

CLASSIFICATION:

UNCLASSIFIED

EXHIBIT R-2, RDT&E Budget Item Justification							DATE: February 2000			
APPROPRIATION/BUDGET ACTIVITY RESEARCH DEVELOPMENT TEST & EVALUATION, NAVY/BA-7					R-1 ITEM NOMENCLATURE Program Element (PE) Name and No. MARITIME TECHNOLOGY/0708730N					
COST (\$ in Millions)		FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	Cost to Complete	Total Cost
Total PE Cost		18.392	21.431	9.366	15.166	7.519	0.000	0.000	0.000	71.874
MARITECH/S2466		18.392	21.431	9.366	15.166	7.519	0.000	0.000	0.000	71.874
Quantity of RDT&E Articles		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

A. Mission Description and Budget Item Justification

MARITECH was initiated by DARPA in 1994 as part of the President's National Shipbuilding Initiative to enhance the commercial viability of the U.S shipbuilding industry and preserve that section of the defense industrial base. The MARITECH Advanced Shipbuilding Enterprise (ASE) is a Navy program that builds on the progress made by the original DARPA MARITECH program. The mission of the program is to manage and focus national research funding on technologies that will reduce the cost of naval ships and will enhance U.S. commercial shipbuilding competitiveness. MARITECH ASE combines DARPA's MARITECH and the Navy's National Shipbuilding Research Program (NSRP). Industry has expanded on the long standing collaborative network of the NSRP to form an organizational structure to execute the research projects accomplished under MARITECH ASE.

The industry has developed a landmark long range Strategic Investment Plan which will guide MARITECH ASE investments. This Strategic Investment Plan provides a framework to guide collaborative research and development among all segments of the U.S. ship construction and repair industry, educational and research institutions, and Government. The objective is to assist the industry in achieving significant reduction in the cost and time required for both commercial and Navy ship construction, conversion, and repair. The recommended investment portfolio includes major initiatives that tie the strategic vision to proposed industry research through collaborative R&D. The major initiatives include: Shipyard Production Process Technologies, Business Process Technologies, Product Design and Material Technologies, Systems Technologies, Facilities and Tooling. Additionally, several critical success factors were found to cut across all of the major initiatives. These "Crosscut Initiatives" include Education and Training, Technology Transfer, Organizational Change, Environmental Protection and Human Resources.

MARITECH ASE has a number of distinguishing features. It is: a) led by an industry collaboration; b) guided by an industry developed Strategic Investment Plan; c) a structured analytical process for cost/benefit decisions; d) maintaining market led benchmarking and metrics to track industry progress; e) promoting collaboration with the research and acquisition communities; f) fostering cooperation with ship owners, designers, regulators, suppliers and other industry stakeholders; and g) leveraging work accomplished by other industries/countries.

The collaboration of major shipyards that lead the program are: Electric Boat Corporation, Bath Iron Works, Newport News Shipbuilding, Atlantic Marine, Litton Ingalls Shipbuilding, Friede/Goldman/Halter Marine, Litton Avondale, NASSCO, Todd Pacific and Cascade General.

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<p>FY 1999 ACCOMPLISHMENTS: (18,392)</p> <ul style="list-style-type: none"> - (U) (490K) Established and staffed a co-located multi-agency MARITECH ASE support office (NAVSEA, MARAD, ONR). - (U) (452K) Established, developed and executed a Joint Funding Agreement with the shipbuilding industry collaboration using other transactions authority. - (U) (13,839K) Worked with the industry collaboration to award cost-shared technology development projects in accordance with the Strategic Investment Plan (SIP) covering the major initiative areas (MIA) of Shipyard Production Process Technologies, Business Process Technologies, Product Design and Material Technologies, Systems Technologies, Facilities and Tooling and the cross-cut initiatives which include Education and Training, Technology Transfer, Organizational Change, Environmental Protection and Human Resource Optimization. - (U) (275K) Supported Government and university participation on the industry-led major initiative teams. Participants promoted technology transfer between the industry and the R&D community and acted as technology scouts for the industry. - (U) (503K) Transferred ongoing research projects from DARPA MARITECH and the National Shipbuilding Research Program to the MARITECH ASE program in order to consolidate management resources. Supported existing Cooperative Agreements including agents such as MARAD, ONR, NSWC, and NRL to continue and close out the remaining DARPA projects. - (U) (250K) Performed an annual review and updated the Strategic Investment Plan. - (U) (200K) Performed a benchmarking study to assess the competitive position of the industry. - (U) (2,383K) As directed by Congress, provided funds to ONR to develop advanced concepts to mitigate marine oil spills caused by tanker casualties. <p>FY 2000 PLAN: (21,431K)</p> <ul style="list-style-type: none"> - (U) (10,371K) Continue technology development projects in the six major initiative areas selected from Research Announcement One (13 projects). - (U) (8,305K) Commence technology development projects in the six major initiative areas selected from Research Announcement Two. - (U) (1,500K) Continue utilization of industry-led major initiative teams to perform the execution and annual review of the SIP, including technology transfer among the Navy, the shipbuilding industry, academia, equipment and material suppliers and the R&D community. - (U) (500K) Operate multi-agency support office to facilitate technology transfer between Government and industry. - (U) (255K) Complete close out of DARPA MARITECH and NSRP projects that transferred to MARITECH ASE. - (U) (500K) Conduct economic technology investment analysis and business model study. 		

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APPROPRIATION/BUDGET ACTIVITY RESEARCH DEVELOPMENT TEST & EVALUATION, NAVY/BA-7	R-1 ITEM NOMENCLATURE Program Element (PE) Name and No. MARITIME TECHNOLOGY/0708730N																					
<p>FY 2001 PLAN: (9,366K)</p> <ul style="list-style-type: none"> - (U) (7,038K) Continue technology development projects in the six major initiative areas selected from Research Announcement One (13 projects). - (U) (328K) Commence technology development projects in the six major initiative areas selected from Research Announcement Two. - (U) (1,500K) Continue utilization of industry-led major initiative teams to perform the execution and annual review of the SIP, including technology transfer among the Navy, the shipbuilding industry, academia, equipment and material suppliers and the R&D community. - (U) (500K) Operate multi-agency support office to facilitate technology transfer between Government and industry. <p>B. Program Change Summary:</p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 50%;"></th> <th style="width: 15%; text-align: center;">FY 1999</th> <th style="width: 15%; text-align: center;">FY 2000</th> <th style="width: 15%; text-align: center;">FY 2001</th> </tr> </thead> <tbody> <tr> <td>FY 2000 President's Budget Submit:</td> <td></td> <td style="text-align: center;">19.681</td> <td style="text-align: center;">19.382</td> </tr> <tr> <td>Appropriated Value:</td> <td style="text-align: center;">19.000</td> <td style="text-align: center;">21.681</td> <td></td> </tr> <tr> <td>Adjustment to FY 1999 Appropriated Value/FY 2000 President's Budget:</td> <td style="text-align: center;">-0.608</td> <td style="text-align: center;">-0.250</td> <td style="text-align: center;">-10.016</td> </tr> <tr> <td>FY 2001 PRES Budget Submit:</td> <td style="text-align: center;">18.392</td> <td style="text-align: center;">21.431</td> <td style="text-align: center;">9.366</td> </tr> </tbody> </table> <p>Funding: FY 99: Program transferred from DARPA (MARITIME TECHNOLOGY, PE 0603746E) - \$19.0M; -\$608K for congressional undistributed reductions; F00: -\$250K minor pricing adjustments. FY 01: -\$594K minor pricing adjustments, -\$9,542K for program restructure.</p> <p>Technical: Not applicable.</p> <p>C. Other Program Funding Summary (Related RDT&E): DARPA P.E. 0603746E (MARITECH) - MARITECH ASE follows the original DARPA MARITECH program. Work remaining under the original DARPA program will transition to the MARITECH ASE program.</p> <p>D. Acquisition Strategy: R&D projects will be solicited and awarded by an industry collaboration represented by the Executive Control Board (ECB) of the National Shipbuilding Research Program (NSRP). The Navy has entered into an agreement with the industry collaboration using "other transactions."</p>				FY 1999	FY 2000	FY 2001	FY 2000 President's Budget Submit:		19.681	19.382	Appropriated Value:	19.000	21.681		Adjustment to FY 1999 Appropriated Value/FY 2000 President's Budget:	-0.608	-0.250	-10.016	FY 2001 PRES Budget Submit:	18.392	21.431	9.366
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FY 2001 PRES Budget Submit:	18.392	21.431	9.366																			

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DATE:

February 2000

APPROPRIATION/BUDGET ACTIVITY

RESEARCH DEVELOPMENT TEST & EVALUATION, NAVY/BA-7

R-1 ITEM NOMENCLATURE

Program Element (PE) Name and No. MARITIME TECHNOLOGY/0708730N

E. Schedule Profile:

FY 99

FY 00

FY 01

Engineering Milestones: N/A

T&E Milestones: N/A

Contract Milestones:

2Q Solicit Proposals for Technology Develop. Projects
*3Q Sign "Other Transactions" Agreement w/Industry
3Q Evaluate Proposals
4Q Initiate 2nd Technology Development Solicitation

Other Program Events:

2Q Staff Multi-Agency Program Office
3Q Initiate New Technology Development Projects
3Q Begin Update of Benchmarking Study/SIP
4Q Sponsor Ship Production Symposium
4Q SponsorTechnology Advisory Forum

2Q Award 2nd Set-Tech. Develop. Projects
3Q Begin Update of Benchmarking Study/SIP
4Q Initiate 3rd Technology Develop. Solicitation

1Q Award 3rd Set-Tech Develop. Projects
3Q Begin Update of Benchm'kg Study/SIP
4Q Initiate 4th Tech Develop. Solicitation

**Other Transactions" Agreement signed April 9, 1999 moving it from 2Q99 into 3Q99 with no financial impact

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Exhibit R-3 Cost Analysis (page 1)								DATE: February 2000				
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT			PROJECT NAME AND NUMBER						
RDT&E, N			MARITIME Technology-PE 0708730N			MARITECH/S2466						
Cost Categories (Tailor to WBS, or System/Item Requirements)	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 99 Cost	FY 99 Award Date	FY 00 Cost	FY 00 Award Date	FY 01 Cost	FY 01 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Technology Development	SS OT*	ECB NSRP**	0.000	15.178	3Q99	20.606	2Q00	8.696	2Q01	21.345	65.825	65.825
Technology Development	Reqn***	TRW/Schafer Corp.		0.446		0.400		0.420		0.840	2.106	2.106
Technology Development	SS	PSU/APL		0.075		0.100		0.100		0.200	0.475	0.475
Subtotal Product Development			0.000	15.699		21.106		9.216		22.385	68.406	68.406
Remarks: * Other Transactions IAW 10 USC 2371 ** Executive Control Board of the National Shipbuilding Research Program *** Procure under GSA Schedule												
Gov't Support Serv/Other Agencies	MIPR/WR	Various	0.000	2.401	3Q99	0.058	2Q00	0.050	2Q01	0.100	2.609	3.802
Support Services Revolving Accts	MIPR/WR	Various	0.000	0.292	2Q99	0.267	2Q00	0.100	2Q01	0.200	0.859	1.066
Subtotal Support			0.000	2.693		0.325		0.150		0.300	3.468	4.868
Remarks:												

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Exhibit R-3, Project Cost Analysis
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Exhibit R-3 Cost Analysis (page 2)								DATE: February 2000				
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT			PROJECT NAME AND NUM						
RDT&E, N			MARITIME Technology-PE 0708730N			MARITECH/S2466						
Cost Categories (Tailor to WBS, or System/Item Requirements)	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 99 Cost	FY 99 Award Date	FY 00 Cost	FY 00 Award Date	FY 01 Cost	FY 01 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Subtotal T&E			0.000	0.000		0.000		0.000		0.000	0.000	
Remarks:												
Contract Support Services												
Subtotal Management			0.000	0.000		0.000		0.000		0.000	0.000	
Remarks:												
Total Cost			0.000	18.392		21.431		9.366		22.685	71.874	71.874
Remarks:												

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Exhibit R-3, Project Cost Analysis
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