

UNCLASSIFIED

EXHIBIT R-2, FY 2000 RDT&E,N BUDGET ITEM JUSTIFICATION SHEET

DATE: February 1999

BUDGET ACTIVITY: 6

PROGRAM ELEMENT: 0605152N

PROGRAM ELEMENT TITLE: Studies and Analysis Support, Navy

(U) COST: (Dollars in Thousands)

<u>Project Number & Title</u>	<u>FY 1998 Budget</u>	<u>FY 1999 Budget</u>	<u>FY 2000 Estimate</u>	<u>FY 2001 Estimate</u>	<u>FY 2002 Estimate</u>	<u>FY 2003 Estimate</u>	<u>FY 2004 Estimate</u>	<u>FY 2005 Estimate</u>	<u>To Complete</u>	<u>Total Program</u>
L2097 Manpower, Personnel, and Training	230	232	288	293	298	304	310	317	CONT.	CONT.
R0132 CNO Program Analysis and Evaluation	185	109	301	307	313	317	319	333	CONT.	CONT.
R0133 National Academy of Sciences/Naval Studies Board	1,720	1,121	2,034	2,071	2,136	2,167	2,294	2,394	CONT.	CONT.
R0147 Operational Strategic and Tactical Effectiveness Analysis	303	166	458	469	477	484	489	509	CONT.	CONT.
S2233 Naval Surface Warfare Studies	1,516	1,551	1,483	2,195	1,564	1,467	1,520	2,684	CONT.	CONT.
S2354 Expeditionary Warfare Studies	0	0	485	479	478	477	488	500	CONT.	CONT.
W2092 Naval Aviation Studies	2,816	1,852	3,482	2,310	2,351	2,390	2,430	2,471	CONT.	CONT.
TOTAL	6,770	5,031	8,531	8,124	7,617	7,606	7,850	9,208	CONT.	CONT.

Quantity of RDT&E Articles

(U) 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.

(U) JUSTIFICATION FOR BUDGET ACTIVITY: This program is funded under RDT&E MANAGEMENT SUPPORT because it supports the operations and installations required for general research and development use.

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EXHIBIT R-2a, FY 2000 RDT&E,N BUDGET PROJECT JUSTIFICATION SHEET

DATE: February 1999

BUDGET ACTIVITY: 6

PROGRAM ELEMENT: 0605152N

PROJECT NUMBER: L2097

PROGRAM ELEMENT TITLE: Studies and Analysis Support, Navy

PROJECT TITLE: Manpower, Personnel and Training

(U) COST: (Dollars in Thousands)

<u>Project Number & Title</u>	<u>FY 1998 Budget</u>	<u>FY 1999 Budget</u>	<u>FY 2000 Estimate</u>	<u>FY 2001 Estimate</u>	<u>FY 2002 Estimate</u>	<u>FY 2003 Estimate</u>	<u>FY 2004 Estimate</u>	<u>FY 2005 Estimate</u>	<u>To Complete</u>	<u>Total Program</u>
L2097 Manpower, Personnel and Training										
TOTAL	230	232	288	293	298	304	310	317	CONT.	CONT.

Quantity of RDT&E Articles

(U) A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION: The Chief of Naval Personnel has an ongoing need for direct analyses of Navy manpower and personnel (MP) policies and program planning. This project provides an essential management tool to: (a) assess the effectiveness of existing MP 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 trends, and to evolving strategic and geopolitical factors, (d) study the impact of MP programs on Navy accession, retention, and performance, and (e) develop, validate and/or refine a broad range of MP forecasting models. The program permits Navy to more effectively utilize Research and Development expertise to respond to emerging MPT issues.

(U) PROGRAM ACCOMPLISHMENTS AND PLANS:

1. FY 1998 ACCOMPLISHMENTS:

- (U) (\$75) Conducted a detailed Navy-wide analysis and completed a report recommending more relevant and accurate measures of retention for enlisted personnel, including automated enlisted reporting systems that allow for efficient collection, exchange, and analysis of retention metrics.
- (U) (\$86) Analyzed and developed a Career Progression Enhancement to the Sea-Shore Rotation Model (SSRM). The interactive capability achieved by this enhancement to the SSRM will be utilized to assess down-sizing and cost savings programs such as outsourcing to support sea-shore rotation and career progression to preclude adverse impact the Navy's shore billet base.
- (U) (\$71) Conducted a study of Minority Representation in Enlisted Communities. Conducted analysis and completed a report documenting the methodology, its application, and recommendations for adjusting cut score values and other factors to improve the distribution of minorities and women across ratings and the consistency of aggregate goals and A-School fill rates.
- (-\$2) Small Business Innovative Research (SBIR) Program.

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PROGRAM ELEMENT: 0605152N

PROJECT NUMBER: L2097

PROGRAM ELEMENT TITLE: Studies and Analysis Support, Navy

PROJECT TITLE: Manpower, Personnel and Training

2. FY 1999 PLAN:

- (U) (\$75) Extend a study of Minority Representation to include Career Progression in Officer Communities.
- (U) (\$75) Update and validate Navy Pay Predictor, Officer (NAPPO) Model for effective longevity management.
- (U) (\$82) Develop Separations Pay Model for accurate requirements management and costing.

3. FY 2000 PLAN:

- (U) (\$88) Develop a requirement-based Selective Reenlistment Bonus (SRB) Model.
- (U) (\$100) Study the cost, productivity and readiness impacts of family violence.
- (U) (\$100) Support studies directed at personnel policies to support the reduced manning initiatives.

(U) B. PROGRAM CHANGE SUMMARY

	<u>FY 1998</u>	<u>FY 1999</u>	<u>FY 2000</u>
(U) FY 1999 President's Budget:	232	287	292
(U) Appropriated Value:	232	287	
(U) Adjustments from 1999 Pres. Budget:	-2	-55	-4
(U) FY 2000 President's Budget Submit:	230	232	288

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DATE: February 1999

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PROGRAM ELEMENT: 0605152N

PROJECT NUMBER: L2097

PROGRAM ELEMENT TITLE: Studies and Analysis Support, Navy

PROJECT TITLE: Manpower, Personnel and Training

CHANGE SUMMARY EXPLANATION:

(U) Funding: FY 1998 funding adjustment (-\$2) thousand: Applied to Small Business Innovative Research (SBIR) program. FY 1999 funding adjustment (-\$55) thousand: Congressional cut: Maintain at FY 1998 (-\$54) thousand; economic adjustment (-\$1) thousand. FY 2000 funding adjustment (-\$4) thousand: Non pay inflation adjustment.

(U) Schedule: Not applicable.

(U) Technical: Not applicable.

(U) C. OTHER PROGRAM FUNDING SUMMARY: Not applicable.

Related RDT&E

(U) P.E. 0603707N (Manpower, Personnel, and Training Advanced Technology Development)

(U) P.E. 0604703N (Manpower, Personnel, and Training, Simulation and Human Factors)

(U) P.E. 0602234N (Materials, Electronics and Computer Technology)

(U) D. ACQUISITION STRATEGY: Not applicable.

(U) E. SCHEDULE PROFILE: Not applicable.

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DATE: February 1999

BUDGET ACTIVITY: 6

PROGRAM ELEMENT: 0605152N

PROJECT NUMBER: R0132

PROGRAM ELEMENT TITLE: Studies and Analysis Support, Navy

PROJECT TITLE: CNO Program Analysis and Evaluation

(U) COST: (Dollars in Thousands)

<u>Project Number & Title</u>	<u>FY 1998 Budget</u>	<u>FY 1999 Budget</u>	<u>FY 2000 Estimate</u>	<u>FY 2001 Estimate</u>	<u>FY 2002 Estimate</u>	<u>FY 2003 Estimate</u>	<u>FY 2004 Estimate</u>	<u>FY 2005 Estimate</u>	<u>To Complete</u>	<u>Total Program</u>
R0132 CNO Program Analysis and Evaluation										
TOTAL	185	109	301	307	313	317	319	333	CONT.	CONT.

Quantity of RDT&E Articles

(U) A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION: This project provides analytical support to the Chief of Naval Operations and the Secretary of the Navy in evaluation of overall balance within total Navy programs. This includes such tasks as: (a) evaluation of force capabilities and requirements; (b) analysis of effectiveness of systems under development; (c) Secretary of Defense directed independent cost and effectiveness analyses of major Navy programs; and (d) items of Congressional interest as they relate to Navy programs. Deliverables consist of formal, structured documents containing or leading to conclusions and/or recommendations as well as the development and maintenance of databases and models. The use of databases and models is driven by the need to objectively and continually assess the impact of reduced funding and/or force drawdown upon Navy programs. They provide Navy planners and decision makers with objective, empirical data with which to make determinations regarding program planning and evaluation of issues. The models funded by this account are the primary tools used to formulate program balance in the assessment process (particularly the Readiness, Support and Infrastructure Assessment and the Investment Balance Review). The analyses based on these models form the heart of the Investment Balance Review, allowing the Navy to formulate and cost-out alternative force structure, manpower, infrastructure and readiness programs.

(U) PROGRAM ACCOMPLISHMENTS AND PLANS:

1. FY 1998 ACCOMPLISHMENTS:

- (U) (\$185) Developed techniques for analysis of Navy Readiness requirements versus capabilities and to maintain the Aviation Readiness model and the Ships Resource-to-Readiness model.

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PROGRAM ELEMENT: 0605152N

PROJECT NUMBER: R0132

PROGRAM ELEMENT TITLE: Studies and Analysis Support, Navy

PROJECT TITLE: CNO Program Analysis and Evaluation

2. FY 1999 PLAN:

- (U) (\$101) Maintain the Aviation Readiness model and the Ships Resource-to-Readiness model.
- (U) (\$6) Conduct studies and analyses to support the Navy's Assessment process.
- (U) (\$2) Portion of extramural program reserved for Small Business Innovation Research assessment in accordance with 15 USC 638.

3. FY 2000 PLAN:

- (U) (\$246) Develop techniques for analysis of Navy Readiness requirements versus capabilities and to maintain the Aviation Readiness model and the Ships Resource-to-Readiness model.
- (U) (\$55) Conduct studies and analyses to support the Navy's Assessment process.

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PROGRAM ELEMENT: 0605152N

PROJECT NUMBER: R0132

PROGRAM ELEMENT TITLE: Studies and Analysis Support, Navy

PROJECT TITLE: CNO Program Analysis and Evaluation

(U) B. PROGRAM CHANGE SUMMARY

	<u>FY 1998</u>	<u>FY 1999</u>	<u>FY 2000</u>
(U) FY 1999 President's Budget:	198	304	308
(U) Appropriated Value:	0	-106	
(U) Adjustments from 1999 Pres. Budget:	-13	-195	-7
(U) FY 2000 President's Budget Submit:	185	109	301

CHANGE SUMMARY EXPLANATION:

(U) Funding: FY 1998 adjustment is due to SBIR (-12) thousand and FY 1998 update (-1) thousand. FY 1999 adjustment is due to Congressional reduction (-105) thousand and Contractor Advisory & Assistance Service (-90) thousand. FY 2000 adjustment is due to assessment for Acquisition Center of Excellence (-3) thousand and Non Pay inflation (-4) thousand.

(U) Schedule: Not applicable.

(U) Technical: Not applicable.

(U) C. OTHER PROGRAM FUNDING SUMMARY: Not applicable.

Related RDT&E

(U) P.E. 0605154N (Center for Naval Analysis)

(U) P.E. 0605873N (Marine Corps Program Wide Support)

(U) D. ACQUISITION STRATEGY: Not applicable.

(U) E. SCHEDULE PROFILE: Not applicable.

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EXHIBIT R-2a, FY 2000 RDT&E,N BUDGET PROJECT JUSTIFICATION SHEET

DATE: February 1999

BUDGET ACTIVITY: 6 **PROGRAM ELEMENT: 0605152N** **PROJECT NUMBER: R0133**
PROGRAM ELEMENT TITLE: Studies and Analysis Support, Navy **PROJECT TITLE: National Academy of Science/
Naval Studies Board**

(U) COST: (Dollars in Thousands)

<u>Project Number & Title</u>	<u>FY 1998 Budget</u>	<u>FY 1999 Budget</u>	<u>FY 2000 Estimate</u>	<u>FY 2001 Estimate</u>	<u>FY 2002 Estimate</u>	<u>FY 2003 Estimate</u>	<u>FY 2004 Estimate</u>	<u>FY 2005 Estimate</u>	<u>To Complete</u>	<u>Total Program</u>
R0133 National Academy of Science/Naval Studies Board										
TOTAL	1,720	1,121	2,034	2,071	2,136	2,167	2,294	2,394	CONT.	CONT.

Quantity of RDT&E Articles

(U) 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.

(U) PROGRAM ACCOMPLISHMENTS AND PLANS:

1. FY 1998 ACCOMPLISHMENTS:

- (U) (\$649) 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.
- (U) (\$1,071) Produced nine studies about the future of naval technology. Initiated two high payoff studies selected from proposals received from CNO and ASN (RD&A).

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DATE: February 1999

BUDGET ACTIVITY: 6

PROGRAM ELEMENT: 0605152N

PROJECT NUMBER: R0133

PROGRAM ELEMENT TITLE: Studies and Analysis Support, Navy

**PROJECT TITLE: National Academy of Science/
Naval Studies Board**

2. FY 1999 PLAN:

- (U) (\$755) 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.
- (U) (\$338) Produce investigations of significant importance to the Navy concerning technology of the future, selected from proposals received from CNO and ASN (RD&A).
- (U) (\$28) Portion of extramural program reserved for Small Business Innovation Research assessment in accordance with 15 USC 638.

3. FY 2000 PLAN:

- (U) (\$685) 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.
- (U) (\$1,349) Produce investigations of significant importance to the Navy concerning technology of the future, selected from proposals received from CNO and ASN (RD&A).

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PROGRAM ELEMENT: 0605152N

PROJECT NUMBER: R0133

PROGRAM ELEMENT TITLE: Studies and Analysis Support, Navy

**PROJECT TITLE: National Academy of Science/
Naval Studies Board**

(U) B. PROGRAM CHANGE SUMMARY

	<u>FY 1998</u>	<u>FY 1999</u>	<u>FY 2000</u>
(U) FY 1999 President's Budget::	1,822	2,365	2,351
(U) Appropriated Value:	0	1,823	
(U) Adjustments from 1999 Pres. Budget:	-102	-1,244	-317
(U) FY 2000 President's Budget Submit:	1,720	1,121	2,034

CHANGE SUMMARY EXPLANATION:

(U) Funding: FY 1998 adjustment are due to SBIR assessment (-\$51) thousand and (-\$51) thousand for Actual Update. FY 1999 adjustment is due to Revised Economic Assumptions (-\$4) thousand, CAAS (-\$698) thousand, Congressional Reduction (-\$542) thousand. FY 2000 adjustment is due to Non Pay Inflation (-\$29) thousand and Program Realignment (-\$288) thousand.

(U) Schedule: Not applicable.

(U) Technical: Not applicable.

(U) C. OTHER PROGRAM FUNDING SUMMARY: Not applicable.

Related RDT&E: Not applicable.

(U) P.E.

(U) D. ACQUISITION STRATEGY: Not applicable.

(U) E. SCHEDULE PROFILE: Not applicable.

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EXHIBIT R-2a, FY 2000 RDT&E,N BUDGET PROJECT JUSTIFICATION SHEET

DATE: February 1999

BUDGET ACTIVITY: 6

PROGRAM ELEMENT: 0605152N

PROJECT NUMBER: R0147

PROGRAM ELEMENT TITLE: Studies and Analysis Support, Navy

PROJECT TITLE: Operational Strategic and Tactical Effectiveness Analysis

(U) COST: (Dollars in Thousands)

<u>Project Number & Title</u>	<u>FY 1998 Budget</u>	<u>FY 1999 Budget</u>	<u>FY 2000 Estimate</u>	<u>FY 2001 Estimate</u>	<u>FY 2002 Estimate</u>	<u>FY 2003 Estimate</u>	<u>FY 2004 Estimate</u>	<u>FY 2005 Estimate</u>	<u>To Complete</u>	<u>Total Program</u>
R0147 Operational Strategic and Tactical Effectiveness Analysis										
TOTAL	303	166	458	469	477	484	489	509	CONT.	CONT.

Quantity of RDT&E Articles

(U) A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION: This project provides the Chief of Naval Operations and the Secretary of the Navy direct analyses of Navy policy, strategy acquisition, and program planning in meeting the following objectives: (a) producing study results impacting upon important programs/issues; (b) identifying and evaluating policy and strategy alternatives and doctrine; and (c) evaluating the capabilities of programmed forces to accomplish missions assigned to the Navy. Deliverables consist of formal, structured documents containing or leading to conclusions and/or recommendations as well as the development and maintenance of databases and models. This project directly supports and is critical for conducting the Navy's joint mission assessments.

(U) PROGRAM ACCOMPLISHMENTS AND PLANS:

1. FY 1998 ACCOMPLISHMENTS:

- (U) (\$263) Conducted reviews of the Capability Resource Allocation Display (CAPRAD) database and performed econometric/statistical analyses on the impact of changes resulting from downsizing and programmatic changes. Also updated and revalidated the Integrated Program Assessment System (IPAS) and other models in order to run these programs using revised allocation displays.
- (U) (\$40) Conducted studies and provided enhancements to Integrated Theater Engagement Model (ITEM), the primary tool for campaign analysis for Assessments and performed analysis of force structure requirements.

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DATE: February 1999

BUDGET ACTIVITY: 6

PROGRAM ELEMENT: 0605152N

PROJECT NUMBER: R0147

PROGRAM ELEMENT TITLE: Studies and Analysis Support, Navy

PROJECT TITLE: Operational Strategic and Tactical Effectiveness Analysis

2. FY 1999 PLAN:

- (U) (\$157) Conduct reviews of the CAPRAD database and perform econometric/statistical analyses on the impact of changes resulting from downsizing and programmatic changes. Also update and revalidate the IPAS and other models in order to run these programs using revised allocation displays.
- (U) (\$5) Conduct studies and provide enhancements to ITEM, the primary tool for campaign analysis for Assessments and perform analysis of force structure requirements.
- (U) (\$4) Portion of extramural program reserved for Small Business Innovation Research assessment in accordance with 15 USC 638.

3. FY 2000 PLAN:

- (U) (\$401) Conduct reviews of the CAPRAD database and perform econometric/statistical analyses on the impact of changes resulting from downsizing and programmatic changes. Also update and revalidate the IPAS and other models in order to run these programs using revised allocation displays.
- (U) (\$56) Conduct studies and provide enhancements to ITEM, the primary tool for campaign analysis for Assessments and perform analysis of force structure requirements.
- (U) (\$1) Assessments and perform analysis of force structure requirements.

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PROGRAM ELEMENT: 0605152N

PROJECT NUMBER: R0147

PROGRAM ELEMENT TITLE: Studies and Analysis Support, Navy

PROJECT TITLE: Operational Strategic and Tactical Effectiveness Analysis

(U) B. PROGRAM CHANGE SUMMARY

	<u>FY 1998</u>	<u>FY 1999</u>	<u>FY 2000</u>
(U) FY 1999 President's Budget:	303	464	470
(U) Appropriated Value:	0	161	
(U) Adjustments from 1999 Pres. Budget:	0	-298	-12
(U) FY 2000 President's Budget Submit:	303	166	458

CHANGE SUMMARY EXPLANATION:

(U) Funding: FY 1999 adjustments due to Revised Economic Assumption (-1) thousand, Contractor Advisory & Assistance Services (-137) and Congressional Reduction (-160) thousand. FY 2000 adjustments are due to assessment for Acquisition of Center of Excellence (-5) thousand and Non Pay Inflation (-7) thousand.

(U) Schedule: Not applicable.

(U) Technical: Not applicable.

(U) C. OTHER PROGRAM FUNDING SUMMARY: Not applicable.

Related RDT&E

(U) P.E. 0605154N (Center for Naval Analyses)

(U) P.E. 0605873N (Marine Corps Program Wide Support)

(U) D. ACQUISITION STRATEGY: Not applicable.

(U) E. SCHEDULE PROFILE: Not applicable.

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EXHIBIT R-2a, FY 2000 RDT&E,N BUDGET PROJECT JUSTIFICATION SHEET

DATE: February 1999

BUDGET ACTIVITY: 6

PROGRAM ELEMENT: 0605152N

PROJECT NUMBER: S2233

PROGRAM ELEMENT TITLE: Studies and Analysis Support, Navy

PROJECT TITLE: Naval Surface Warfare Studies

(U) COST: (Dollars in Thousands)

<u>Project Number & Title</u>	<u>FY 1998 Budget</u>	<u>FY 1999 Budget</u>	<u>FY 2000 Estimate</u>	<u>FY 2001 Estimate</u>	<u>FY 2002 Estimate</u>	<u>FY 2003 Estimate</u>	<u>FY 2004 Estimate</u>	<u>FY 2005 Estimate</u>	<u>To Complete</u>	<u>Total Program</u>
S2233 Naval Surface Warfare Studies										
TOTAL	1,516	1,551	1,483	2,195	1,564	1,467	1,520	2,684	CONT.	CONT.

Quantity of RDT&E Articles

(U) A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION: This project provides for analysis of the warfighting capability of Naval forces by examining specific selected numbers and mixes of surface combatants and other forces that are subjected to representative operational situations in a joint littoral environment. The U.S. strategic emphasis has shifted from global containment and warfighting to a global engagement and deference strategy with regional focus. As part of an overall effort at addressing future Naval force levels and capabilities, the Navy must assess the warfighting effectiveness of new operating concepts using different mixes of surface combatants operating in a littoral warfare environment and develop an investment strategy that supports the capabilities required. Required Operational Capabilities/Projected Operational Environment (ROC/POE) must be updated every two years or created for new ship classes. These ROC/POE's are vitally important in that mission requirements for ships drive equipment configurations, manning levels and associated shipboard accommodations, tailor ship and staff missions, capabilities, manning to new strategies, tactics, operational environments, and policies.

(U) PROGRAM ACCOMPLISHMENTS AND PLANS:

1. FY 1998 ACCOMPLISHMENTS:

- (U) (\$1,516) Continued analyses to identify force capabilities considering various force mixes. These studies addressed the warfighting and national security policy and strategy requirements for effective, flexible and cost-efficient Naval Surface Warfare Forces, including the numbers and mixes of surface combatants and other forces that are subjected to representative operational situations in a joint littoral environment. Measures of Effectiveness were used in characterizing Naval Surface Warfare capabilities for battle space dominance and for power projection. The results were applied to campaign scenarios and operational situations to scope, focus and interpret the analyses. The results of these analyses were applied to strategic planning and investment strategies for future Joint Littoral Warfare Naval Forces. Obligations were initiated in October 1997 and completed in September 1998.

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DATE: February 1999

BUDGET ACTIVITY: 6

PROGRAM ELEMENT: 0605152N

PROJECT NUMBER: S2233

PROGRAM ELEMENT TITLE: Studies and Analysis Support, Navy

PROJECT TITLE: Naval Surface Warfare Studies

2. FY 1999 PLAN:

- (U) (\$1,545) Continue analyses to identify force capabilities considering various force mixes. These studies will address the warfighting and national security policy and strategy requirements for effective, flexible and cost-efficient Naval Surface Warfare Forces, including new operational concepts, the numbers and mixes of surface combatants and other forces that are subjected to representative operational situations in a joint littoral environment. Measures of Effectiveness will be used in characterizing Naval Surface Warfare capabilities for battle space dominance and for power projection. The results will be applied to campaign scenarios and operational situations to scope, focus and interpret the analyses. The results of these analyses will be applied to strategic planning and investment strategies for future Joint Littoral Warfare Naval Forces. Revise ROC/POE instructions. Obligations initiated in October 1998 and will complete in September 1999.
- (U) (\$6) Portion of extramural program is reserved for Small Business Innovation Research assessment in accordance with 15 USC 638.

3. FY 2000 PLAN:

- (U) (\$1,483) Continue analyses to identify force capabilities considering various force mixes. These studies will address the warfighting and strategy requirements for effective, flexible and cost-effective Naval Surface Warfare Forces focused on the challenge of continuous operations in the littoral regions. Measures of Effectiveness will be used in characterizing Naval Surface Warfare capabilities for theater air dominance and precision land attack undergirded by maritime dominance. The results will be applied to campaign scenarios and operational situations to scope, focus and interpret the analyses. The results of these analyses will be applied to strategic planning and investment strategies for future Joint Littoral Warfare Naval Forces and directly support the DoN Assessment process. Revise ROC/POE instructions. Obligations will initiate October 1999 and complete September 2000.

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DATE: February 1999

BUDGET ACTIVITY: 6

PROGRAM ELEMENT: 0605152N

PROJECT NUMBER: S2233

PROGRAM ELEMENT TITLE: Studies and Analysis Support, Navy

PROJECT TITLE: Naval Surface Warfare Studies

(U) B. PROGRAM CHANGE SUMMARY

	<u>FY 1998</u>	<u>FY 1999</u>	<u>FY 2000</u>
(U) FY 1999 President's Budget:	1,559	2,586	2,776
(U) Appropriated Value:	1,951	2,586	
(U) Adjustment to FY1998 Appropriated Value/ (U) Adjustments from 1999 Pres. Budget:			
(a) Minor Pricing Adjustments	-435	-1,035	-1293
(U) FY 2000 President's Budget Submit:	1,516	1,551	1,483

CHANGE SUMMARY EXPLANATION:

(U) Funding: FY 1998 decrease reflects FY 1998 SBIR reduction of (-\$39) thousand, general pricing adjustments of (-\$396) thousand. FY 1999 decrease reflects Congressional cut (-\$1026) thousand and general pricing adjustments (-\$9) thousand. FY 2000 decrease reflects program rebalancing (-\$1000) thousand, and general pricing adjustments (-\$293) thousand.

(U) Schedule: Not applicable.

(U) Technical: Not applicable.

(U) C. OTHER PROGRAM FUNDING SUMMARY: Not applicable.

Related RDT&E: Not applicable.

(U) P.E.

(U) D. ACQUISITIONSTRATEGY: Not applicable.

(U) E. SCHEDULE PROFILE: Not applicable.

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EXHIBIT R-3, FY 2000 RDT&E,N COST ANALYSIS

DATE: February 1999

BUDGET ACTIVITY: 6

PROGRAM ELEMENT: 0605152N

PROJECT NUMBER: S2233

PROJECT TITLE: Naval Surface Warfare Studies

<u>Cost Categories:</u>	<u>Contract Method & Type</u>	<u>Performing Activity & Location</u>	<u>Total Prior Yrs Cost</u>	<u>FY 1999 Cost</u>	<u>FY 1999 Award Date</u>	<u>FY 2000 Cost</u>	<u>FY 2000 Award Date</u>	<u>Cost to Complete</u>	<u>Total Cost</u>	<u>Target Value of Contract</u>
Subtotal Product Development			0	0		0		CONT.	CONT.	
Remarks										
Research Analysis Support	WR	Various	1411	635		983		1395	CONT.	
	RCP	NSWC/Dahlg	1723	416		500		638	CONT.	
	Comp	Various	2375	500		0		162	CONT.	
Subtotal Support			5509	1551		1483		2195	CONT.	
Remarks										
Subtotal Test & Evaluation			0	0		0		0	0	0
Remarks										
Subtotal Management			0	0		0		0	0	0
Remarks										
Total Cost			5509	1551		1483		2195	CONT	

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EXHIBIT R-2a, FY 2000 RDT&E,N BUDGET PROJECT JUSTIFICATION SHEET

DATE: February 1999

BUDGET ACTIVITY: 6 **PROGRAM ELEMENT: 0605152N** **PROJECT NUMBER: S2354**
PROGRAM ELEMENT TITLE: Studies and Analysis Support, Navy **PROJECT TITLE: Expeditionary Warfare Studies**

(U) COST: (Dollars in Thousands)

<u>Project Number & Title</u>	<u>FY 1998 Budget</u>	<u>FY 1999 Budget</u>	<u>FY 2000 Estimate</u>	<u>FY 2001 Estimate</u>	<u>FY 2002 Estimate</u>	<u>FY 2003 Estimate</u>	<u>FY 2004 Estimate</u>	<u>FY 2005 Estimate</u>	<u>To Complete</u>	<u>Total Program</u>
S2354 Expeditionary Warfare Studies										
TOTAL	0	0	485	479	478	477	488	500	CONT.	CONT.

Quantity of RDT&E Articles

(U) A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION: This project provides for analysis of the warfighting capability of Expeditionary forces, with emphasis on the joint littoral environment, by examining specific selected numbers and mixes of amphibious combatants, mine warfare forces and other forces that are subjected to represent operational situations in a joint littoral environment. The U.S. strategic emphasis has shifted from global containment and warfighting to a global engagement and deference strategy with regional focus. As part of an overall effort at addressing future Naval force levels and capabilities, the Navy must assess the warfighting effectiveness of new operational concepts using different mixes of expeditionary combatants operating in a littoral warfare environment and develop an investment strategy that supports the capabilities required.

(U) PROGRAM ACCOMPLISHMENTS AND PLANS:

1. FY 1998 ACCOMPLISHMENTS: Not applicable.

2. FY 1999 PLAN:

- (U) None. Dedicated Expeditionary Warfare Studies efforts begin in FY2000.

3. FY 2000 PLAN:

- (U) (\$485) Initiate efforts for dedicated analyses of Expeditionary Warfare Studies. Continue analysis to identify force capabilities considering various force mixes. These studies will address the warfighting and national security policy and strategy requirements for effective, flexible and cost-efficient Naval Expeditionary Warfare Forces, including the numbers and mixes of expeditionary combatants, to include mine warfare forces and other forces that are subjected to represent operational situations in a joint littoral environment. Measures of Effectiveness will be used in characterizing Naval Expeditionary Warfare applied to strategic planning and investment strategies for future Joint Littoral Warfare Naval Forces. Obligations will initiate in October 1999 and complete in September 2000.

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DATE: February 1999

BUDGET ACTIVITY: 6

PROGRAM ELEMENT: 0605152N

PROJECT NUMBER: S2354

PROGRAM ELEMENT TITLE: Studies and Analysis Support, Navy

PROJECT TITLE: Expeditionary Warfare Studies

(U) B. PROGRAM CHANGE SUMMARY

	<u>FY 1998</u>	<u>FY 1999</u>	<u>FY 2000</u>
(U) FY 1999 President's Budget:	0	491	489
(U) Appropriated Value:	0	491	
(U) Adjustments from 1999 Pres. Budget:			
(a) Minor Pricing Adjustments	0	-491	-4
(U) FY 2000 President's Budget Submit:	0	0	485

CHANGE SUMMARY EXPLANATION:

(U) Funding: FY 1999 decrease reflects Congressional cut (-\$491) thousand. FY 2000 decrease reflects general pricing adjustments (-\$4) thousand.

(U) Schedule: Not applicable.

(U) Technical: Not applicable.

(U) C. OTHER PROGRAM FUNDING SUMMARY: Not applicable.

Related RDT&E: Not applicable.

(U) P.E.

(U) D. ACQUISITION STRATEGY: Not applicable.

(U) E. SCHEDULE PROFILE: Not applicable.

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DATE: February 1999

BUDGET ACTIVITY: 6

PROGRAM ELEMENT: 0605152N

PROJECT NUMBER: W2092

PROGRAM ELEMENT TITLE: Studies and Analysis Support, Navy

PROJECT TITLE: Naval Aviation Studies

(U) COST: (Dollars in Thousands)

<u>Project Number & Title</u>	<u>FY 1998 Budget</u>	<u>FY 1999 Budget</u>	<u>FY 2000 Estimate</u>	<u>FY 2001 Estimate</u>	<u>FY 2002 Estimate</u>	<u>FY 2003 Estimate</u>	<u>FY 2004 Estimate</u>	<u>FY 2005 Estimate</u>	<u>To Complete</u>	<u>Total Program</u>
W2092 Naval Aviation Studies										
TOTAL	2,816	1,852	3,482	2,310	2,351	2,390	2,430	2,471	CONT.	CONT.

Quantity of RDT&E Articles

(U) A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION: This project supports studies over a wide range of naval aviation issues that support the ongoing Joint Strike Assessment (JSA) guidelines. Results provide a basis for recommendations to the Chief of Naval Operations concerning major policy, planning, and acquisition program decisions. This effort is a management initiative, which will allow allocation of study resources in a timely manner according to priorities. This ongoing program will continue to leverage more detailed program specific analysis in order to gain insight in acquisition of various weapon systems and their impact on force structure, manning levels, operational readiness and Carrier Air Wing effectiveness. This program will also support various Analysis of Alternatives (AOA) Studies.

(U) PROGRAM ACCOMPLISHMENTS AND PLANS:

1. FY 1998 ACCOMPLISHMENTS:

- (U) (\$139) Completed analyses of TACAIR and weapons effectiveness, including tradeoffs of development and acquisition alternatives utilizing the WEPTAC M&S facility.
- (U) (\$500) Completed the phase two effort on Naval Aviation Training Decision Support System (NATDSS). This effort provided a prototype model, which facilitated analysis of the factors, which influence the flight hour program.
- (U) (\$188) Continued studies to support JSA issues for the current and follow-on cycle.

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DATE: February 1999

BUDGET ACTIVITY: 6

PROGRAM ELEMENT: 0605152N

PROJECT NUMBER: W2092

PROGRAM ELEMENT TITLE: Studies and Analysis Support, Navy

PROJECT TITLE: Naval Aviation Studies

- (U) (\$500) Initiated a two year effort to determine the mission requirements for a Multi-mission Maritime Aircraft (MMA) as a potentially common follow-on to the E-6A/B, EP-3, P-3, C-130 and C-9 aircraft. This study will lead to a Milestone 0 decision.
- (U) (\$72) Initiated Carrier Air Wing (CVW) capabilities analysis effort. Developed the scenarios and updated database to facilitate the evaluation of the limiting factors and potential capacity in projecting combat capability from the CV.
- (U) (\$160) Initiated a low level, multi-year effort to develop a consistent methodology to quantify current and estimate future vertical lift mission effectiveness. Evaluated H-60 series aircraft to conduct the Airborne Mine Countermeasures mission.
- (U) (\$330) Completed CSA feasibility study.
- (U) (\$175) Conducted analyses of Department of Navy Short Take-Off Vertical Aircraft Landing (DON STOVAL, STOVAL) survivability, technology and hardware issues for UAV marinization on carriers and L-class ships, cost benefit for land based SAR outsourcing, and aviator retention.
- (U) (\$750) Conducted analyses of N88 UAV CONOPS development using CIRPAS Pelican aircraft as a surrogate UAV, to develop UAV models to guide the generation of CONOPS and to support planning for future Fleet Battle Experiments.
- (U) (\$2) Provided support for general aviation related AOAs and studies with NAVAIR and OPNAV.

2. FY 1999 PLAN:

- (U) (\$375) Continue analyses of TACAIR modernization alternatives. Perform sensitivity analyses utilizing M&S tools as required.
- (U) (\$50) Continue studies to support JSA issues for the current and follow-on cycle. Initiate evaluation of warfare planning factors.
- (U) (\$850) Complete studies to determine the mission requirements for a MMA as a potentially common follow-on to the E-6A/B, EP-3, P-3, C130 and C-9 aircraft. This study will support a Milestone 0 decision.

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DATE: February 1999

BUDGET ACTIVITY: 6

PROGRAM ELEMENT: 0605152N

PROJECT NUMBER: W2092

PROGRAM ELEMENT TITLE: Studies and Analysis Support, Navy

PROJECT TITLE: Naval Aviation Studies

- (U) (\$300) Continue Carrier Air Wing (CVW) capabilities analysis effort. Begin the evaluation of the limiting factors and potential capacity in projecting combat capability from the CVW.
- (U) (\$277) Provide support for general aviation related AOAs and studies within NAVAIR and OPNAV.

3. FY 2000 PLAN:

- (U) (\$500) Continue Carrier Air Wing (CVW) capabilities analysis effort. Evaluate the limiting factors and potential capacity in projecting combat capability from the Aircraft Carrier Battle Group (CVBG).
- (U) (\$200) Prepare a naval aviation developmental plan that will provide for the future operational capabilities required to support network centric warfare including future vertical lift requirements.
- (U) (\$499) Conduct studies to explore the potential utilization of high speed weapons with initial operating capability in FY2010 to FY2015. Study is to establish operational requirements and conduct preliminary analysis for this family of weapons.
- (U) (\$500) Continue studies to support JSA issues for the current and follow-on cycle.
- (U) (\$200) Begin studies to evaluate concepts of operations for strike missions.
- (U) (\$500) Begin studies to explore alternatives for Advanced Weapons Initiatives.
- (U) (\$1000) Begin studies to develop requirements for EA-6B Follow-on.
- (U) (\$83) Provide support for general aviation related AOAs and studies within NAVAIR and OPNAV.

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EXHIBIT R-2a, FY 2000 RDT&E,N BUDGET PROJECT JUSTIFICATION SHEET

DATE: February 1999

BUDGET ACTIVITY: 6

PROGRAM ELEMENT: 0605152N

PROJECT NUMBER: W2092

PROGRAM ELEMENT TITLE: Studies and Analysis Support, Navy

PROJECT TITLE: Naval Aviation Studies

(U) B. PROGRAM CHANGE SUMMARY

	<u>FY 1998</u>	<u>FY 1999</u>	<u>FY 2000</u>
(U) FY 1999 President's Budget:	1,916	3,518	3,041
(U) Appropriated Value:	1,916	3,518	
(U) Adjustments from 1999 Pres. Budget:	+900	-1,666	+441
(U) FY 2000 President's Budget Submit:	2,816	1,852	3,482

CHANGE SUMMARY EXPLANATION:

(U) Funding: FY-98 reflects a net increase of +\$900 thousand which includes a -\$28 thousand reduction for Small Business Innovative Research (SBIR) assessment, an increase of +\$728 thousand for a below threshold reprogramming for UAV CONOPS development, and an increase of +\$200 thousand for an in-house realignment for CSA Program initiatives. FY-99 reflects a net decrease of -\$1666 which includes a -\$1600 thousand reduction as a Congressional adjustment and -\$66 thousand reduction for economic adjustments. The net increase of +\$441 thousand in FY2000 represents an increase of +499 thousand for a hypersonic missile study, -\$5 thousand reduction for baseline issues, and -\$53 thousand reduction for economic adjustments.

(U) Schedule: N/A

(U) Technical: N/A

(U) C. OTHER PROGRAM FUNDING SUMMARY: Not applicable.

(U) D. ACQUISITION STRATEGY: Not applicable

(U) E. SCHEDULE PROFILE: Not applicable.

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EXHIBIT R-3, FY 2000 RDT&E,N COST ANALYSIS

DATE: February 1999

BUDGET ACTIVITY: 6

PROGRAM ELEMENT: 0605152N

PROJECT NUMBER:

W2092

PROJECT TITLE:

Naval Aviation Studies

<u>Cost Categories:</u>	<u>Contract Method & Type</u>	<u>Performing Activity & Location</u>	<u>Total Prior Yrs Cost</u>	<u>FY 1999 Cost</u>	<u>FY 1999 Award Date</u>	<u>FY 2000 Cost</u>	<u>FY 2000 Award Date</u>	<u>Cost to Complete</u>	<u>Total Cost</u>	<u>Target Value of Contract</u>
Subtotal Product Development			0	0		0		CONT.	CONT.	
Remarks										
Miscellaneous	Misc	Misc	2613	1642		1972				
Concept Studies	TBD	TBD				1500				
Subtotal Support			2613	1642		3472		CONT.	CONT.	
Remarks										
Subtotal Test & Evaluation			0	0		0		CONT.	CONT.	
Remarks										
Miscellaneous	Misc	Misc	203	210		10				
Subtotal Management			203	210		10				
Remarks										
Total Cost			2816	1852		3482		CONT.	CONT.	

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