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Exhibit R-2, RDT&E Budget Item Justification: PB 2013 Navy	DATE: February 2012
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APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 7: <i>Operational Systems Development</i>	R-1 ITEM NOMENCLATURE PE 0205658N: <i>Navy Science Assistance Progr</i>
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COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
Total Program Element	3.503	1.957	3.450	-	3.450	3.504	3.531	3.596	3.669	Continuing	Continuing
0834: <i>LAB Fit Support</i>	3.503	1.957	3.450	-	3.450	3.504	3.531	3.596	3.669	Continuing	Continuing

A. Mission Description and Budget Item Justification

The Naval Science Advisor Program ensures the Fleet/Force (F/F) helps shape the Department of the Navy (DoN) investment in Science and Technology (S&T), develops teaming relationships to rapidly demonstrate and transition technology, supports development of technology-based capability options for naval forces, and enables warfighting innovations based on technical and conceptual possibilities. This is accomplished through proactive connectivity and collaboration between DoN S&T and Joint, Navy, and Marine Corps commands worldwide. The program accomplishes this through several methods. It provides Science Advisors to Joint, Navy, and Marine Corps operational and strategic planning commands. Science Advisors facilitate and disseminate Joint Capabilities Integration and Development System (JCIDS) requirements provided by the F/F Commanders to the Director of Navy Test and Evaluation and Technology Requirements (OPNAV N091). Science Advisors collaborate with the F/F to identify specific solutions to known operational capability needs and provide the means to develop and demonstrate prototype systems. As a result, Science Advisors provide insight into issues associated with Naval Warfighting Capabilities that influence S&T program decision making. The program develops leaders among civilian scientists and engineers in the Naval Research Enterprise (NRE). Upon completion of their tours, Science Advisors return to the NRE with first hand knowledge of the F/F, warfighting issues, and strategic decision making. The Office of Naval Research (ONR) Science Advisor program enables continuous communication and collaboration between the warfighters, the technical community, and strategic development commands.

B. Program Change Summary (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
Previous President's Budget	3.535	1.957	3.478	-	3.478
Current President's Budget	3.503	1.957	3.450	-	3.450
Total Adjustments	-0.032	-	-0.028	-	-0.028
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-0.014	-			
• Program Adjustments	-	-	-0.021	-	-0.021
• Rate/Misc Adjustments	-	-	-0.007	-	-0.007
• Congressional General Reductions Adjustments	-0.018	-	-	-	-

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<u>Change Summary Explanation</u> Technical: Not applicable. Schedule: Not applicable.		

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy **DATE:** February 2012

APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 7: <i>Operational Systems Development</i>				R-1 ITEM NOMENCLATURE PE 0205658N: <i>Navy Science Assistance Progr</i>				PROJECT 0834: <i>LAB Fit Support</i>			
COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
0834: <i>LAB Fit Support</i>	3.503	1.957	3.450	-	3.450	3.504	3.531	3.596	3.669	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

A. Mission Description and Budget Item Justification

The Naval Science Advisor Program ensures the F/F helps shape the DoN investment in S&T, develops teaming relationships to rapidly demonstrate and transition technology, supports development of technology-based capability options for naval forces, and enables warfighting innovations based on technical and conceptual possibilities. This is accomplished through proactive connectivity and collaboration between DoN S&T and Joint, Navy, and Marine Corps commands worldwide. The program accomplishes this through several methods. It provides Science Advisors to Joint, Navy, and Marine Corps operational and strategic planning commands. Science Advisors facilitate and disseminate JCIDS requirements provided by the F/F Commanders to the OPNAV N091. Science Advisors collaborate with the F/F to identify specific solutions to known operational capability needs and provide the means to develop and demonstrate prototype systems. As a result, Science Advisors provide insight into issues associated with Naval Warfighting Capabilities that influence S&T program decision making. The program develops leaders among civilian scientists and engineers in the NRE. Upon completion of their tours, Science Advisors return to the NRE with firsthand knowledge of the F/F, warfighting issues, and strategic decision making. The Office of Naval Research (ONR) Science Advisor program enables continuous communication and collaboration between the warfighters, the technical community, and strategic development commands.

FY12 decrease (-\$1.5M) results from one year (FY12 only) decrease to respond to POM-12 DPPG S&T fiscal guidance.

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)

		FY 2011	FY 2012	FY 2013
Title: NAVAL SCIENCE ADVISOR PROGRAM		3.503	1.957	3.450
Articles:		0	0	0
FY 2011 Accomplishments:				
The Science Advisors (SA) are a conduit between the Fleet Forces, Office of Naval Research (ONR) and the Naval Research Establishments (NRE). Specific Fleet:				
SA, Navy Warfare Development Command (NWDC), provided technical support for the generation and development of advanced warfighting concepts leading to innovative new strategies to address Navy challenges and opportunities.				
SA, Commander Seventh Fleet (C7F), engaged with the NREs as follows: briefed senior level audiences, participated in discussions on relevant technology and Science and Technology (S&T) gaps in the areas of Information Operations (IO), Electronic Warfare, Computer Network Operations, Information Analysis & Communications, Survivability & Self Defense, Strike, and Anti-Submarine Warfare in the context of the Navy's 13 S&T Focus Areas and Sea Power 21 Pillars.				

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B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)		FY 2011	FY 2012
SA, Commander US Naval Forces Central Command (C5F), provided leadership and guidance towards identification and response of C5F warfighting capability gaps based on threats having a critical impact on major campaign operations and combat readiness in the CENTCOM Area of Responsibility (AOR).			
SA, Commander US Fleet Forces Command (USFFC), facilitated integration and articulation of fleet warfighter and readiness requirements influencing Naval and DoD RDT&E resourcing as follows: Led team from Operational Fleets, Force Providers and Naval Component Commands in articulation of fleet requirements to S&T community.			
SA, Commander Submarine Forces (CSF), established a team based structure to advance Undersea Enterprise (USE) S&T needs to achieve warfighting capabilities through the USE Chief Technology Officer (CTO), OPNAV N87, and the NREs. Evaluated, refined, and supported FY-13 Future Naval Capabilities (FNC) proposals in conjunction with ONR program officers, four Enabling Capability (EC)s were approved for new start: Towed Array Reliability Improvement, ASW Fusion for Remote sensors, Alternate Anti-Surface Warfare Torpedo Homing and Target Discrimination, and Simulation Toolset for Analysis of Mission, Personnel, and Systems.			
SA, Commander Naval Surface Forces (SURFOR), provided continuous engagement with ONR, fellow SAs, and Fleet and Systems Command senior leaders in the creation, modification, and promulgation of Total Ownership Cost, Anti-Surface Warfare (ASW) and Integrated Air and Missile Defense (IAMD) gaps used as the basis for the development of FNC EC products.			
SA, Commander Third Fleet (C3F), led the demonstration planning efforts for an Information Operations Technology Demonstration that was tasked by the CNO. Also, completed a survey of game changing or disruptive S&T efforts throughout the NRE. As a result of the survey, developed a Future Capabilities Needs List, which details desired areas of future S&T investment. This IO demonstration will commence again this year to improve on what we learned last year and implement new technologies and tactics.			
SA, US Naval Forces Europe/Africa, (C6F), managed the deployment of the Computer Aided Maritime Threat Evaluation System, a rules based information technology to aid C6F in assessing the risk of commercial shipping within the AOR. Codified an enduring technical exchange with the NATO Undersea Research Center (NURC) under a memorandum of agreement to facilitate greater interoperability and the transition of NURC technologies into Naval Forces Europe/Africa, C6F exercises and operations.			
SA, Commanding General 1st Marine Expeditionary Force and Marine Forces Central Command (CG I MEF/MARCENT), supported deployed force requirements definition and innovation insertion into Iraq and Afghanistan.			

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B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)		FY 2011	FY 2012
SA, CNO Strategic Studies Group (SSG), fully partnered in the generation of revolutionary warfighting concepts for the Navy of the future. Along with the Technology Fellows, the SA developed the SSG Fall Program which included: Researched and invited lecturers to address the SSG, developed an engaging and mind opening Exploration Travel for the CNO Fellows and Mini Exploration Travel for all SSG members.			
SA, Commander, US Marine Corps Forces Command (MARFORCOM), continued a cohesive and close teaming relationship with ONR Global SA at I MEF, II MEF, III MEF, and Marine Forces Pacific (MARFORPAC) that coordinated United States Marine Corps (USMC) operating force's voice on S&T matters.			
SA, Commander, Naval Air Forces (NAVAIRFOR), continued the development and installation efforts of the North Atlantic Treaty Organization (NATO) Sea Sparrow Missile, Electro-Optical/Infrared (EO/IR) upgrade on 2 Aircraft Carriers (CVNs), USS George H.W. Bush (CVN-77) and USS George Washington (CVN 73), and one Amphibious Assault Vessel, USS Bataan (LHD-5), for detection and identification of small boat threats to aircraft carrier strike groups.			
SA, III Marine Expeditionary Force (III MEF), worked with other USMC SAs to establish a new Operational Advisory Group (OAG) for the Marine Corps in Operational Science Technology and Experimentation (OSTE). Designed and proposed a new Science and Technology Review Committee (STC) at III MEF that will be used to inform the new OSTE OAG of MEF requirements and provide oversight, guidance and ownership of S&T work at III MEF in Okinawa, Japan.			
SA, CNO Executive Panel (CEP), as a member of CNO's personal staff, provided support to the CEP as an action officer for CEP subcommittee meetings, plenary sessions and intelligence briefings. Performed as Principal Staff representative for two CEP subcommittees; (1) Resource Sponsorship, and (2) Technical Diversity.			
SA, Commanding General II Marine Expeditionary Force (II MEF), provided support to the standup and deployment of II MEF FWD, briefing the Operations Officers and S&T Officers on emerging technology capabilities to be encountered in Afghanistan during II MEF FWD rotation.			
SA, Commander, USMC, Pacific (MARFORPAC), focused on addressing operational and strategic needs with technology by engaging with the joint S&T community both within the Pacific and across DoD. Proposed, secured funding, and started installation of Micro Auto Gasification System (MAGS), a small scale in-situ waste management system for tactical and garrison environments.			
SA, Commander Pacific Fleet (PACFLT), improved capabilities across the Pacific AOR through rapid technology pull in various mission areas including Maritime Security Operations, ASW and Counter-Intelligence Surveillance Reconnaissance. Engaged			

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B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)			FY 2011	FY 2012
S&T, Acquisition, Industry, University, Other Government Agencies and Coalition Partners to emphasize our warfighting gaps and identify possible long-term solutions and collaborative efforts.				
SA, Naval Supply Systems Command (NAVSUP), is the Research and Development (R&D) manager, technology requirement and technology facilitator and Naval Research Enterprise conduit for NAVSUP. Worked with the NAVSUP Enterprise and logistics R&D Working Group and Executive Steering Group (ESG) to generate NAVSUP's annual list of capability gaps from the current NAVSUP Commander's Guidance, which helps direct R&D investments at NAVSUP.				
SA, US Pacific Command (USPACOM), developed a Command-wide S&T strategy to address operational shortfalls and synchronize S&T engagement with the USPACOM Theater Campaign Plan. Established and executed multi-phase action plan to inform Service RDT&E enterprise of Command war fighting shortfalls and identify candidate mitigation capabilities via USPACOM S&T Integrated Priority List.				
SA, Chief of Naval Operations Code N81 (OPNAV N81), focused on disseminating the Navy's warfighting capability/risk analysis products to the broader S&T community resulting in an improved influence of requirements pull on S&T. The N81 SA was part of the ONR internal strategy cell membership for the updated Navy S&T Strategic Plan.				
SA, Commander Submarine Forces Pacific Fleet (SUBPAC), continued to expand the capabilities of the Unmanned Aerial System (UAS, aka SOTHOC, Submarine Over-The-Horizon Organic Capability). A successful tactical development exercise with the UAS occurred in the summer of 2010, followed by a second development exercise to evaluate counter detection. These exercises used UAS for over-the-horizon targeting of High-Valued Units in a multi-ship formation.				
SA, Naval Mine and Anti-Submarine Warfare Command (NMAWC), Commander NMAWC is the lead for the FNC ASW sub-IPT. The SA is directly responsible to the Commander for drafting/modifying capability gaps and EC ideas, vetting them through the sub IPT members, incorporating modifications, and providing the final recommendation to the Commander for presentation to the Sea Shield IPT.				
SA, OPNAV N2/N6 advised the Deputy CNO for Information Dominance (DCNO N2N6), advised Flag and SES Leadership on Navy S&T programs that addressed information dominance; member of FNC Technical Oversight Group (TOG) Working Group which prioritized and selected fifteen ECs products that addressed nine FNC Pillars (i.e. FORCEnet, Sea Strike, Shield, and Basing); member of the FORCEnet Integrated Product Team (IPT), Rapid Technology Transition (RTT) Team, and Joint Concept Technology Demonstration (JCTD) Team that reviewed technology programs to the fleet.				

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B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)		FY 2011	FY 2012
SA, Commander, Navy Expeditionary Combat Command (NECC), updated the NECC S&T Strategy Plan as the warfighters demand signal to the Navy Expeditionary Combat Enterprise (NECE). Conducted technical demonstrations and the Operational Demonstration of the Riverine and Intercoastal Operations (RIO) JCTD unattended sensor system.			
SA, Commander, C10F, C10F, Serve as the senior representative/liaison in all interactions with S&T oriented government, military, academia, and industry organizations. Function as the "FORCEnet" Operational Agent S&T representative, Naval Space Operations S&T representative and Service Cryptologic Component Command S&T representative in the signals intelligence community.			
SA, Commander Second Fleet (C2F), led the planning efforts for two Sea Trial sponsored events. Coordinated the MK 38 Laser Weapons System initiative which demonstrates the capabilities of a ship based directed energy weapon system for self-defense against small watercraft, UAS and other threats.			
FY 2012 Plans: Continue all efforts of FY 2011.			
FY 2013 Plans: Continue all efforts of FY 2012.			
Accomplishments/Planned Programs Subtotals		3.503	1.957
C. Other Program Funding Summary (\$ in Millions) N/A			
D. Acquisition Strategy Not Applicable.			
E. Performance Metrics Goal: Provide leadership with timely S&T advice on issues. Metric: Monthly reports by Science Advisors to the Office of Naval Research and senior leadership within their assigned commands.			

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2013 Navy											DATE: February 2012		
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Product Development (\$ in Millions)				FY 2012		FY 2013 Base		FY 2013 OCO		FY 2013 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Science Advisors	WR	Space and Naval Warfare Systems Center (SPAWAR):San Diego, CA	6.509	1.000	Mar 2012	1.854	Mar 2013	-		1.854	Continuing	Continuing	Continuing
Science Advisors	WR	Various:Various	6.879	0.957	Mar 2012	1.596	Mar 2013	-		1.596	Continuing	Continuing	Continuing
Subtotal			13.388	1.957		3.450		-		3.450			

	Total Prior Years Cost	FY 2012		FY 2013 Base		FY 2013 OCO		FY 2013 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	13.388	1.957		3.450		-		3.450			

Remarks

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Exhibit R-4, RDT&E Schedule Profile: PB 2013 Navy			DATE: February 2012		
APPROPRIATION/BUDGET ACTIVITY		R-1 ITEM NOMENCLATURE		PROJECT	
1319: Research, Development, Test & Evaluation, Navy		PE 0205658N: Navy Science Assistance Progr		0834: LAB Fit Support	
BA 7: Operational Systems Development					

	FY 2011				FY 2012				FY 2013				FY 2014				FY 2015				FY 2016				FY 2017			
	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
Proj 0834																												
Naval Science Advisor Program																												

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Exhibit R-4A, RDT&E Schedule Details: PB 2013 Navy			DATE: February 2012
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Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
<i>Proj 0834</i>				
Naval Science Advisor Program	1	2011	4	2017