CLASSIFICATION:	UNCLASSIFIED						
EXHIBIT R-2, RDT&E BUDGET ITEM JUSTIFICATION						DATE February 2008	
APPROPRIATION/BUDGET ACTIVITY **RDTEN/BA 4**			R-1 ITEM NOMENCLATURE **0603724N/NAVY ENERGY PROGRAM**				
COST (In Millions)	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
Total PE Cost	1.579	6.020	5.611	5.840	6.013	6.128	6.248
0829 / ENERGY CONSERVATION (ADV)	0.000	3.658	3.884	4.018	4.136	4.217	4.300
0838 / Mobility Fuels (ADV)	1.579	1.567	1.727	1.822	1.877	1.911	1.948
9999 / CONGRESSIONAL ADDS	0.000	0.795	0.000	0.000	0.000	0.000	0.000

A. MISSION DESCRIPTION:

This program supports projects to evaluate, adapt, and demonstrate energy related technologies for Navy aircraft and ship operations to: (a) increase fuel-related weapons systems capabilities such as range and time on station; (b) reduce energy costs; (c) apply energy technologies that improve environmental compliance; (d) relax restrictive fuel specification requirements to reduce cost and increase availability worldwide; (e) provide guidance to fleet operators for the safe use of commercial grade or off-specification fuels when military specification fuels are unavailable or in short supply; and (f) make needed periodic changes to fuel specifications to ensure fuel quality and avoid fleet operating problems. This program supports the achievement of legislated, White house, Department of Defense, and navy energy management goals. It also responds to direction from the Office of the Secretary of Defense, the Secretary of the Navy, and the Chief of Naval Operations to make up-front investment in technologies that reduce future cost of operation and ownership of the fleet and supporting infrastructure.

(U) Project 0829 - The Fleet Readiness R&D Program is designed to develop and implement energy and maintenance saving improvements into existing Fleet assets. This Fleet driven program will identify mature potential energy saving and maintenance improvement areas, by involvement with Life-Cycle Managers (LCMs), NAVSEA technical warrant holders, In-Service Engineering Agents (ISEAs), PEO, and the TMA/TMI community.

(U) Project 0838- This project provides data through engine and fuel system tests which relate the effects of changes in Navy fuel procurement specification properties to the performance and reliability of Naval ship and aircraft engines and fuel systems.

(U) Project 9999: Comprised of Congressional adds

CLASSIFICATION:	UNCLASSIFIED	
EXHIBIT R-2, RDT&E BUDGET ITEM JUSTIFICATION (CONTINUATION)		DATE February 2008
APPROPRIATION/BUDGET ACTIVITY **RDTEN/BA 4**	R-1 ITEM NOMENCLATURE **0603724N/NAVY ENERGY PROGRAM**	

B. PROGRAM CHANGE SUMMARY:

Funding:	FY 2007	FY 2008	FY 2009
FY 2008 President's Budget:	1.594	5.335	5.635
FY 2009 President's Budget	1.579	6.020	5.611
Total Adjustments	-0.015	0.685	-0.024
Summary of Adjustments			
SBIR Reductions	-0.011		
Misc Reductions	-0.004	-0.115	-0.024
Congressional Add		0.800	
Subtotal	-0.015	0.685	-0.024

CLASSIFICATION:	UNCLASSIFIED						
EXHIBIT R-2a, RDT&E PROJECT JUSTIFICATION					DATE February 2008		
APPROPRIATION/BUDGET ACTIVITY **RDTEN/BA 4**	PROGRAM ELEMENT NUMBER AND NAME **0603724N/NAVY ENERGY PROGRAM**				PROJECT NUMBER AND NAME **0829/ENERGY CONSERVATION (ADV)**		
COST (In Millions)	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
Project Cost	0.000	3.658	3.884	4.018	4.136	4.217	4.300
RDT&E Articles Qty	0	0	0	0	0	0	0

A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

The Fleet Readiness R&D Program is designed to develop and implement energy and maintenance saving improvements into existing Fleet assets. This Fleet driven program will identify mature potential energy saving and maintenance improvement areas, by involvement with Life-Cycle Managers (LCMs), NAVSEA technical warrant holders, In-Service Engineering Agents (ISEAs), PEO, and the TMA/TMI community. Potential technology target areas will include: hull hydrodynamics, hull husbandry, heating, Ventilation & Air Conditioning (HVAC) systems, thermal management, propulsion systems, electrical systems, and power generation and storage systems. The program directly supports Fleet requirements to reduce energy consumption and lower maintenance costs. The program will focus on research and development across the following major areas:

(U) Hull Hydrodynamic Project(s) - This project area will accomplish prototype development, laboratory and Fleet testing to determine overall mission and cost effectiveness of these improvements.

(U) Hull Husbandry Project(s) - Project funds will be utilized to identify and evaluate new underwater hull coating systems and underwater hull cleaning and maintenance techniques both landbased and shipboard to reduce hydrodynamic drag on the hull and thereby increase fuel efficiency.

(U) HVAC Projects (s) - Project funds will be utitized to accomplish prototype development, land and shipboard testing to determine overall mission and cost effectiveness of these improvements.

(U) Thermal Management Project(s) - Project funds will be utilized to identify and evaluate potential uses for Thermal Management techniques designed to reduce overall shipboard heat generation and reduce the overall need for HVAC.

(U) Propulsion Systems Project(s) - Project funds will be utilized to indentify, perform landbased and ship board testing of ship propulsion system improvements, on gas turbine and diesel engine systems to reduce overall fuel consumption and lower maintenance costs. (SCD# 1801 - online waterwash system for GTM/GTG, SCD# 1808 power conservation management)

CLASSIFICATION:	UNCLASSIFIED	
EXHIBIT R-2a, RDT&E PROJECT JUSTIFICATION (CONTINUATION)		DATE February 2008
APPROPRIATION/BUDGET ACTIVITY **RDTEN/BA 4**	PROGRAM ELEMENT NUMBER AND NAME **0603724N/NAVY ENERGY PROGRAM**	PROJECT NUMBER AND NAME **0829/ENERGY CONSERVATION (ADV)**

(U) Electrical Systems Project(s) - Project funds will be utilized to indentify, perform landbased and ship board testing of ship electrical system improvements, to reduce overall fuel consumption and lower maintenance costs. (SCD# 1817 Variable Speed Drive (VSD)) for 1000 gal. firemain system, (SCD# 1818 VSD-IMP for 2000 gal. firepumps)

(U) Power Generation & Storage System Project(s) - This project area will accomplish prototype development, laboratory and Fleet testing to determine overall mission and cost effectiveness of these improvements.

CLASSIFICATION:	UNCLASSIFIED	
EXHIBIT R-2a, RDT&E PROJECT JUSTIFICATION		DATE February 2008
APPROPRIATION/BUDGET ACTIVITY **RDTEN/BA 4**	PROGRAM ELEMENT NUMBER AND NAME **0603724N/NAVY ENERGY PROGRAM**	PROJECT NUMBER AND NAME **0829/ENERGY CONSERVATION (ADV)**

B. ACCOMPLISHMENTS/PLANNED PROGRAM:

	FY 2007	FY 2008	FY 2009
Accomplishments/Effort/Subtotal Cost	0.000	0.934	0.978
RDT&E Articles Quantity	0	0	0

(U) Hull Hydrodynamic Project(s) - This project area will accomplish prototype development, laboratory and Fleet testing to determine overall mission and cost effectiveness of these improvements.

	FY 2007	FY 2008	FY 2009
Accomplishments/Effort/Subtotal Cost	0.000	0.387	0.395
RDT&E Articles Quantity	0	0	0

(U) Hull Husbandry Project(s) - Project funds will be utilized to identify and evaluate new underwater hull coating systems and underwater hull cleaning and maintenance techniques both landbased and shipboard to reduce hydrodynamic drag on the hull and thereby increase fuel efficiency.

	FY 2007	FY 2008	FY 2009
Accomplishments/Effort/Subtotal Cost	0.000	0.187	0.194
RDT&E Articles Quantity	0	0	0

(U) HVAC Projects (s) - Project funds will be utitized to accomplish prototype development, land and shipboard testing to determine overall mission and cost effectiveness of these improvements.

	FY 2007	FY 2008	FY 2009
Accomplishments/Effort/Subtotal Cost	0.000	0.188	0.194
RDT&E Articles Quantity	0	0	0

(U) Thermal Management Project(s) - Project funds will be utilized to identify and evaluate potential uses for thermal management techniques designed to reduce overall shipboard heat generation and reduce the overall need for HVAC.

	FY 2007	FY 2008	FY 2009
Accomplishments/Effort/Subtotal Cost	0.000	1.119	1.175
RDT&E Articles Quantity	0	0	0

(U) Propulsion Systems Project(s) - Projects funds will be utilized to indentify, perform landbased and ship board testing of ship propulsion system improvements, on gas turbine and diesel engine systems to reduce overall fuel consumption and lower maintenance costs. (SCD# 1801 - online waterwash system for GTM/GTG, SCD# 1808 power conservation management)

CLASSIFICATION:	UNCLASSIFIED	
EXHIBIT R-2a, RDT&E PROJECT JUSTIFICATION (CONTINUATION)		DATE February 2008
APPROPRIATION/BUDGET ACTIVITY **RDTEN/BA 4**	PROGRAM ELEMENT NUMBER AND NAME **0603724N/NAVY ENERGY PROGRAM**	PROJECT NUMBER AND NAME **0829/ENERGY CONSERVATION (ADV)**

	FY 2007	FY 2008	FY 2009
Accomplishments/Effort/Subtotal Cost	0.000	0.655	0.753
RDT&E Articles Quantity	0	0	0

(U) Electrical Systems Project(s) - Projects funds will be utilized to indentify, perform landbased and ship board testing of ship electrical system improvements, to reduce overall fuel consumption and lower maintenance costs. (SCD# 1817 Variable Speed Drive(VSD)) for 1000 gal. firemain system, (SCD# 1818 VSD-IMP for 2000 gal. firepumps)

	FY 2007	FY 2008	FY 2009
Accomplishments/Effort/Subtotal Cost	0.000	0.188	0.195
RDT&E Articles Quantity	0	0	0

(U) Power Generation & Storage System Project(s) - This project area will accomplish prototype development, laboratory and Fleet testing to determine overall mission and cost effectiveness of these improvements.

C. OTHER PROGRAM FUNDING SUMMARY:

Line Item No. and Name	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	To Complete	Total Cost
N/A									

D. ACQUISITION STRATEGY:

This is a non acquisition program that develops, evaluates, and validates mature technologies in support of Fleet fuel and maintenance savings.

E. MAJOR PERFORMERS:

Field Activities & Locations - Work Performed:

NSWC Carderock, Bethesda, MD and Philadelphia- Utlilize various engineering capabilities and core equities within the Carderock Division to support the goals of the program. This aligns within the Ship and Ships Systems Product Area.

CLASSIFICATION:	UNCLASSIFIED											
EXHIBIT R-3, RDT&E PROJECT COST ANALYSIS										DATE February 2008		
APPROPRIATION/BUDGET ACTIVITY **RDTEN/BA 4**		PROGRAM ELEMENT NUMBER AND NAME **0603724N/NAVY ENERGY PROGRAM**					PROJECT NUMBER AND NAME **0829/ENERGY CONSERVATION (ADV)**					
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY Cost ($000)	FY 2007 Cost ($000)	FY 2007 Award Date	FY 2008 Cost ($000)	FY 2008 Award Date	FY 2009 Cost ($000)	FY 2009 Award Date	Cost to Complete ($000)	Total Cost ($000)	Target Value of Contract
Primary Hardware Development		NAVSEA, Carderock	0.000	0.000		0.374		0.387		CONT	CONT	0.000
Systems Engineering		NAVSEA, Carderock	0.000	0.000		0.374		0.392		CONT	CONT	0.000
Engineering Development		NAVSEA, Carderock	0.000	0.000		0.707		0.778		CONT	CONT	0.000
Engineering Development		NAVSEA, Carderock	0.000	0.000		0.709		0.763		CONT	CONT	0.000
Subtotal Product Development			**0.000**	**0.000**		**2.164**		**2.320**		**CONT**	**CONT**	**0.000**
Remarks:												
Subtotal Support Costs			**0.000**	**0.000**		**0.000**		**0.000**		**0.000**	**0.000**	**0.000**
Remarks:												
Developmental Test & Evaluation		NAVSEA, Carderock	0.000	0.000		0.747		0.783		CONT	CONT	0.000
Operational Test & Evaluation		NAVSEA, Carderock	0.000	0.000		0.187		0.195		CONT	CONT	0.000
Live Fire Test & Evaluation		NAVSEA, Carderock	0.000	0.000		0.187		0.195		CONT	CONT	0.000
Subtotal Test and Evaluation			**0.000**	**0.000**		**1.121**		**1.173**		**CONT**	**CONT**	**0.000**
Remarks:												
Program Management Support			0.000	0.000		0.261		0.275		0.000	0.536	0.000
Travel			0.000	0.000		0.037		0.039		0.000	0.076	0.000
Test Assets			0.000	0.000		0.075		0.077		0.000	0.152	0.000
Subtotal Management Services			**0.000**	**0.000**		**0.373**		**0.391**		**0.000**	**0.764**	**0.000**
Remarks:												
Total Cost			**0.000**	**0.000**		**3.658**		**3.884**		**CONT**	**CONT**	**0.000**

CLASSIFICATION:

EXHIBIT R4, Schedule Profile				DATE: **February 2008**
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N /BA-4**	PROGRAM ELEMENT NUMBER AND NAME 0603724N/Navy Energy Program		PROJECT NUMBER AND NAME 0829/Energy Conversation	

Fiscal Year	2007				2008				2009				2010				2011				2012				'2013							
	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
Engineering **Milestones**																																
Proposal Development																																
Proposal Acceptance																																
Modeling and Simulation (If Required)																																
Prototype Development																																
Prototype Demo																																
Land- based Testing																																
Determine Fuel & Maintenance Savings																																
Shipboard Eval																																
Component Inplementation																																

CLASSIFICATION:

Exhibit R-4a, Schedule Detail					DATE: **February 2008**			
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N /BA-4**	PROGRAM ELEMENT NUMBER AND NAME 0603724N/Navy Energy Program				PROJECT NUMBER AND NAME 0829/Energy Conversation			
Schedule Profile	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	
PROPOSAL DEVELOPMENT		Q3Q4	Q1Q2Q3Q4	Q1Q2Q3Q4	Q1Q2Q3Q4	Q1Q2Q3Q4	Q1Q2Q3Q4	
PROPOSAL ACCEPTANCE		Q4	Q1Q2Q3Q4	Q1Q2Q3Q4	Q1Q2Q3Q4	Q1Q2Q3Q4	Q1Q2Q3Q4	
MODELING AND SIMULATION		Q4	Q1Q2Q3Q4	Q1Q2Q3Q4	Q1Q2Q3Q4	Q1Q2Q3Q4	Q1Q2Q3Q4	
PROTOTYPE DEVELOPMENT		Q4	Q1Q2Q3Q4	Q1Q2Q3Q4	Q1Q2Q3Q4	Q1Q2Q3Q4	Q1Q2Q3Q4	
PROTOTYPE DEMONSTRATION			Q1Q2Q3Q4	Q1Q2Q3Q4	Q1Q2Q3Q4	Q1Q2Q3Q4	Q1Q2Q3Q4	
LAND-BASED TESTING			Q2Q3Q4	Q1Q2Q3Q4	Q1Q2Q3Q4	Q1Q2Q3Q4	Q1Q2Q3Q4	
DETERMINE FUEL & MAINTENANCE SAVINGS			Q2Q3Q4	Q1Q2Q3Q4	Q1Q2Q3Q4	Q1Q2Q3Q4	Q1Q2Q3Q4	
SHIPBOARD EVALUATION			Q4	Q1Q2Q3Q4	Q1Q2Q3Q4	Q1Q2Q3Q4	Q1Q2Q3Q4	
COMPONENT IMPLEMENTATION RECOMMEND				Q2Q3Q4	Q1Q2Q3Q4	Q1Q2Q3Q4	Q1Q2Q3Q4	

CLASSIFICATION:	UNCLASSIFIED						
EXHIBIT R-2a, RDT&E PROJECT JUSTIFICATION					DATE February 2008		
APPROPRIATION/BUDGET ACTIVITY **RDTEN/BA 4**	PROGRAM ELEMENT NUMBER AND NAME **0603724N/NAVY ENERGY PROGRAM**				PROJECT NUMBER AND NAME **0838/Mobility Fuels (ADV)**		
COST (In Millions)	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
Project Cost	1.579	1.567	1.727	1.822	1.877	1.911	1.948
RDT&E Articles Qty	0	0	0	0	0	0	0

A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

(U) This project provides data through engine and fuel system tests which relate the effects of changes in Navy fuel procurement specification properties to the performance and reliability of Naval ship and aircraft engines and fuel systems. This information is required to: (a) determine the extent to which nnecessarily restrictive specification features can be relaxed to reduce cost and increase availability worldwide; (b) provide guidance to fleet operators for the safe use of off-specification or commercial grade fuels when military specificatioin fuels are unavailable or in short supply; and (c) make needed periodic changes to fuel specifications to ensure fuel quality and avoid fleet operating problems while accommodating evolutionary changes in the fuel supply industry. Recent problems with fuel quality have adversely affected ship and aircraft system performance and reliability and resulted in degradation of fuel in storage. The resulting readiness impacts, additional maintenance costs, and the cost of lost equipment,although difficult to quantify, are many times the cost of this product. Over the next decade, the potential for fuel quality related problems will increase because of changing industry practices required to comply with new environmental regulations.

This project represents the only investment designed to maintain the Navy's ability to operate as a "smart" customer for fuels that cost over $2.5 B per year for procurement, transport, storeage and consuming and are essential to fleet operations.

CLASSIFICATION:	UNCLASSIFIED	
EXHIBIT R-2a, RDT&E PROJECT JUSTIFICATION		DATE February 2008
APPROPRIATION/BUDGET ACTIVITY **RDTEN/BA 4**	PROGRAM ELEMENT NUMBER AND NAME **0603724N/NAVY ENERGY PROGRAM**	PROJECT NUMBER AND NAME **0838/Mobility Fuels (ADV)**

B. ACCOMPLISHMENTS/PLANNED PROGRAM:

	FY 2007	FY 2008	FY 2009
Accomplishments/Effort/Subtotal Cost	0.787	0.760	0.875
RDT&E Articles Quantity	0	0	0

(U) Aircraft Fuels

Performs development, test and evaluation work on Naval aircraft fuels to: a) determine the extent to which unnecessarily restrictive specification features can be relaxed to reduce cost and increase availability worldwide; b) provide guidance to fleet operators for the safe use of military aircraft that include new additives or are from new sources including synthetics; and c) make needed periodic changes to the fuel specifications to ensure fuel quality and avoid fleet operating problems while accommodating evolutionary changes in the fuel supply industry.

Continue development of a qualification procedure to evaluate and approve utilization of synthetic and ultra clean, low sulfur jet fuels. Continue development and evaluation of JP-5 copper contamination removal system. Initiate development of shipboard-based sensors and instruments to rapidly determine critical jet fuel properties. Implement +100 thermal stability enhancing jet fuel additive across T-45 (Training aircraft fleet) fleet for shore-based application.

Continue development of JP-5 copper contamination removal system. Continue development of a qualification procedure to evaluate and approve utilization of synthetic and ulta-clean, lowsulfur jet fuels. Continue development of shipboard-based sensors and instruments to rapidly determine critical jet fuel properties.

Conduct field trial of copper contamination system. Continue development of shipboard-based sensors and instruments to rapidly determine critical jet fuel properties. Continue development of a qualification procedure to evaluate and approve utilization of synthetic and ultra-clean, low sulfur jet fuels.

Continued development and evaluation of JP-5 copper contamination removal system. Initiated development of an equipment/fuel qualification procedure to evaluate and approve synthetic aircraft fuels. Completed evaluation of impacts of copper contamination on aircraft engine maintenance/performance.

	FY 2007	FY 2008	FY 2009
Accomplishments/Effort/Subtotal Cost	0.792	0.807	0.852
RDT&E Articles Quantity	0	0	0

(U) Ship Fuels

Performs development, test and evaluation work on Naval ship propulsion fuels to: a) determine the extent to which unnecessarily restrictive specification features can be relaxed to reduce cost and increase availability worldwide; b) provide guidance to fleet operators for the safe use of off-specification or commercial grade fuels when military fuels are unavailable or in limited supply; and c) make needed periodic changes to fuel specifications to ensure fuel quality and avoid fleet operating problems while accomodating evolutionary changes in the fuel supply industry.

CLASSIFICATION:	UNCLASSIFIED	
EXHIBIT R-2a, RDT&E PROJECT JUSTIFICATION (CONTINUATION)		DATE February 2008
APPROPRIATION/BUDGET ACTIVITY **RDTEN/BA 4**	PROGRAM ELEMENT NUMBER AND NAME **0603724N/NAVY ENERGY PROGRAM**	PROJECT NUMBER AND NAME **0838/Mobility Fuels (ADV)**

Continued assessment of the feasibility of specifying JP-5 (jet fuel) as the single fuel at sea for use by all Naval Systems (ships, aircraft and ground equipment). Continued review of the F-76 ship distillate fuel specification and test requirements evaluation to remove any unnecessary requirements to increase availability. Completed development and acceptance of commercial fuel specification American Society For the Testing of Materials (ASTM D6985 Specification For Middle Distillate Fuel Oil- Military Marine Applications). Initiated development of a qualification procedure to evaluate and approve utilization of synthetic and ultr-clean. low sulfur ship fuels.

Complete assessment of the feasibility of specifying JP-5 as the Single Fuel at-sea for use by all Naval Systems (ships, aircraft and ground equipment). Continue development of a qualification procedure to evaluate and approve utilization of synthetic and ultra clean, low sulfur ship fuels. Complete F-76 specification and test requirements evaluation to determine, modify and/or remove any unnecessary requirements to increase availability.

Conduct JP-5 single fuel at sea iniative field trial. Continue development of a qualification procedure to evaluate and approve utilization of synthetic and ultra-clean, low sulfur ship fuels. Initiate development of shipboard-based sensors and instruments to rapidly determine critical ship fuel properties.

Initiate implementation of JP-5 as Single Naval Fuel At-Sea. Continue development of a qualification procedure to evaluate and approve utilization of synthetic and ultra-clean, low sulfur ship fuels. Continue development of shipboard-based sensors and instruments to rapidly determine critical ship fuel properties.

C. OTHER PROGRAM FUNDING SUMMARY:

Line Item No. and Name	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	To Complete	Total Cost
Not Applicable.									

D. ACQUISITION STRATEGY:

Not Applicable.

E. MAJOR PERFORMERS:

NAWCAD, Patuxent River, MD Technical engineering support FY06 Award FY07 Award FY08 Award
to help identify and execute Date Date Date
requirements associated with Oct-05 Oct -06 Oct -07
Navy Mobility Fuels Program.

CLASSIFICATION:	UNCLASSIFIED											
EXHIBIT R-3, RDT&E PROJECT COST ANALYSIS									DATE February 2008			
APPROPRIATION/BUDGET ACTIVITY **RDTEN/BA 4**		PROGRAM ELEMENT NUMBER AND NAME **0603724N/NAVY ENERGY PROGRAM**					PROJECT NUMBER AND NAME **0838/Mobility Fuels (ADV)**					
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY Cost ($000)	FY 2007 Cost ($000)	FY 2007 Award Date	FY 2008 Cost ($000)	FY 2008 Award Date	FY 2009 Cost ($000)	FY 2009 Award Date	Cost to Complete ($000)	Total Cost ($000)	Target Value of Contract
Systems Development		NRL, Washington DC	0.350	0.000		0.000		0.000		0.000	0.350	0.000
Subtotal Product Development			**0.350**	**0.000**		**0.000**		**0.000**		**0.000**	**0.350**	**0.000**
Remarks:												
Developmental Test & Evaluation	Various	Various	1.643	0.789	TBD	0.760	TBD	0.875	TBD	0.000	4.067	0.000
Developmental Test & Evaluation	MIPR	Army Tank & Armaments	0.000	0.000	TBD	0.000	TBD	0.000	TBD	0.000	0.000	0.000
Subtotal Support Costs			**1.643**	**0.789**		**0.760**		**0.875**		**0.000**	**4.067**	**0.000**
Remarks:												
Subtotal Test and Evaluation			**0.000**	**0.000**		**0.000**		**0.000**		**0.000**	**0.000**	**0.000**
Remarks:												
Program Management Support	Various	Various	1.996	0.448	TBD	0.807	TBD	0.852	TBD	0.000	4.103	0.000
Program Management Support	MIPR	Army Tank & Armaments	0.339	0.342	TBD	0.000	TBD	0.000	TBD	0.000	0.681	0.000
Subtotal Management Services			**2.335**	**0.790**		**0.807**		**0.852**		**0.000**	**4.784**	**0.000**
Remarks:												
Total Cost			**4.328**	**1.579**		**1.567**		**1.727**		**0.000**	**9.201**	**0.000**

CLASSIFICATION:	UNCLASSIFIED	
EXHIBIT R-4, SCHEDULE PROFILE		DATE February 2008
APPROPRIATION/BUDGET ACTIVITY **RDTEN/BA 4**	PROGRAM ELEMENT NUMBER AND NAME **0603724N/NAVY ENERGY PROGRAM**	PROJECT NUMBER AND NAME **0838/Mobility Fuels (ADV)**

Fiscal Year	2007				2008				2009				2010				2011				2012				2013			
	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
Engineering Milestones																												
Aircraft Fuels																												
Ship Fuels																												

CLASSIFICATION:	UNCLASSIFIED						
EXHIBIT R-4a, SCHEDULE DETAIL					DATE February 2008		
APPROPRIATION/BUDGET ACTIVITY **RDTEN/BA 4**	PROGRAM ELEMENT NUMBER AND NAME **0603724N/NAVY ENERGY PROGRAM**			PROJECT NUMBER AND NAME **0838/Mobility Fuels (ADV)**			
Schedule Profile	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
Aircraft Fuels	Q1 Q2 Q3 Q4	Q1 Q2 Q3 Q4	Q1 Q2 Q3 Q4	Q1 Q2 Q3 Q4	Q1 Q2 Q3 Q4	Q1 Q2 Q3 Q4	Q1 Q2 Q3 Q4
Ship Fuels	Q1 Q2 Q3 Q4	Q1 Q2 Q3 Q4	Q1 Q2 Q3 Q4	Q1 Q2 Q3 Q4	Q1 Q2 Q3 Q4	Q1 Q2 Q3 Q4	Q1 Q2 Q3 Q4

CLASSIFICATION:	UNCLASSIFIED	
EXHIBIT R-2a, RDT&E PROJECT JUSTIFICATION		DATE February 2008
APPROPRIATION/BUDGET ACTIVITY **RDTEN/BA 4**	PROGRAM ELEMENT NUMBER AND NAME **0603724N/NAVY ENERGY PROGRAM**	PROJECT NUMBER AND NAME **9999/CONGRESSIONAL ADDS**

B. ACCOMPLISHMENTS/PLANNED PROGRAM:

	FY 2007	FY 2008	FY 2009
Accomplishments/Effort/Subtotal Cost	0.000	0.795	0.000
RDT&E Articles Quantity	0	0	0

(U) Ocean Thermal Energy Conversion -

Ocean Thermal Energy Conversion to produce liquid hydrocarbon fuels from sea water.