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Exhibit R-2, RDT&E Budget Item Justification: PB 2014 Navy	DATE: April 2013
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APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0603713N: <i>Ocean Engineering Tech Dev</i>
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COST (\$ in Millions)	All Prior Years	FY 2012	FY 2013 [#]	FY 2014 Base	FY 2014 OCO ^{##}	FY 2014 Total	FY 2015	FY 2016	FY 2017	FY 2018	Cost To Complete	Total Cost
Total Program Element	91.840	9.802	7.029	9.196	-	9.196	9.887	10.120	7.546	7.684	Continuing	Continuing
0099: <i>Deep Submergence Bio Med Dev</i>	18.944	3.438	3.538	3.106	-	3.106	4.003	3.965	3.824	3.893	Continuing	Continuing
0394: <i>Shallow Depth Diving EQ</i>	72.896	6.364	3.491	6.090	-	6.090	5.884	6.155	3.722	3.791	Continuing	Continuing

[#] FY 2013 Program is from the FY 2013 President's Budget, submitted February 2012

^{##} The FY 2014 OCO Request will be submitted at a later date

A. Mission Description and Budget Item Justification

Developments in this program will enable the U.S. Navy to overcome deficiencies that constrain underwater operations in the areas of search, location, rescue, recovery, salvage, construction, and protection of offshore assets. This program develops medical technology, diver life support equipment, and the vehicles, systems, tools, and procedures to permit manned underwater operations.

B. Program Change Summary (\$ in Millions)	FY 2012	FY 2013	FY 2014 Base	FY 2014 OCO	FY 2014 Total
Previous President's Budget	9.996	7.029	7.198	-	7.198
Current President's Budget	9.802	7.029	9.196	-	9.196
Total Adjustments	-0.194	0.000	1.998	-	1.998
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-0.194	0.000			
• Program Adjustments	0.000	0.000	2.001	-	2.001
• Rate/Misc Adjustments	0.000	0.000	-0.003	-	-0.003

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Exhibit R-2A, RDT&E Project Justification: PB 2014 Navy									DATE: April 2013			
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 4: Advanced Component Development & Prototypes (ACD&P)					R-1 ITEM NOMENCLATURE PE 0603713N: Ocean Engineering Tech Dev				PROJECT 0099: Deep Submergence Bio Med Dev			
COST (\$ in Millions)	All Prior Years	FY 2012	FY 2013 [#]	FY 2014 Base	FY 2014 OCO ^{##}	FY 2014 Total	FY 2015	FY 2016	FY 2017	FY 2018	Cost To Complete	Total Cost
0099: Deep Submergence Bio Med Dev	18.944	3.438	3.538	3.106	-	3.106	4.003	3.965	3.824	3.893	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0		0	0	0	0	0		
# FY 2013 Program is from the FY 2013 President's Budget, submitted February 2012												
## The FY 2014 OCO Request will be submitted at a later date												
A. Mission Description and Budget Item Justification												
This project:												
1) Develops advanced biomedical and bioengineering technology for enhancing medical and life support for submarine escape and rescue;												
2) Conducts research for diver health, safety and effectiveness; and												
3) Supports deeper, longer, and more flexible dives.												
Deliverables for DISSUB (disabled submarine) include: medical procedures for submarine escape and rescue (including new Submarine Rescue Diving and Recompression System (SRDRS)), life support parameters, medical procedures for life support, exposure guidance for atmospheric contaminants, non-chemical CO2 scrubbing, prevention and treatment of decompression illness, and senior survivor expert decision system.												
Deliverables for diver enhancement include: exposure guidance for diver underwater continuous noise, impulse noise, and underwater blast, exposure guidance for oxygen breathing, collection of operational diving depth/time profiles to predict decompression risk, enhanced underwater swimming efficiency, enhanced diver thermal protection, and real-time decompression guidance.												
Requirements: NAPDD #587-873, Deep Submergence Biomedical Development, 23 November 1999.												
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)									FY 2012	FY 2013	FY 2014	
Title: Deep Submergence Bio Med Dev - Diver Health and Safety									1.719	1.769	1.553	
									0	0	0	
Description: Diver Health and Safety Research: Pulmonary oxygen toxicity exposure limits. Procedures for assessing and mitigating risk for diving in contaminated water. Procedure to determine remaining CO2 scrubber duration. Development of advanced insulation garments for diver thermal protection. Develop guidance for optimizing thermal control during decompression. Continue collection of operational dive profiles for advanced modeling. Novel methods for diver thermal protection. Improve resistance to O2 toxicity. Diver anthropometry. Chemical hardening of diving equipment. Predictive index of visual and auditory O2 toxicity. Guidelines for flying after diving. Guidelines for infra- and ultra-sound diver exposure. Develop an advanced diver thermal model. Electronic collection of operational dive data. Diver sound monitor. Investigation of diver in-water maladies, develop/improve real-time decompression guidance and dive planning.												

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B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)		FY 2012	FY 2013	FY 2014
FY 2012 Accomplishments: Successful development of topside decompression monitor for real time decompression guidance for surface supplied air diving. Identified a very significant effect of breathing air versus oxygen while at rest, in repeat and prolong dives, on diver fatigue and exercise capability. Continue human performance and pulmonary oxygen toxicity investigation and guidance for repeated long duration dives. Continue enhanced thermal protection efforts for divers. Continue probabilistic and deterministic decompression modeling. Continue real-time decompression guidance and planning efforts. FY 2013 Plans: Evaluate the effects of CO2 retention on diver cognition. Evaluation of drugs to mitigate Central Nervous System Oxygen toxicity. Continued evaluation of susceptibility to immersion pulmonary edema. Continue human performance and pulmonary oxygen toxicity investigation and guidance for repeated long duration dives. Continue enhanced thermal protection efforts for divers. Continue probabilistic and deterministic decompression modeling. Continue real-time decompression guidance and planning efforts. Other projects to be approved in August 2012. FY 2014 Plans: To be determined based on projects selected in late FY 2012 and FY 2013.				
Title: Deep Submergence Bio Med Dev - Submarine Rescue Articles: Description: Submarine Rescue: Decompression procedures for pressurized SRDRS operators. Use of perfluorocarbons to accelerate decompression in submarine rescue. Adjunctive therapies for treating DISSUB survivors. Guidance for food, water, clothing, medical supplies to enhance survival of submarine crews awaiting rescue. Flexible computer generated decompression schedules for wide range of conditions in a DISSUB. Develop DISSUB triage procedures. DISSUB survival trial. Develop oxygen metabolizer for closed vehicles. Treatment guidance for decompression sickness and arterial gas embolism in submarine escape and rescue. Interventions for toxicological problems with rescued submariners. Minimizing decompression sickness and arterial gas embolism with Submarine Escape and Immersion Suit (SEIS) training. Use of pharmacologic agents to reduce decompression risk in submarine rescuees. Development of toxic gas analyzer for use in pressurized DISSUB. FY 2012 Accomplishments: Completed testing of the O2 monitoring system for the rebreather used for submarine rescue. Completed evaluation of an improved hyperbaric toxic gas analyzers for submarine and DISSUB use. Evaluated the suitability of the SEIE suit for small stature submarines escapees.		1.719 0	1.769 0	1.553 0

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Exhibit R-2A, RDT&E Project Justification: PB 2014 Navy		DATE: April 2013	
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>		R-1 ITEM NOMENCLATURE PE 0603713N: <i>Ocean Engineering Tech Dev</i>	PROJECT 0099: <i>Deep Submergence Bio Med Dev</i>
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)		FY 2012	FY 2013
Continue prediction improvement for DISSUB Rescue using 70kg swine dropout decompression from 30-50 fsw. Continue decompression enhancement using combined animal models for depths too risky for human subject testing. Continue negative pressure breathing to enhance nitrogen elimination during pressurized DISSUB rescue.			
FY 2013 Plans: Evaluation of prescribed drugs to decrease the incidence of oxygen convulsions when breathing high levels of oxygen during DISSUB survivor decompression. Evaluation of a survival-prolonging drug on rates of decompression illness in DISSUB survivors. Other projects to be approved August 2012.			
FY 2014 Plans: To be determined based on projects selected in late FY 2012 and FY 2013.			
Accomplishments/Planned Programs Subtotals		3.438	3.538
C. Other Program Funding Summary (\$ in Millions) N/A			
Remarks			
D. Acquisition Strategy Integrated thrust area teams (e.g., decompression research) are established with university, commercial, and in-house Navy labs to jointly execute biomedical R&D. Peer review of research proposals accomplished by independent Technical Advisory Board. Annual review of progress by Executive Review Board (CNO/NAVSEA/ONR/BUMED). Program management by 0-6 Undersea Medical Officer. Contracting by competitive process using BAA and leveraging ONR capabilities.			
E. Performance Metrics Quarterly Program Reviews			

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Navy												DATE: April 2013			
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 4: Advanced Component Development & Prototypes (ACD&P)						R-1 ITEM NOMENCLATURE PE 0603713N: Ocean Engineering Tech Dev				PROJECT 0099: Deep Submergence Bio Med Dev					
Test and Evaluation (\$ in Millions)				FY 2012		FY 2013		FY 2014 Base		FY 2014 OCO		FY 2014 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Development Test & Evaluation	WR	NEDU:Panama City, FL	13.833	1.951	Oct 2011	2.040	Oct 2012	1.781	Oct 2013	-		1.781	Continuing	Continuing	Continuing
Development Test & Evaluation	WR	NMRC:Silver Spring, MD	4.644	1.347	Oct 2011	1.358	Oct 2012	1.185	Oct 2013	-		1.185	Continuing	Continuing	Continuing
Subtotal			18.477	3.298		3.398		2.966		0.000		2.966			
Management Services (\$ in Millions)				FY 2012		FY 2013		FY 2014 Base		FY 2014 OCO		FY 2014 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Program Management Support	Various	NEDU:Panama City	0.086	0.070	Oct 2011	0.070	Oct 2012	0.070	Oct 2013	-		0.070	Continuing	Continuing	Continuing
Travel	Various	Various:Various	0.183	0.070	Oct 2011	0.070	Oct 2012	0.070	Oct 2013	-		0.070	Continuing	Continuing	Continuing
*SBIR Assessment	Various	Various:Various	0.182	0.000	Oct 2011	0.000		0.000		-		0.000	Continuing	Continuing	Continuing
Acquisition Workforce	Various	Various:Various	0.016	0.000		0.000		0.000		-		0.000	Continuing	Continuing	Continuing
Subtotal			0.467	0.140		0.140		0.140		0.000		0.140			
			All Prior Years	FY 2012		FY 2013		FY 2014 Base		FY 2014 OCO		FY 2014 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals			18.944	3.438		3.538		3.106		0.000		3.106			
Remarks															

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Exhibit R-4, RDT&E Schedule Profile: PB 2014 Navy

DATE: April 2013

APPROPRIATION/BUDGET ACTIVITY

1319: Research, Development, Test & Evaluation, Navy
BA 4: Advanced Component Development & Prototypes (ACD&P)

R-1 ITEM NOMENCLATURE

PE 0603713N: Ocean Engineering Tech
Dev

PROJECT

0099: Deep Submergence Bio Med Dev

CLASSIFICATION: UNCLASSIFIED		EXHIBIT R-4, SCHEDULE PROFILE																Date: March-13											
APPROPRIATION/BUDGET ACTIVITY		PROGRAM ELEMENT NUMBER AND NAME																PROJECT NUMBER AND NAME											
RDTE N / BA 4		0603713N / OCEAN ENGINEERING TECHNOLOGY DEVELOPMENT																0099 / DEEP SUBMERGENCE BIO MED DEV											
FY12		FY12				FY13				FY14				FY15				FY16				FY17				FY18			
FY12 DSB DP R&D Execution		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
FY13																													
1) Broad Agency Announcement Published (DSBDP R&D Priorities);																													
2) Invitation for FY13 Pre-Proposals; and																													
3) Submission of FY13 Pre-Proposals																													
1) Request for Full Proposals from Approved Pre-Proposals; and																													
2) Submission of FY13 Full Proposals																													
1) Full Proposal Review by DSB DP Technical Advisory Board (TAB);																													
2) TAB Meets to Prioritize DSB DP FY13 Proposals;																													
3) Brief Sponsor on TAB Prioritized DSB DP FY13 R&D Program; and																													
4) Forward Proposal Approval Letters, Navy Lab Guidance Letters																													
FY13 DSB DP R&D Execution																													
FY14																													
1) Broad Agency Announcement Published (DSBDP R&D Priorities);																													
2) Invitation for FY14 Pre-Proposals; and																													
3) Submission of FY14 Pre-Proposals																													
1) Request for Full Proposals from Approved Pre-Proposals; and																													
2) Submission of FY14 Full Proposals																													
1) Full Proposal Review by DSB DP Technical Advisory Board (TAB);																													
2) TAB Meets to Prioritize DSB DP FY14 Proposals;																													
3) Brief Sponsor on TAB Prioritized DSB DP FY14 R&D Program; and																													
4) Forward Proposal Approval Letters, Navy Lab Guidance Letters																													
FY14 DSB DP R&D Execution																													

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EXHIBIT R-4, SCHEDULE PROFILE

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Exhibit R-4A, RDT&E Schedule Details: PB 2014 Navy			DATE: April 2013
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0603713N: <i>Ocean Engineering Tech Dev</i>	PROJECT 0099: <i>Deep Submergence Bio Med Dev</i>	

Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
Proj 0099				
FY12 DSBDP R&D Execution	1	2012	4	2012
FY13 Broad Agency Announcement Published (DSBDP R&D Priorities)	3	2012	3	2012
Invitation for FY13 Pre-Proposals	3	2012	3	2012
Submission of FY13 Pre-Proposals	3	2012	3	2012
Request for Full Proposals from Approved FY13 Pre-Proposals	3	2012	4	2012
Submission of FY13 Full Proposals	3	2012	4	2012
Full FY13 Proposal Review by DSBDP Technical Advisory Board (TAB)	4	2012	4	2012
TAB Meets to Prioritize DSBDP FY13 Proposals	4	2012	4	2012
Brief Sponsor on TAB Prioritized DSBDP FY13 R&D Program	4	2012	4	2012
Forward FY13 Proposal Approval Letters, Navy Lab Guidance Letters	4	2012	4	2012
FY13 DSBDP R&D Execution	1	2013	4	2013
FY14 Broad Agency Announcement Published (DSBDP R&D Priorities)	3	2013	3	2013
Invitation for FY14 Pre-Proposals	3	2013	3	2013
Submission of FY14 Pre-Proposals	3	2013	4	2013
Request for Full Proposals from Approved FY14 Pre-Proposals	3	2013	4	2013
Submission of FY14 Full Proposals	3	2013	4	2013
Full FY14 Proposal Review by DSBDP Technical Advisory Board (TAB)	4	2013	4	2013
TAB Meets to Prioritize DSBDP FY14 Proposals	4	2013	4	2013
Brief Sponsor on TAB Prioritized DSBDP FY14 R&D Program	4	2013	4	2013
Forward FY14 Proposal Approval Letters, Navy Lab Guidance Letters	4	2013	4	2013
FY14 DSBDP R&D Execution	1	2014	4	2014

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Exhibit R-2A, RDT&E Project Justification: PB 2014 Navy									DATE: April 2013			
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 4: Advanced Component Development & Prototypes (ACD&P)					R-1 ITEM NOMENCLATURE PE 0603713N: Ocean Engineering Tech Dev				PROJECT 0394: Shallow Depth Diving EQ			
COST (\$ in Millions)	All Prior Years	FY 2012	FY 2013 [#]	FY 2014 Base	FY 2014 OCO ^{##}	FY 2014 Total	FY 2015	FY 2016	FY 2017	FY 2018	Cost To Complete	Total Cost
0394: Shallow Depth Diving EQ	72.896	6.364	3.491	6.090	-	6.090	5.884	6.155	3.722	3.791	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0		0	0	0	0	0		
# FY 2013 Program is from the FY 2013 President's Budget, submitted February 2012												
## The FY 2014 OCO Request will be submitted at a later date												
A. Mission Description and Budget Item Justification												
This project is to develop systems to support submarine escape, survivability, rescue missions, and conventional diver operations. Diver operations include ship husbandry, salvage/recovery, and submarine rescue operations to support national, as well as Navy, needs around the world. Modern certifiable diving systems that ensure diver safety and allow maximum work efficiency will replace currently antiquated systems. Efforts through FY15 focus on the Submarine Rescue Diving and Recompression System (SRDRS) to provide a new rapidly deployed emergency submarine rescue capability. SRDRS provides a new capability of pressurized transportation of rescuees from a stricken submarine directly to the decompression system replacing the Deep Submergence Rescue Vehicles and Mother Submarines. SRDRS includes an air transportable rapid Assessment/Underwater Work System (AUWS), a Pressurized Rescue Module (PRM) or Rescue Capable System (RCS), and a Submarine Decompression System (SDS). The AUWS is a manned system that provides intervention system capability. To reduce operational risk, an initiative is in process to transition from AUWS to an unmanned Remote Operated Vehicle (ROV). Intervention assets support clearing disabled submarine seating surfaces, delivery of emergency life support stores, and disabled submarine assessment. The Submarine Rescue System-Rescue Capable System (SRS-RCS) completed OPEVAL in FY08 and is rescue ready. The Submarine Rescue System-Submarine Decompression System (SRS-SDS) is scheduled for IOC in FY15. SRDRS Full Operational Capability (FOC) is scheduled for FY15. The SRDRS will provide a global rapid response capability to support submarine rescue missions with an increase in capability at a fraction of the cost of the currently available systems.												
Shallow Depth Diving Equipment managed under SEA00C - This project develops systems to support submarine escape and rescue missions, and conventional diver operations. Diver operations include ship husbandry, salvage/recovery, and submarine rescue operations to support national, as well as Navy, needs around the world. Modern certifiable diving systems that ensure diver safety and allow maximum work efficiency will replace currently antiquated systems. R&D will be performed in the areas of contaminated water diving, diver thermal protection, and diver sound protection.												
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)									FY 2012	FY 2013	FY 2014	
Title: Shallow Depth Diving EQ - SRDRS									5.285	2.268	4.691	
									0	0	0	
Description: Continue design, fabrication, and acceptance testing of the prototype Submarine Decompression System and support equipment. Continue integration of all SRDRS components.												
FY 2012 Accomplishments:												

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B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)		FY 2012	FY 2013	FY 2014	
Continue design/development/fabrication of Submarine Decompression Chambers 1 and 2 repairs and modifications. Continue design/development/fabrication of Submarine Decompression System Primary Elements including: Pressurized Flexible Manways 1, 2, and 3; Deck Transfer Lock; Mission and Auxiliary Support Equipment; Submarine Decompression System Ship Interface Templates; Modified Transfer Locks 1 and 2 Mods and Base Ship Interface Templates; and Pressurized Rescue Module System 6 atmospheres absolute (6ata) efforts. Plan to continue SDS Element Developmental Testing. Plan to begin Element Integration Testing at Oceaneering. FY 2013 Plans: Plan to complete Submarine Decompression Chambers 1 and 2 repairs and modifications. Plan to complete design/development/fabrication of Submarine Decompression System Primary Elements including: Pressurized Flexible Manways 1, 2, and 3; Deck Transfer Lock; Mission and Auxiliary Support Equipment, Submarine Decompression System Ship Interface Templates; Modified Transfer Lock 1 and 2 Mods and Base Ship Interface Templates; and Pressurized Rescue Module System 6ata efforts. Plan to complete material audits for: Submarine Decompression Chambers 1 and 2; Morgan Breathing System 2000; Pressurized Flexible Manways 1, 2, and 3; Deck Transfer Lock; and Pressurized Rescue Module System to 6ata. Plan to complete System Integration Audit for the Submarine Decompression System. Plan to complete Development Testing for Deck Transfer Lock; Pressurized Flexible Manways 1, 2, and 3; Submarine Decompression Chambers 1 and 2; and the Ship Interface Template Sets. Plan to complete Element Integration Testing at Oceaneering and Deliver Submarine Decompression System to Undersea Rescue Command to begin integration with the Submarine Rescue System. FY 2014 Plans: Plan to complete integration with the Submarine Rescue System, Manned Testing, Unmanned Testing and Sea Trials. Achieve Submarine Rescue System, Transfer Under Pressure Certification and begin Operational Testing and Post Delivery Shakedown efforts.					
Title: Shallow Depth Diving EQ - Diving		1.079	1.223	1.399	
Articles:		0	0	0	
Description: Continue research on contaminated water diving and research on diver thermal protection and CO2 monitors, and diver sound protection. FY 2012 Accomplishments: Continue research on contaminated water diving and research on diver thermal protection and CO2 monitors, and diver sound protection. FY 2013 Plans:					

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Exhibit R-2A, RDT&E Project Justification: PB 2014 Navy		DATE: April 2013	
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>		R-1 ITEM NOMENCLATURE PE 0603713N: <i>Ocean Engineering Tech Dev</i>	PROJECT 0394: <i>Shallow Depth Diving EQ</i>
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)		FY 2012	FY 2013
To be determined based on projects selected in late FY 2012.			
FY 2014 Plans: To be determined based on projects selected in late FY 2012 and FY 2013.			
Accomplishments/Planned Programs Subtotals		6.364	3.491
C. Other Program Funding Summary (\$ in Millions) N/A			
Remarks			
D. Acquisition Strategy The Submarine Rescue system (SRS) segment of the SRDRS is largely based on the use of Commercial-Off-the-Shelf (COTS) technology and maximum use of Non-Developmental Items (NDI). The SRS segment is being procured using performance based specifications. Many of the SRS contracts were awarded competitively and were based on technical capability and cost considerations (best value). Program management of SRDRS is accomplished through the use of Program Executive Officer, Submarines (PEO SUB) leadership. This change was enacted in February 2003 realigning the responsibility from SEA00C to PEOSUB. The Prototype system provides full operational capability and no additional procurement is planned. The system is designed to be Government Owned/Commercially Operated/Commercially Maintained (GO/CO/CM).			
E. Performance Metrics Quarterly Program Reviews and Critical Design Reviews.			

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Navy												DATE: April 2013			
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Product Development (\$ in Millions)				FY 2012		FY 2013		FY 2014 Base		FY 2014 OCO		FY 2014 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Pressurized Rescue Module System (PRMS)	C/CPIF	Oceanworks:Ontario, Canada	23.824	0.000		0.000		0.000		-		0.000	0.000	23.824	
PRMS	C/FFP	Oceanworks:Ontario, Canada	4.150	0.000		0.000		0.000		-		0.000	0.000	4.150	
Systems Engineering - Design, Integration	C/CPAF	Oceaneering:Hanover, MD	21.155	0.424	Oct 2011	0.427	Oct 2012	1.605	Oct 2013	-		1.605	Continuing	Continuing	Continuing
Systems Engineering - Technical	Various	Various:Various	0.537	0.000		0.000		0.000		-		0.000	Continuing	Continuing	Continuing
Systems Engineering - Design, Integration	C/CPAF	Oceaneering:Hanover, MD	1.986	2.764	Feb 2012	0.184	Jan 2013	0.688	Jan 2014	-		0.688	0.000	5.622	
Systems Engineering - Design, Integration	C/CPAF	Oceaneering:Hanover, MD	2.145	0.000	Apr 2012	0.140	Apr 2013	0.721	Apr 2014	-		0.721	0.000	3.006	
Systems Engineering - Design & Integration	C/CPAF	Oceaneering:Hanover, MD	0.635	0.697	Jul 2012	0.052	Sep 2013	0.259	Sep 2014	-		0.259	0.000	1.643	
Diving Equipment Product Management (00C)	Various	Various:Various	0.000	0.999	Oct 2011	1.143	Oct 2012	1.319	Oct 2013	-		1.319	0.000	3.461	
Subtotal			54.432	4.884		1.946		4.592		0.000		4.592			
Remarks															
1. Oceaneering is the prime for SRDRS Transfer Under Pressure (TUP) capability scheduled for IOC in FY15. FY14 funding increase supports post delivery shakedown and initial spares.															
Support (\$ in Millions)				FY 2012		FY 2013		FY 2014 Base		FY 2014 OCO		FY 2014 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Development Support (00C)	Various	Various:Various	4.806	0.000	Oct 2011	0.000		0.000		-		0.000	Continuing	Continuing	Continuing
Integrated Logistics Support	Various	Various:Various	0.841	0.000		0.000		0.000		-		0.000	Continuing	Continuing	Continuing
Configuration Management	C/CPAF	Oceaneering:Hanover, MD	0.489	0.000		0.000		0.000		-		0.000	Continuing	Continuing	Continuing

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Navy												DATE: April 2013			
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 4: Advanced Component Development & Prototypes (ACD&P)						R-1 ITEM NOMENCLATURE PE 0603713N: Ocean Engineering Tech Dev						PROJECT 0394: Shallow Depth Diving EQ			
Support (\$ in Millions)				FY 2012		FY 2013		FY 2014 Base		FY 2014 OCO		FY 2014 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Subtotal			6.136	0.000		0.000		0.000		0.000		0.000			
Test and Evaluation (\$ in Millions)				FY 2012		FY 2013		FY 2014 Base		FY 2014 OCO		FY 2014 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Developmental Test & Evaluation	Various	Various:Various	3.187	0.000		0.000		0.000		-		0.000	Continuing	Continuing	Continuing
Operational Test & Evaluation	WR	COMOPTEVFOR:Norfolk, VA	0.575	0.000		0.080	Oct 2012	0.150	Oct 2013	-		0.150	Continuing	Continuing	Continuing
Subtotal			3.762	0.000		0.080		0.150		0.000		0.150			
Management Services (\$ in Millions)				FY 2012		FY 2013		FY 2014 Base		FY 2014 OCO		FY 2014 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Contractor Engineering Support	Various	QBS/ Various:Richmond BC, Canada/Various	0.074	0.000		0.000		0.000		-		0.000	Continuing	Continuing	Continuing
Government Engineering Support	WR	NFESC:Port Hueneme, CA	0.197	0.000		0.000		0.000		-		0.000	Continuing	Continuing	Continuing
Government Engineering Support	WR	PSNSY/ Various:Bremerton, WA/Various	2.197	0.000		0.000		0.000		-		0.000	Continuing	Continuing	Continuing
Government Engineering Support	Various	Various:Various	1.859	0.000		0.000		0.000		-		0.000	Continuing	Continuing	Continuing
Program Management Support	Various	Perot:Washington, DC	2.110	0.000		0.000		0.000		-		0.000	Continuing	Continuing	Continuing
Travel (Submarine Rescue)	Various	NAVSEA:Washington, DC	0.589	0.120	Oct 2011	0.100	Oct 2012	0.150	Oct 2013	-		0.150	Continuing	Continuing	Continuing
Travel (00C)	C/BA	NAVSEA:Washington, DC	0.000	0.050	Oct 2011	0.050	Oct 2012	0.050	Oct 2013	-		0.050	0.000	0.150	

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Navy												DATE: April 2013			
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 4: Advanced Component Development & Prototypes (ACD&P)						R-1 ITEM NOMENCLATURE PE 0603713N: Ocean Engineering Tech Dev						PROJECT 0394: Shallow Depth Diving EQ			
Management Services (\$ in Millions)				FY 2012		FY 2013		FY 2014 Base		FY 2014 OCO		FY 2014 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
SBIR Assessment	Various	Various:Various	0.443	0.000		0.000		0.000		-		0.000	Continuing	Continuing	Continuing
Acquisition Workforce	Various	Various:Various	0.021	0.000		0.000		0.000		-		0.000	Continuing	Continuing	Continuing
Program Management Support	Various	Various:Various	0.430	0.000		0.244	Oct 2012	0.200	Oct 2013	-		0.200	0.000	0.874	
Program Management Support	Various	Various:Various	0.269	0.568	Jan 2012	0.244	Jan 2013	0.189	Jan 2014	-		0.189	0.000	1.270	
Program Management Support	Various	Various:Various	0.377	0.400	Apr 2012	0.383	Apr 2013	0.306	Apr 2014	-		0.306	0.000	1.466	
Government Engineering Support	WR	PNSY:Portsmouth, NH	0.000	0.312	Oct 2011	0.414	Oct 2012	0.423	Oct 2013	-		0.423	0.000	1.149	
Program Management Support (00C)	Various	NEDU:Panama City, FL	0.000	0.030	Oct 2011	0.030	Oct 2012	0.030	Oct 2013	-		0.030	0.000	0.090	
Subtotal			8.566	1.480		1.465		1.348		0.000		1.348			
Remarks Items citing various are due to contract competitions in process. Submarine Rescue travel increase in FY14 is related to Transfer Under Pressure integration testing and Operational Evaluation events scheduled at Undersea Rescue Command, San Diego during FY14.															
			All Prior Years	FY 2012		FY 2013		FY 2014 Base		FY 2014 OCO		FY 2014 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals			72.896	6.364		3.491		6.090		0.000		6.090			
Remarks															

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Exhibit R-4, RDT&E Schedule Profile: PB 2014 Navy

DATE: April 2013

APPROPRIATION/BUDGET ACTIVITY

1319: Research, Development, Test & Evaluation, Navy
BA 4: Advanced Component Development & Prototypes (ACD&P)

R-1 ITEM NOMENCLATURE

PE 0603713N: Ocean Engineering Tech
Dev

PROJECT

0394: Shallow Depth Diving EQ



SRDRS Acquisition

Transfer Under Pressure



Update 12 Feb 13

SRS ACQUISITION MILESTONES

DESIGN/DEVELOPMENT

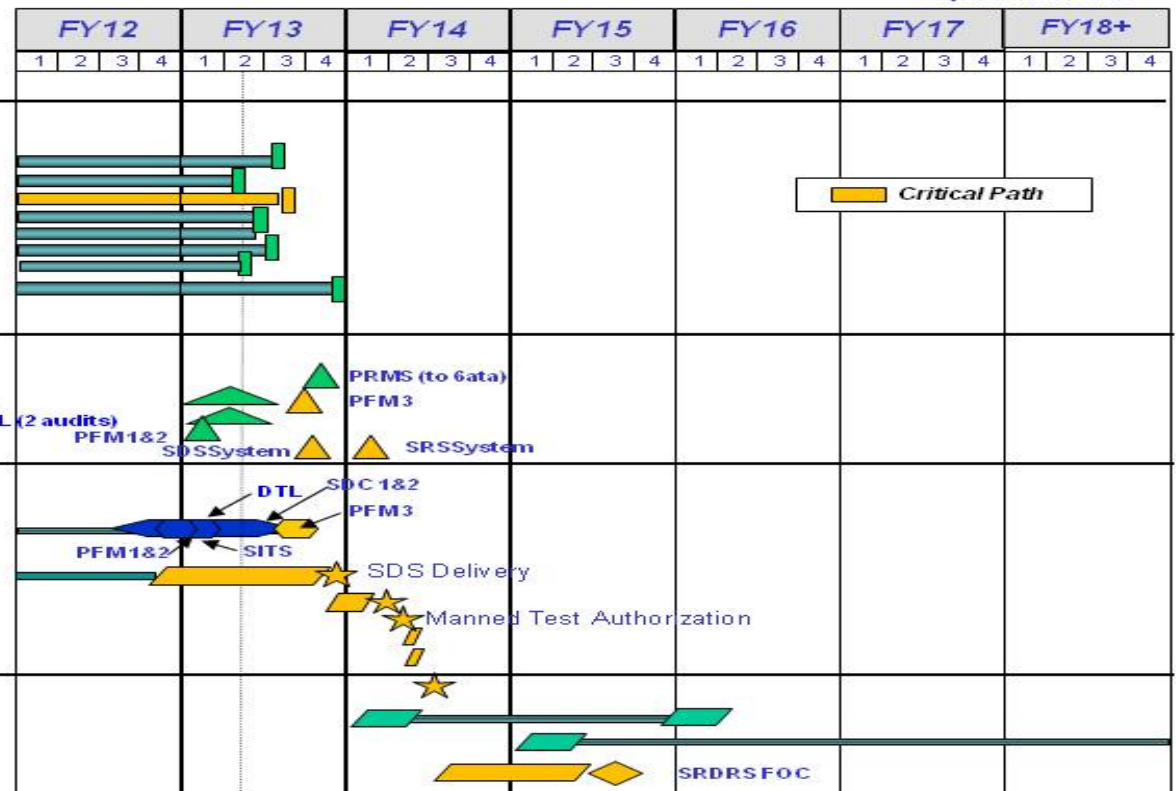
- SDS Primary Elements
 - SDC 1&2 Repairs & Modifications
 - PFM 1&2
 - PFM 3
 - DTL
 - SDS MSE & AE
 - SDS Templates (SDS SITS)
 - MTL 1&2 Mods & Base SITS
- PRMS to 6ata Efforts

CONFIGURATION AUDITS

- Material Audits (PCAs) SDC 1/2 & MBS2000 (2 audits)
- System Integration Audits (FCAs)

T&E MILESTONES

- Developmental Testing
 - (1) SDS Element Testing
- Integration & Sea Trials Testing
 - (1) SDS Element Integration @ OII
 - (2) SRS System Integration Unmanned @ URC
 - (3) SRS Manned @ URC
 - (4) SRS Sea Trials
- SRS-TUP CERTIFICATION
- POST DELIVERY SHAKEDOWN
- PREPLANNED PRODUCT IMPROVEMENTS
- OPEVAL & ORE



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Exhibit R-4A, RDT&E Schedule Details: PB 2014 Navy			DATE: April 2013
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0603713N: <i>Ocean Engineering Tech Dev</i>	PROJECT 0394: <i>Shallow Depth Diving EQ</i>	

Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
Proj 0394				
Acquisition Milestones	1	2012	4	2018
Design & Development-SDS Primary Elements	1	2012	3	2013
SDC 1 & 2 Repairs & Modifications	1	2012	3	2013
PFM 1 & 2	1	2012	2	2013
PFM 3	1	2012	3	2013
DTL	1	2012	2	2013
SDS MSE & AE	1	2012	2	2013
SDS Templates (SDS SITS)	1	2012	3	2013
MTL 1 & 2 Mods & Base SITS	1	2012	2	2013
Design & Development PRMS to 6ata Efforts	1	2012	4	2013
Configuration Audits	1	2013	1	2014
Material Audits (PCAs)	1	2013	4	2013
System Integration Audits (FCAs)	3	2013	1	2014
T&E Milestones	1	2012	2	2014
Developmental Testing (SDS Element Testing)	1	2012	4	2013
Integration & Sea Trials Testing	1	2012	2	2014
SDS Element Integration @ OII	1	2012	4	2013
SDS Delivery	4	2013	4	2013
SRS System Integration Unmanned @ URC	4	2013	2	2014
Manned Test Authorization	2	2014	2	2014
SRS Manned @ URC	2	2014	2	2014

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Exhibit R-4A, RDT&E Schedule Details: PB 2014 Navy			DATE: April 2013	
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>		R-1 ITEM NOMENCLATURE PE 0603713N: <i>Ocean Engineering Tech Dev</i>		PROJECT 0394: <i>Shallow Depth Diving EQ</i>
		Start		End
Events by Sub Project		Quarter	Year	Quarter
SRS Sea Trials		2	2014	2
SRS TUP Certification		3	2014	3
Post Delivery Shakedown		1	2014	2
Preplanned Product Improvements (RCS & TUP)		1	2015	4
OPEVAL& ORE		3	2014	2
SRDRS FOC		3	2015	3