL DEFENSE SEALIFT FUND</b>	<b>PROJECT NUMBER AND NAME</b> <b>3116/Strategic Sealift Research &amp; Development</b>		
		FY 2008	FY 2009	FY 2010
<b>Accomplishments/Effort/Subtotal Cost</b>		0.000	0.000	0.500
RDT&E Articles Quantity		0	0	0
<p>Lighter/HSV to Shore Cargo Transfer - Investigate and develop technologies and systems to provide an easily transportable and deployable capability to transfer vehicles and ISO containers from lighterage and high speed vessels across the surf zone to a beach or to a pier in a harbor.</p> <p>FY10 - Transition ongoing SBIR efforts and initiate analysis, design and fabrication efforts.</p> <p><b>C. OTHER PROGRAM FUNDING SUMMARY:</b> Not applicable for SEALIFT R&amp;D efforts. U) Related RDT&amp;E: Not Applicable</p> <p><b>D. ACQUISITION STRATEGY:</b> Not applicable for SEALIFT R&amp;D efforts.</p>				

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<b>CLASSIFICATION:</b>		<b>UNCLASSIFIED</b>										
<b>EXHIBIT R-3, RDT&amp;E PROJECT COST ANALYSIS</b>									DATE May 2009			
<b>APPROPRIATION/BUDGET ACTIVITY</b> <b>RDTEN/BA 4</b>		<b>PROGRAM ELEMENT NUMBER AND NAME</b> <b>0408042N/NATIONAL DEFENSE SEALIFT FUND</b>					<b>PROJECT NUMBER AND NAME</b> <b>3116/Strategic Sealift Research &amp; Development</b>					
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY Cost (\$000)	FY 2008 Cost (\$000)	FY 2008 Award Date	FY 2009 Cost (\$000)	FY 2009 Award Date	FY 2010 Cost (\$000)	FY 2010 Award Date			
Sealift Concept Development	Various	NAVFAC, Port Hueneme; CSC/ Subcontractors-Wash DC	4.574	0.000		1.572	DEC-08	1.573	DEC-09			
Ship to Ship/Lighter Interface	Various	CSC/Subcontractors-Wash DC	3.234	0.000		0.000		0.400	DEC-09			
Planning Tools and C41	Various	Navy Post Grad School	0.425	0.000		0.025	DEC-08	0.000				
Ship Systems Development	Various	CSC/Subcontractors-Wash DC	0.468	0.000		0.300	DEC-08	0.750	DEC-09			
Shipboard Crane Systems	Various	NSWCCD, CSC-Wash DC	1.610	0.000		3.900	MAY-09	2.800	DEC-09			
Sealift Ship Design Validation	Various	NSWCCD, CSC-Wash DC	6.626	0.000		0.400	DEC-08	0.000				
Lighter/HSV to Shore Cargo Transfer	Various	Various	0.000	0.000		0.000		0.500	DEC-09			
<b>Subtotal Product Development</b>			<b>16.937</b>	<b>0.000</b>		<b>6.197</b>		<b>6.023</b>				
Remarks:												
<b>Total Cost</b>			<b>16.937</b>	<b>0.000</b>		<b>6.197</b>		<b>6.023</b>				

**EXHIBIT R-3  
RDT&E PROJECT COST ANALYSIS**

<b>CLASSIFICATION:</b>		<b>UNCLASSIFIED</b>					
<b>EXHIBIT R-2a, RDT&amp;E PROJECT JUSTIFICATION</b>					<b>DATE</b> May 2009		
<b>APPROPRIATION/BUDGET ACTIVITY</b> <b>RD TEN/BA 4</b>		<b>PROGRAM ELEMENT NUMBER AND NAME</b> <b>0408042N/NATIONAL DEFENSE SEALIFT FUND</b>			<b>PROJECT NUMBER AND NAME</b> <b>3117/Naval Operational Logistics Integration</b>		
<b>COST (In Millions)</b>	<b>FY 2008</b>	<b>FY 2009</b>	<b>FY 2010</b>				
Project Cost	22.512	20.640	14.501				
RDT&E Articles Qty	0	0	0				
<b>A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:</b>							
<p>Naval Operational Logistics Integration (OPLOG) (3117) - develops enabling technologies for future and in-service afloat operational logistics and integrated supply systems; defines integrated combat logistics force and combatant logistics requirements; and conducts cooperative initiatives with acquisition programs, program sponsors, engineering managers, the Navy science and technology community and Fleet customers. OPLOG develops integrated, cross-platform (i.e. applicable to more than one ship class / type) operational logistics technologies and capabilities as well as draft acquisition and operations policy ensuring future Naval systems leverage emerging logistic capabilities and technologies.</p> <p>This project provides a foundation for the transition of science &amp; technology initiatives (such as the Office of Naval Research (ONR) Seabasing Future Naval Capabilities ((FNC)) and other enabling government, industry and academia concepts to the acquisition community. Technology development is necessary to mitigate technological and operational risk before ship acquisition programs accept new technologies. This project resources continued research and development of appropriate technologies with applicability to multiple acquisition programs and defines and matures performance and interface requirements for those technologies. The operational logistics family of systems touches all aspects of Seapower 21 yet logistics capability and system interfaces are typically left to individual acquisition programs to develop and resolve. As Seabasing and the Sea Base definition continue to gain resolution this project will provide technologies focused toward the development of integrated Joint, Combined and Coalition logistics capabilities.</p> <p>This project will develop improved shipboard replenishment, transfer, and handling systems and components as well as asset visibility and standardized packaging technologies. This integrated suite of capabilities will enable multiple ship types to leverage technologies common across DoD (Joint) and commercial transportation networks and provide a more affordable, mission capable force. This capabilities and system-of-systems approach will be applied to concept development of future auxiliary force architectures.</p>							

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<b>EXHIBIT R-2a, RDT&amp;E PROJECT JUSTIFICATION</b>			DATE May 2009
APPROPRIATION/BUDGET ACTIVITY <b>RD TEN/BA 4</b>	PROGRAM ELEMENT NUMBER AND NAME <b>0408042N/NATIONAL DEFENSE SEALIFT FUND</b>	PROJECT NUMBER AND NAME <b>3117/Naval Operational Logistics Integration</b>	
<b>B. ACCOMPLISHMENTS/PLANNED PROGRAM:</b>			
	FY 2008	FY 2009	FY 2010
<b>Accomplishments/Effort/Subtotal Cost</b>	12.994	10.729	9.119
RDT&E Articles Quantity	0	0	0
<p>Advanced Replenishment Systems: Develop integrated shipboard underway replenishment (UNREP) concepts and systems that provide improved refueling and resupply capability across all Navy ship types and sizes; facilitating emerging missions including Seabasing, Heavy UNREP, small combatant UNREP, interface definition and system/component interoperability.</p> <p>FY08 - Continue Heavy UNREP development including control system, rigging and hauling winches and anti-slack device prototypes. Conduct Heavy UNREP land-based test site installations and system checks and initiate component testing and detailed logistics support. Conduct advanced UNREP ship impact analyses for T-AOE and T-AKE platforms to evaluate cost and capability options to support CVN78. Conduct integration design and testing of all-electric and powered trolley prototype for integration into UNREP operational and technical architectures. Conduct at-sea testing of CONREP wireless ranging proof of principle. Conduct integration studies for transitioning the Office of Naval Research (ONR) Seabasing Future Naval Capabilities (FNC) large vessel (LVI) lift-on/lift-off(LO/LO) capability.</p> <p>FY09 - Continue land-based component testing of Heavy UNREP and all-electric CONREP systems. Complete technology integration of Heavy UNREP and advanced replenishment sub-systems and components and continue Integrated Logistics Support (ILS) in preparation for ship installation(s). Continue low tension (small ship) unrep integration and demonstration efforts. Finish at-sea testing of wireless ranging prototype and develop final design; develop Fleet implementation plan.</p> <p>FY10 - Complete land-based testing Heavy UNREP and advanced UNREP technologies; initiate at-sea testing of baseline advanced STREAM architecture; continue integrations of all-electric technologies into legacy and emerging UNREP architectures; develop time-phases CLF technology implementation schedule. Develop wireless ranging install plan.</p>			
	FY 2008	FY 2009	FY 2010
<b>Accomplishments/Effort/Subtotal Cost</b>	1.425	0.855	0.550
RDT&E Articles Quantity	0	0	0
<p>Standard Packaging Interfaces &amp; Technologies: Develop standardized, integrated packaging and containerization solutions consistent with improved replenishment systems, asset visibility and tracking systems and improved shipboard material handling architectures. Leverage and expand current intermodal (ISO) and legacy / emerging DOD material handling architectures such as the Joint Modular Intermodal Container (JMIC) and Joint Modular Intermodal Distribution System (JMIDS).</p> <p>FY08 - Complete development of "open" (eg: ISO) specification for JMIC leveraging results of JMIC commercialization. Resource JMIDS JCTD Year 3 efforts including Military Utility Assessments (MUAs) focused on Seabasing. Continue JMIDS transition planning and operational testing. Develop standardized containerization policy for future system acquisition and demonstrate lighter-weight JMIC containers.</p> <p>FY09 - Resource JMIDS JCTD during final year of residual operational evaluation efforts. Continue JMIDS transition planning, finalize standardized containerization policy for future system acquisition and conduct ship systems integration studies, operational analysis, and expeditionary unit load planning and operational integration.</p> <p>FY10 - Document resolution of JMIDS JCTD (JMIC component) and implementation plans for U.S. Navy. Document high-priority operational features for inclusion into final</p>			

<b>CLASSIFICATION:</b>		<b>UNCLASSIFIED</b>		
<b>EXHIBIT R-2a, RDT&amp;E PROJECT JUSTIFICATION (CONTINUATION)</b>				DATE May 2009
<b>APPROPRIATION/BUDGET ACTIVITY</b> <b>RD TEN/BA 4</b>		<b>PROGRAM ELEMENT NUMBER AND NAME</b> <b>0408042N/NATIONAL DEFENSE SEALIFT FUND</b>		<b>PROJECT NUMBER AND NAME</b> <b>3117/Naval Operational Logistics Integration</b>
capabilities documentation and shipboard stowage system integration. Conduct focused operational analysis with residual components from the JCTD.				
		FY 2008	FY 2009	FY 2010
<b>Accomplishments/Effort/Subtotal Cost</b>		1.865	1.925	0.562
RDT&E Articles Quantity		0	0	0
<p>Asset Visibility and Planning: Integrate asset information management systems with emerging logistics architectures to improve asset visibility throughout the DoN logistics cycle, focusing on shipboard applications and integration. Incorporate open architectures and standards-based technologies into ship platforms to comply with DoD RFID policy and shipboard certification requirements regarding emitting technologies.</p> <p>FY08 - Conduct afloat pRFID spectrum and complex cavity analyses in context of shipboard in-transit visibility demonstration(s). Conduct comparative analysis with current / emerging optical and light-based technologies. Integrate and demonstrate asset visibility technologies in Naval standardized packaging beyond the scope of the JMIDS JCTD. Develop draft pRFID afloat implementation policy.</p> <p>FY09 - Conduct at-sea demonstration of integrated asset visibility and standardized packaging technologies aboard combat logistics force and surface combatant assets. Quantify asset visibility characteristics and efficiencies achieved via integrated packaging and asset visibility. Finalize recommendations, performance characteristics, and policy for near-term implementation including development of performance requirements expanding in-service afloat warehouse management systems.</p> <p>FY10 - Complete at-sea demonstration of integrated asset visibility and standardized packaging technologies aboard combat logistics force and surface combatant assets. Identify shipboard requirements and certification processes the impact shipboard implementation and installation of integrated asset visibility technologies; conduct engineering evaluation of selected asset visibility technologies and propose updates to documentation and procedures as required. Coordinate proposed changes with cognizant SYSCOM technical authorities.</p>				
		FY 2008	FY 2009	FY 2010
<b>Accomplishments/Effort/Subtotal Cost</b>		0.775	0.775	0.562
RDT&E Articles Quantity		0	0	0
<p>Logistics Architectures: Develop comprehensive, integrated afloat supply system architectures considering operational, system, and technical requirements and initiatives. Define system performance and interface requirements; draft future operational logistics capability acquisition guidelines and develop cost-versus-capability analyses for affordable technology development. Conduct concept assessment and integration studies examining OPLOG- and other-funded technology development efforts (eg: Office of Naval Research (ONR) Seabasing Future Naval Capabilities (FNC) Science and Technology (S&amp;T) funded technologies).</p> <p>FY08 - Conduct integration analyses of commercially-developed and coalition partner-developed advanced replenishment technologies to quantify technology readiness and transition timelines. Continue coordinating transition of appropriate FNC projects to RDT&amp;E budgets based on program transition opportunities and acquisition strategy/schedule. Develop naval expeditionary coastal warfare operational logistics technology development and demonstration plans.</p> <p>FY09 - Coordinate Navy JMIDS JCTD transition planning, at-sea replenishment systems demonstration, and naval expeditionary coastal warfare operational logistics experimentation. Conduct Steering Group meetings and coordinate input from Fleet and Acquisition members regarding near-term technology needs.</p>				

<b>CLASSIFICATION:</b>		<b>UNCLASSIFIED</b>	
<b>EXHIBIT R-2a, RDT&amp;E PROJECT JUSTIFICATION (CONTINUATION)</b>			DATE May 2009
<b>APPROPRIATION/BUDGET ACTIVITY</b> <b>RD TEN/BA 4</b>	<b>PROGRAM ELEMENT NUMBER AND NAME</b> <b>0408042N/NATIONAL DEFENSE SEALIFT FUND</b>	<b>PROJECT NUMBER AND NAME</b> <b>3117/Naval Operational Logistics Integration</b>	
<p>projects.</p> <p>FY10 - Update integration analyses of commercially-developed and coalition partner-developed advanced replenishment and containerization technologies and quantify technology readiness and transition timelines. Support transition of appropriate FNC projects to RDT&amp;E budgets based on program transition opportunities and acquisition. Develop naval operational logistics technology development and demonstration plans and coordinate technology transition planning, demonstration, and experimentation. Conduct analysis of seabasing concepts and operational architectures; identifying technology development and integration opportunities. Conduct Steering Group meetings and coordinate input from Fleet and Acquisition members regarding near-term technology needs.</p>			
	FY 2008	FY 2009	FY 2010
<b>Accomplishments/Effort/Subtotal Cost</b>	0.758	0.708	0.213
RDT&E Articles Quantity	0	0	0
<p>Integrated Naval Logistics: Coordinate OPLOG technology development efforts with sponsor and US Marine Corps Naval Logistics Integration (NLI) initiatives aligning Navy and Marine Corps logistics systems and processes for Sea Based operations.</p> <p>FY08 - Assess enterprise architecture efforts for integration with Total Asset Visibility capability. Conduct S&amp;RL assessments on Total Asset Visibility afloat and plan demonstrations at sea.</p> <p>FY09 - Conduct S&amp;RL at-sea demonstration and quantify impacts on afloat Total Asset Visibility.</p> <p>FY10 - Complete S&amp;RL at-sea demonstration(s) and quantify impacts on afloat Total Asset Visibility.</p>			
	FY 2008	FY 2009	FY 2010
<b>Accomplishments/Effort/Subtotal Cost</b>	4.695	5.648	2.495
RDT&E Articles Quantity	0	0	0
<p>Shipboard Material Transport: Develop improved shipboard equipment for vertical and horizontal material movement and subsequent stowage. Incorporate standardized containerization initiatives and future shipboard configurations / architectures and develop legacy (back-fit) capabilities as applicable. Transition ongoing S&amp;T, and other appropriate initiatives into the acquisition community with focused technology demonstration(s) and operational test and evaluation.</p> <p>FY08 - Plan demonstration of fully-functional ASRS (Automated Storage and Retrieval System) prototype aboard suitable logistics ship. Conduct CAMM (Compact Agile Material Mover) at-sea demonstration and evaluation. Conduct ship impact analysis and concept definition for at-sea automated weapons assembly. Integrate existing afloat warehouse management systems systems.</p> <p>FY09 - Engineer demonstration of fully-functional ASRS prototype aboard suitable logistics ship. Develop and demonstrate CAMM technical and operational architectures for with ASRS prototype leveraging lessons-learned from in-service cross-platform and cross-functional afloat application.</p> <p>FY10 - Conduct operational at-sea evaluation of fully-functional ASRS prototype; documenting operational performance, selective offload capability, and life-cycle ownership costs (including manning) against baseline break-bulk operations. Develop cost-versus-capability relationships for ASRS selective access/offload capability to complete</p>			

<b>CLASSIFICATION:</b>		<b>UNCLASSIFIED</b>		
<b>EXHIBIT R-2a, RDT&amp;E PROJECT JUSTIFICATION (CONTINUATION)</b>				DATE May 2009
<b>APPROPRIATION/BUDGET ACTIVITY</b> <b>RD TEN/BA 4</b>	<b>PROGRAM ELEMENT NUMBER AND NAME</b> <b>0408042N/NATIONAL DEFENSE SEALIFT FUND</b>	<b>PROJECT NUMBER AND NAME</b> <b>3117/Naval Operational Logistics Integration</b>		
business case analysis of ASRS. Develop recommendations for implementation within the Fleet and develop selective access requirements for future auxiliary ship acquisition programs. Continue development of CAMM technology including long-term at-sea testing; develop recommendations for implementation within the Fleet and identify Joint applications. Develop CAMM Joint demonstration, test and evaluation strategy. Coordinate engineering integration of High Rate Horizontal Vertical Material Movement (HRHVMM) with ASRS; including land-based and at-sea test planning and testing. Document Fleet implementation (backfit) recommendations and as requirements for future auxiliary platforms.				
		FY 2008	FY 2009	FY 2010
<b>Accomplishments/Effort/Subtotal Cost</b>		0.000	0.000	1.000
RDT&E Articles Quantity		0	0	0
Ship Concept Development for future common hull form tug and salvage capability FY10 - Establish ship concept development team, plan concept development and collect platform characteristics/requirements. Conduct planning for analysis of alternatives; including operational requirements and tradespace requirements and readiness, and analysis approach. Identify required tools and resources, and identify requirements for additional design and analysis tools. Coordinate efforts with NAVSEA, MSC, PEO Ships and Fleet.				
<b>C. OTHER PROGRAM FUNDING SUMMARY:</b> Not Applicable (U) Related RDT&E: Not Applicable				
<b>D. ACQUISITION STRATEGY:</b> Not applicable for OPLOG R&D efforts.				

CLASSIFICATION:		UNCLASSIFIED										
EXHIBIT R-3, RDT&E PROJECT COST ANALYSIS									DATE			
									May 2009			
APPROPRIATION/BUDGET ACTIVITY		PROGRAM ELEMENT NUMBER AND NAME					PROJECT NUMBER AND NAME					
RD TEN/BA 4		0408042N/NATIONAL DEFENSE SEALIFT FUND					3117/Naval Operational Logistics Integration					
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY Cost (\$000)	FY 2008 Cost (\$000)	FY 2008 Award Date	FY 2009 Cost (\$000)	FY 2009 Award Date	FY 2010 Cost (\$000)	FY 2010 Award Date			
Primary Hardware Development	Various	Oldenburg Inc., Alion-JJMA, Sys, Markey Inc., Garrett Corp	10.089	0.000		4.344	VAR	3.546	VAR			
Ancillary Hardware Development	Various	AMSEC LLC, Markey, Rockwell Intl, Alion, SAIC, Alien Technologies	5.956	0.000		2.368	VAR	1.562	VAR			
Ship Integration	WX & RX	NSWC Carderock, Dahlgren, Port Hueneme; Oldenburg, Alion-JJMA	3.634	0.000		1.565	VAR	2.345	VAR			
Ship Suitability	WX & RX	NSWC Carderock, SPAWAR Charleston, Panama City	0.760	0.000		0.650	VAR	0.425	VAR			
Systems Engineering	WX & RX	NSWC Carderock, Port Hueneme; Oldenburg, Alion, SAIC, SYS, AMSEC	7.524	0.000		3.200	VAR	1.125	VAR			
<b>Subtotal Product Development</b>			<b>27.963</b>	<b>0.000</b>		<b>12.127</b>		<b>9.003</b>				
Remarks:												
Development Support	Various	Various Contractors	4.218	0.000		2.300	VAR	1.702	VAR			
Software Development			0.418	0.000		0.210	VAR	0.325	VAR			
Integrated Logistics Support			0.225	0.000		0.108	VAR	0.125	VAR			
Configuration Management			0.275	0.000		0.210	VAR	0.156	VAR			
Technical Data	WX & RX	NSWC Port Hueneme; Alion, SAIC, Markey	2.983	0.000		0.385	VAR	0.315	VAR			
Studies & Analyses	WX & RX		2.550	0.000		0.375	VAR	0.110	VAR			
<b>Subtotal Support Costs</b>			<b>10.669</b>	<b>0.000</b>		<b>3.588</b>		<b>2.733</b>				
Remarks:												
Developmental Test & Evaluation	Various	SYS, Markey, Alion	1.390	0.000		0.215	VAR	0.473	VAR			
Operational Test & Evaluation	Various	Oldenburg, Alion, SAIC	2.115	0.000		0.650	VAR	0.742	VAR			
Live Fire Test & Evaluation			0.000	0.000		0.000		0.000				
Test Assets			0.000	0.000		0.000		0.000				
Tooling			0.400	0.000		0.000		0.000				
GFE			0.000	0.000		0.000		0.000				
Award Fees			0.000	0.000		0.000		0.000				
<b>Subtotal Test and Evaluation</b>			<b>3.905</b>	<b>0.000</b>		<b>0.865</b>		<b>1.215</b>				
Remarks:												
Contractor Engineering Support			3.900	0.000		3.300	VAR	1.100	VAR			
Government Engineering Support			0.791	0.000		0.760	VAR	0.450	VAR			

<b>CLASSIFICATION:</b>		<b>UNCLASSIFIED</b>										
<b>EXHIBIT R-3, RDT&amp;E PROJECT COST ANALYSIS</b>									DATE May 2009			
<b>APPROPRIATION/BUDGET ACTIVITY</b> <b>RDTEN/BA 4</b>		<b>PROGRAM ELEMENT NUMBER AND NAME</b> <b>0408042N/NATIONAL DEFENSE SEALIFT FUND</b>					<b>PROJECT NUMBER AND NAME</b> <b>3117/Naval Operational Logistics Integration</b>					
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY Cost (\$000)	FY 2008 Cost (\$000)	FY 2008 Award Date	FY 2009 Cost (\$000)	FY 2009 Award Date	FY 2010 Cost (\$000)	FY 2010 Award Date			
Program Management Support			0.000	0.000		0.000		0.000				
Travel			0.000	0.000		0.000		0.000				
Transportation			0.000	0.000		0.000		0.000				
SBIR Assessment			0.000	0.000		0.000		0.000				
<b>Subtotal Management Services</b>			<b>4.691</b>	<b>0.000</b>		<b>4.060</b>		<b>1.550</b>				
Remarks:												
<b>Total Cost</b>			<b>47.228</b>	<b>0.000</b>		<b>20.640</b>		<b>14.501</b>				

**NATIONAL DEFENSE SEALIFT FUND****Exhibit P-40****FY 2010 President's Budget****MAY 2009****BA 05****BLI 0500****National Defense Features (NDF)****(\$M)**

<u>RRF</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>
Total RRF	232.6	335.2	275.5

**Justification:**

The RRF Budget Review is based upon the conclusions of the 2005 Mobility Capabilities Study (MCS) and subsequent requirements review and determination by Navy and USTRANSCOM. The study and review indicated required readiness levels for the RRF ships. The funding level meets required readiness and allows the ships to activate in time to deliver cargo to a give area of operations and satisfy Combatant Commanders' critical war fighting requirements.

FY 2009 marks the initial year the FSS program is fully integrated into the RRF program. The Commander, U.S. TRANSCOM, the Chief of Naval Operations and Commander MSC, in conjunction with Maritime Administration, agree there is a mutual interest in the operation, maintenance, management and transfer of the eight FSS ships to the National Defense Reserve Fleet Ready Reserve Force.

FY 2010 continues SDDC/USTRANSCOM capability enhancements for specified RRF ships and maintenance to provide an extended service life program for aging priority ships. The budget supports development of a Beaumont Layberth Facility (BLF) located within the MARAD fleet site in Beaumont TX. This government-owned facility built to Navy Type III standards, will berth up to 8 LMSRs and provide cost efficiencies to the sealift program over the long term.

FY 2008 funding includes \$5.110 million in GWOT Supplemental.

**NATIONAL DEFENSE SEALIFT FUND**  
**Exhibit P-5 SEALIFT COST ANALYSIS**  
**FY 2010 President's Budget**

MAY 2009

		B. APPROPRIATION: National Defense Sealift Fund (NDSF) (A)		C. ITEM NOMENCLATURE Budget Activity: Ready Reserve Force (RRF) (NDSF BA 5) Budget Line Item: Ready Reserve Force (RRF) (NDSF BLI 0500)						BA 05 BLI 0500	
ELEMENT OF COST		TOTAL COST IN THOUSANDS OF DOLLARS									
COST CODE	RRF COST CATEGORY	FY 08		FY 09		FY 10					
		QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST				
BLI 0500	Maintenance & Repair, activations Less JCS Exercise Savings		110,653 (5,000)		139,379 (5,000)		129,487 (5,000)				
BLI 0500	ROS Crews/SM fees	44	71,263	50	86,570	49	88,902				
BLI 0500	Outporting	44	22,145	50	24,764	49	23,890				
BLI 0500	Logistics		8,059		8,692		9,236				
BLI 0500	NDRF/Facilities & Security		20,133		21,877		20,749				
BLI 0500	SDDC/USTC enhancements of RRF Beaumont Layberth Facility		247		369		6,259				
	FY 2008 GWOT Supplemental		5,110		525		1,961				
BLI 0500	Total, Maintenance & Ops program MARAD school ship Title XI MARAD Ship Financing Guarantee Program		232,610		277,176		275,484				
	TOTAL, RRF (NDSF BA 5 BLI 0500)		232,610		335,176		275,484				

UNCLASSIFIED

FY 2010 PRESIDENT'S BUDGET  
READY RESERVE FORCE - SHIPS BY READINESS CATEGORY

MAY 2009  
BA 05  
BLI 0500

Ship Type	2008	2009	2010
<b>BREAKBULK</b>	<u>3</u>	<u>2</u>	<u>1</u>
ROS-5	2	1	0
PREPO	1	1	1
<b>RO/RO</b>	<u>27</u>	<u>35</u>	<u>35</u>
ROS-5	27	35	35
<b>HEAVYLIFT</b>	<u>4</u>	<u>4</u>	<u>4</u>
ROS-5	2	2	2
RRF-10	2	2	2
<b>T-ACS</b>	<u>6</u>	<u>6</u>	<u>6</u>
ROS-5	6	6	6
<b>OPDS-TANKER</b>	<u>2</u>	<u>1</u>	<u>1</u>
RRF-10	1	1	1
PREPO	1	0	0
<b>T-AVB</b>	<u>2</u>	<u>2</u>	<u>2</u>
ROS-5	2	2	2
<b>GRAND TOTALS</b>	<b>44</b>	<b>50</b>	<b>49</b>