#### **CLASSIFICATION:**

# **UNCLASSIFIED**

EXHIBIT R-2, RDT&E Budget Item Justification							DATE:	
							FEBRUARY 2005	
APPROPRIATION/BUDGET ACTIVITY					R-1 ITEM NOMEN	CLATURE		
RESEARCH DEVELOPMENT TEST & EVALUATION	ON, NAVY /	BA-6			0605152N Studies	and Analysis Sup	port, Navy	
COST (\$ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
Total PE Cost	10.447	6.160	9.629	2.712	10.298	3.277	11.130	4.057
0133 NATL ACAD SCI/STUD BRD	1.576	1.873	1.913	1.911	2.018	2.014	2.110	2.104
2092 NAVAL AVIATION STUDIES	3.783	3.999	7.421	0.504	7.978	0.956	8.707	1.633
2097 MANPOWER PERSONNEL & TRAINING	0.285	0.288	0.295	0.297	0.302	0.307	0.313	0.320
9410 FIRE RETARDANT FIBERS	0.961							
9411 FUTURE SIGINT REQMNTS/JOINT ACS PROG	3.842							
					_			

## A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

This program provides analytical support to the Secretary of the Navy and the Chief of Naval Operations as a basis for major policy, planning and acquisition program execution decisions. It supports research and development strategy development and planning. It supports studies in the areas of manpower, personnel, training, and aviation. It also develops analytical tools for evaluating effectiveness of U.S. weapons against potential foreign threat ships and submarines.

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## **CLASSIFICATION:**

EXHIBIT R-2a, RDT&E Project Justification							DATE:	
							Februa	ry 2005
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEME	NT NUMBER AND	NAME		PROJECT NUMBE	R AND NAME		
RDT&E, N / BA-6	0605152N Studie	es and Analysis Su	pport - Navy		0133 National Ac	ademy of Science/l	Naval Studies Board	
COST (\$ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
Project Cost	1.576	1.873	1.913	1.911	2.018	2.014	2.110	2.104
RDT&E Articles Qty								

#### A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

This project supports the core program for the Naval Studies Board. As agreed upon between the Chief of Naval Operations (CNO) and the President of the National Academy of Sciences and with appropriate attention to the influence of the domestic economy, national objectives, social imperatives and anticipated military requirement, the Naval Studies Board will conduct and report upon surveys, investigations, and analyses in the field of scientific research and development applicable to the operation and function of the Navy. Reports consist of a briefing to the Assistant Secretary of the Navy (Research Development and Acquisition) (ASN (RD&A)) and the CNO and staff, and written technical reports.

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#### **CLASSIFICATION:**

EXHIBIT R-2a, RDT&E Project Justification			DATE:
			February 2005
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND N	AME
RDT&E, N / BA-6	0605152N Studies and Analysis Support - Navy	0133 National Academy of	Science/Naval Studies Board

## B. Accomplishments/Planned Program

	FY 04	FY 05	FY 06	FY 07
Accomplishments/Effort/Subtotal Cost	1.576	1.873	1.913	1.911
RDT&E Articles Quantity				

#### FY 2004 Accomplishments:

- Completed two reports from earlier years: Naval Forces' Defense Capabilities Against Chemical and Biological Warfare Threats; and, The Role of Experimentation in Building Future Naval Forces.
- Continued research efforts and investigations in areas of interest to the Navy. Continued to support annual Navy authorized activities of importance, such as the National Space Forum and the Weinblum Memorial Lecture Series. Continued performance on the two studies initiated in FY03.
- Initiated two new studies entitled 1)Sea Basing- Ensuring Joint Forces Access From the Sea and, 2)Command, Control, Communications, Computers, Intelligence, Surveillance, and Reconnaissance (C4ISR) for Future Naval Strike Groups. Initiated one new workshop entitled Naval Analytical Capabilities and Improving Capabilities Based Planning.

#### FY 2005 Plans:

- Continue research efforts and investigations in areas of interest to the Navy. Continue to support annual Navy authorized activities of importance, such as the National Space Forum and the Weinblum Memorial Lecture Series.
- Initiate new studies (1-3) to be selected by the CNO at the beginning of FY05.

#### FY 2006 Plans:

- Continue research efforts and investigations in areas of interest to the Navy. Continue to support annual Navy authorized activities of importance, such as the National Space Forum and
  the Weinblum Memorial Lecture Series.
- Initiate new studies (1-3) to be selected by the CNO at the beginning of FY06.

#### FY 2007 Plans:

- Continue research efforts and investigations in areas of interest to the Navy. Continue to support annual Navy authorized activities of importance, such as the National Space Forum and the Weinblum Memorial Lecture Series.
- Initiate new studies (1-3) to be selected by the CNO at the beginning of FY07.

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## CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification							DATE:	February	, 2005
APPROPRIATION/BUDGET ACTIVITY	PROGRAM	ELEMENT NUMBER	AND NAME		PROJECT NUMB	ER AND NA	AME	i ebi dai j	y 2003
RDT&E, N / BA-6	0605152N	Studies and Analysi	s Support - Nav	/y	0133 National A	cademy of	Science/Naval S	tudies Board	
C. PROGRAM CHANGE SUMMARY:									
Funding:		FY 04	FY 05	FY 06	FY 07				
FY 2005 President's Budget		2.043	1.891	1.891	1.938				
FY 2006/2007 President's Budget		1.576	1.873	1.913	1.911				
Total Adjustments		-0.467	-0.018	0.022	-0.027				
Summary of Adjustments									
Congressional undistributed reductions			-0.018						
SBIR/STTR Transfer		-0.041							
Program Adjustments				0.003	-0.052				
Economic Assumptions				0.019	0.025				
Reprogrammings		-0.426	0.010						
Subtotal		-0.467	-0.018	0.022	-0.027				
Schedule:									
Not applicable									
Technical:									
Not applicable									
		D 4 0110DD			4.45				

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## **CLASSIFICATION:**

EXHIBIT R-2a, RDT&E Project Justification							DATE:	
							FEBRUA	RY 2005
APPROPRIATION/BUDGET ACTIVITY PROGRAM ELEMENT NUMBER AND NAME PROJECT NUMBER AND NAME								
RDT&E, N / BA-6	0605152N Studies	and Analysis Supp	ort - Navy		2092 Naval Warfai	e Studies		
COST (\$ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
Project Cost	3.783	3.999	7.421	0.504	7.978	0.956	8.707	1.633
RDT&E Articles Qty								

## A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

This project supports detailed mission, capability and technical analysis of future naval warfighting requirements. This work provides the analytic basis for integration and prioritization of overall military capability requirements and acquisition programs in support of executing the Naval Capability Development Process and development/delivery of MCP, NCP and ISCP briefs for CNO. This project replaces warfare analysis efforts (other than system-level Analyses of Alternatives) previously funded separately (directly, by reprogramming, or through Program Executive Offices) by all sponsors within N6/N7.

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## **CLASSIFICATION:**

EXHIBIT R-2a, RDT&E Project Justification	EXHIBIT R-2a, RDT&E Project Justification					
				FEBRU <i>A</i>	ARY 2005	
PPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUM	IBER AND NAME	PROJECT NUMBER AND N	AME		
RDT&E, N / BA-6	0605152N Studies and Anal	ysis Support - Navy	2092 Naval Warfare Studies			
3. Accomplishments/Planned Program						
7. 7. Godoni pilotini on Gyriani od 1. rogram						
	FY 04	FY 05	FY 06	FY 07		
Accomplishments/Effort/Subtotal Cost	3.783	3.999	7.421	0.504		
RDT&E Articles Quantity						
Naval Warfare Studies: Develop and deliver centraline N6/N7, supporting the development of Mission Capath Program Proposal. Conduct studies of FORCEnet Cengagements. Conduct studies of offensive Sea Strikes, offensive information operations, and Marine above the water to establish a secure air and maritim power ashore. Conduct studies of Sea Base capabilities at sea and ashore. Conduct studies of the requirement	cility Package and Integrated 4ISR capabilities, technologies, ike capabilities, technologies, corps maneuver forces. Corps de domain for establishment cities, technologies, and systematics for Navy ship and aircraft	briefings to CNO and the shaping to support and control effective ar project decisive and precise combe Sea Shield capabilities, technolout of joint forces into a theater of all and joint forces into a theater of capability.	g of resource-allocation decision of timely battlespace preparat bat power with conventional arogies, and systems required be operations, and projection of S f operations and sustain their of the projection of S for the pr	ns for the Sponsor ion and combat nd unconventional elow, on, and ea Strike combat		
	FY 04	FY 05	FY 06	FY 07		
Accomplishments/Effort/Subtotal Cost						
RDT&E Articles Quantity						

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## **CLASSIFICATION:**

EXHIBIT R-2a, RDT&E Project Justification					DATE:	
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER	AND NAME		PROJECT NUMBER AN	FEBRUARY 2005 AND NAME	
RDT&E, N / BA-6	0605152N Studies and Analysis S	Support - Navy		2092 Naval Warfare Stu	tudies	
C. PROGRAM CHANGE SUMMARY:						
Funding:	FY 04	FY 05	FY 06	FY 07		
FY 2005 President's Budget	0.289	0.000	0.000	0.000		
FY 2006/2007 President's Budget	3.783	3.999	7.421	0.504		
Total Adjustments	3.494	3.999	7.421	0.504		
Summary of Adjustments						
SBIR/STTR Transfer	-0.007					
Program Adjustments		-0.001	7.273	0.307		
Economic Assumptions			0.148	0.197		
Reprogrammings	3.501	4.000				
Subtotal	3.494	3.999	7.421	0.504		
Schedule:						
Not Applicable						
Technical:						
Not Applicable						

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EXHIBIT R-2a, RDT&E Project Justification							DATE:	
							Februa	ry 2005
PPROPRIATION/BUDGET ACTIVITY PROGRAM ELEMENT NUMBER AND NAME PROJECT NUMBER AND NAME								
RDT&E, N / BA-6	0605152N, Studies	and Analysis Supp	ort, Navy		2097/Manpower,	Personnel, and Ti	raining	
COST (\$ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
Project Cost	0.285	0.288	0.295	0.297	0.302	0.307	0.313	0.320
RDT&E Articles Qty								

## A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

The Chief of Naval Personnel has a continuing need for studies and analyses of manpower and personnel (M&P) policies and programs and critical M&P issues that have Navy-wide implications. This project provides an essential management tool to: (a) assess the effectiveness of existing M&P policies and programs; (b) identify needs for new policies and programs; (c) determine the required manpower and training mix relative to changing demographic, societal and legislative/regulatory actions, and to evolving strategic and geopolitical factors; (d) study the impact of M&P programs on Navy accession, attrition, retention, and performance; and, to (e) develop, validate and/or refine a broad range of M&P forecasting models. The program permits Navy to more effectively utilize Research and Development expertise to respond to emergent M&P issues on a continuing basis.

(U) JUSTIFICATION FOR BUDGET ACTIVITY: This program is funded under RDT&E operational systems development because it encompasses engineering and development of new end-items prior to production approval decision.

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#### **CLASSIFICATION:**

EXHIBIT R-2a, RDT&E Project Justification			DATE:
			FEBRUARY 2005
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND N	İAME
RDT&E, N / BA-6	0605152N Studies and Analysis Support - Navy	2097/Manpower, Personnel,	and Training

## **B.** Accomplishments/Planned Program

	FY 04	FY 05	FY 06	FY 07
Accomplishments/Effort/Subtotal Cost	0.285	0.288	0.295	0.297
RDT&E Articles Quantity				

## . (U) FY 2004 ACCOMPLISHMENTS:

- · (U) (\$47K) Completed a study of the Non-Prior Service Accessions Trend/Impact on the Naval Reserve Force.
- Identified metrics and developed a simple model, allowing the analysis of different types of accession training programs or "boot camps", with respect to overall Reserve Force Personnel and Training Readiness. Model will assist with analysis of future force shaping in regards to accession of various Non-Prior Service (NPS) populations (E-3 and below as compared to E4/5).
- · (U) (\$60K) Analyzed Civilian Turnover within the DoN and developed a Retirement Projection Model/Tool. Examined the NAPPE and CIVFORS models to determine whether the continuous time-series approach used in these models is a better predictor of civilian turnover than models based on other techniques, such as traditional regression analysis. The analysis included an investigation into the possibility of adding additional parameters to the NAPPE model such as the unemployment rate and other variables external to DON.
- · (U) (\$36K) Completed an analysis of Separation Pay Options. Analyzed the costs and benefits of various options for voluntarily separating members from service. Considered historical experience with VSI/SSB/TERA as well as involuntary separation pay. Based on the analysis, provided several options for a permanent, flexible tool for force shaping.
- · (U) (\$56K) Completed a study of the Delayed Entry Program (DEP) Management. Designed and conducted research to investigate the "real reasons" that a DEPPER attrites and becomes another loss to the system coded as a Qualified Not-Enlisted (QNE) or Failed to Obligate (FTO). Research and analysis should assist in assessing individual recruiter's ability to manage and/or lead DEP activities, fix responsibilities for DEP management at the zone, district, region and national level and evaluate alternative DEP management schemes.
- · (U) (\$55K) Developed a Graduate Education Quota Model to identify resident graduate education quotas by subspecialty area and community. The model will allow communities to efficiently allocate officer inventory based upon graduate education priorities and enable the efficient use of graduate education resources.
- · (U) (\$11K) Handbook for Human-Computer Interface (HCI) Design and Usability Testing project will be completed in FY-05. In FY-04, began development, testing, and evaluation of an HCI design methodology and prototype testing and evaluation system. The product of this research effort will be used in early and midcourse design and testing phases of new computer-based systems or during major systems upgrades.
- . (U) (\$20K) Small Business Innovative Research (SBIR) and other withhold amounts.
- . (U) FY 2005 PLAN:
- (U) (\$37.8K) Human-Computer Interface Design and Evaluation Guide. The product, resulting from this effort, a Handbook for Human-Computer Interface Design and Usability Testing is intended for use during early and midcourse design and testing phases of a new computer-based system or for use during a major system upgrade.

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**Exhibit R-2a, RDTEN Project Justification** 

#### CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification			DATE:
			February 2005
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME	
RDT&E, N / BA-6	0605152N, Studies and Analysis Support, Navy	2097/Manpower, Personnel and Tr	aining

(U) FY 2005 PLAN: (Continued)

- (U) (\$65K) Permanent Change of Station (PCS) Input Variables. PCS Discretionary (operational, rotational, training) moves are forecasted using two models, OBAY and Tree Classification. Pers-4 and N10 respectively are the users of these models. Additionally, detailers may generate a different move requirement based on detailing policies. There is a need to have these models validated and verified against the purpose for which they were developed and accredited for requirement that cover the FMB process.
- (U) (\$37K) Women Classification. The major objective of the proposed study is to determine if meaningful personality metrics can be identified that are related to officer retention of females serving in the surface warfare community.
- (U) (\$38.1K) Separation Pay Options. This research will analyze the efficiency of various options for voluntarily separating members from the Navy. FY04 research described the historical experience with VSI/SSB/TERA, involuntary separation pay, and other past programs. It also developed a simulation model to analyze the expected outcomes of alternative separation pay options, including alternative auction formats and annuities versus lump sum payments.
- (U) (\$20K) DoN/DoD PCS Policy Analysis. DOD Instruction 1315.7, lays out an algorithm for move sequences, and is very specific that Services shall not adopt policy requiring PCS moves in the CONUS solely based on the passage of a stipulated time period. Anecdotal evidence and preliminary analysis seem to suggest that some policies and business processes currently practiced in the Navy lend themselves to this prohibited PCS practice. Available data suggests that the current Navy PCS move churn is higher than it would be if the Navy applied the move algorithms identified in DOD Instruction 1315.7. If so, this also means there are inefficiencies in operational and personal stability, as well as in total move counts.
- (U) (\$90.1K) Billet Gap Analysis. With human capital becoming a major focus in Navy leadership, many types of metrics will need to be defined in order to determine the gaps, or reductions in the human capital index. Given this, personnel and placement managers often encounter situations in which there is a discrepancy between what the system has determined as being a gap and what the contextual evidence seems to suggest about the "gap."

(U) FY 2006 PLAN:

- (U) (\$36K) Conduct a cost-benefit analysis of Recruiter Refresher Training to justify training expenditures.
- (U) (\$80K) Develop an Automated Tracking System (database) of NJROTC Programs Participants.
- (U) (\$129K) Assess manpower/personnel growth of Acquisition Category (ACAT) III and ACAT IV Programs.
- (U) (\$50K) Assess the potential use and determine appropriate areas to employ Smart Card Technology.

(U) FY 2007 PLAN:

- (U) (\$80K) Assess the Total Officer Force Composition.
- (U) (\$80K) Analyze Nuclear Field Enlisted Retention and Compensation.
- (U) (\$57K) Assess alternative approaches for development of a new/updated Navy Manpower Requirements System.
- (U) (\$80K) Assess Return on Investment (ROI) for select Officer Programs.

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## **CLASSIFICATION:**

EXHIBIT R-2a, RDT&E Project Justification						DATE:	
·						February 2005	
ROPRIATION/BUDGET ACTIVITY PROGRAM ELEMENT NUMBER AND NAME			PI	PROJECT NUMBER AND NAME			
RDT&E, N / BA-6	0605152N, Studies and Analysis Support, Navy		20	097/Manpower, Per	ning		
B. PROGRAM CHANGE SUMMARY:							
Funding:		FY 2004	FY 2005	FY 2006	FY 2007		
FY 2005 President's Budget		0.294	0.292	0.293	0.295		
FY 2006/2007 President's Budget		0.285	0.288	0.295	0.297		
Total Adjustments	•	-0.009	-0.004	0.002	0.002		
Summary of Adjustments:							
Congressional undistributed red	ductions		-0.004				
SBIR/STTR Transfer		-0.009					
Economic Assumptions				0.002	0.002		
		-0.009	-0.004	0.002	0.002		
Schedule:							
Not Applicable							
Fechnical:							
Not Applicable							

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