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Exhibit R-2, RDT&E Budget Item Justification	Date: February 1999
APPROPRIATION/BUDGET ACTIVITY RDT&E,N/BA-5	R-1 ITEM NOMENCLATURE 0604528N/SWATH Oceanographic Ship

COST (\$ in Millions)	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	Cost to Complete	Total Cost
Total P.E. Cost	45.0									45.0
22457 SWATH Oceanographic Ship	45.0									45.0
Quantity of RDT&E Articles & cost	1 – 45.0									1 – 45.0

A. Mission Description and Budget Item Justification
 (U) Mission Description: This program supports innovative development and construction of one prototype Small Waterplane Area Twin Hull (SWATH) general purpose oceanographic research vessel. Its mission is to conduct general oceanographic research in coastal and deep ocean areas. Congress originally appropriated in the FY97 DOD Appropriation Act \$45 million of Shipbuilding and Conversion, Navy (SCN) funds for the SWATH AGOR as a “plus-up” to the President’s budget to replace the R/V MOANA WAVE, a Navy owned ship operated by the University of Hawaii. Congress transferred the funds to FY98 RDTE in the FY 1998 DOD Appropriation Act. The SWATH AGOR will be the first Navy-owned oceanographic research SWATH. The industry design team will use new SWATH technologies that have not been proven in the design of an oceanographic SWATH ship of the size and range being considered (up to 2000+ long tons). The ship will be a developmental effort in that it will incorporate many new untried and unproven design concepts. If successful in developing this vessel, the Navy will be able to utilize the state-of-the-art concepts in developing a future larger upscale generation of oceanographic vessels. The technology developed for the SWATH AGOR will have applications for other Navy Missions planned for future development, such as Surface Combatants, mine countermeasure ships and SIGINT surveillance ships. This program is a streamline acquisition program and has minimized applicable regulations by taking advantage of Section 845 of the National Defense Act for FY94, as amended by Section 804 of the National Defense Act for FY97.

(U) Program Accomplishments and Plans:

1. (U) FY 1998 ACCOMPLISHMENTS:
 - (U) (\$1.0) Commence Phase I -Ship Definitization. Joint Industry-Government WIPTs will optimize desired ship capabilities within a specific cost cap; essentially as a pure Cost as an Independent Variable (CAIV) effort. Work required during Phase I will include finalization of ship requirements, performance and ship spec development, integrated management plan, logistic support concept, Test and Evaluation Plan, life cycle cost estimates, and a Phase II budget breakdown. At the end of Phase I the ship will be detailed in sufficient detail to exercise a firm fixed price option for Phase II.
 - (U) (\$40.5) Commence Phase II - Detail Design and Construction. During this phase, detail design will be completed. Model test may be performed, if necessary, to validate the ship’s capabilities and predicted performance. The Industry Team will proceed with procurement, construction, equipment, test and ship trials, mission, demonstrations, fitting out, post-shakedown availability, and ship delivery.
 - (U) (\$3.5) - Program Technical and Management Support
2. (U) FY 1999 PLAN: Not Applicable.
3. (U) FY 2000 PLAN: Not Applicable.

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B. Program Change Summary:

	<u>FY 1998</u>	<u>FY 1999</u>	<u>FY 2000</u>
FY 1999 President's Budget:	45.0		
Appropriated Value:	45.0		
Adjustment to FY 1998 Appropriated Value/ FY 1999 President's Budget:			
FY 2000 PRES Budget Submit:	45.0		

Funding: Appropriation code 1301 assigned to denote FY1998/2001 RDT&E funding.

Schedule: Not Applicable.

Technical: Not Applicable.

C. Other Program Funding Summary: Not Applicable.

<u>FY 1998</u>	<u>FY 1999</u>	<u>FY 2000</u>	<u>FY 2001</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>	<u>To Complete</u>	<u>Total Cost</u>
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D. Acquisition Strategy: N00024-98-92304 Firm Fixed Price (FFP) Agreement signed with Lockheed Martin for Phase I on 5 May 98 for \$1,000,000. Only Phase I tasks are part of the agreement. The planned Phase II tasks will be developed during Phase I and exercised as an option.

E. Schedule Profile:

	<u>FY 1998</u>	<u>FY 1999</u>	<u>FY 2000</u>
Program	Phase I		
Milestones	Trades/Concept Cost Estimate		

<u>FY 1998</u>	<u>FY 1999</u>	<u>FY 2000</u>
Develop Performance		

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	Specifications		
	Finalize Requirements Document		
	Major Decision II (MDII) Approval to enter Phase II		
Engineering Milestones	Phase I Contract/Detail Design	Phase II Construction of AGOR SWATH	Continue Phase II Construction of AGOR SWATH
T&E Milestones	TBD	TBD	
Contract Milestones	Establish desired operational capabilities	Award Phase II Option	
	Major Decision I (MDI) - approve development strategy Develop Source Selection Plan		
	Issue Request for Proposal (RFP)		
	Award Phase I		

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Exhibit R-3 Cost Analysis		Date: February 1999
APPROPRIATION/BUDGET ACTIVITY RDT&E,N/BA-5	PROGRAM ELEMENT NAME AND NUMBER 0604528N/SWATH Oceanographic Ship	PROJECT NAME AND NUMBER SWATH Oceanographic Ship/22457

Cost Categories (Tailor to WBS, or System/Item Requirements)	Contract Method & Type	Performing Activity & Location	Total <u>PYs</u> Cost	FY99 Cost	FY99 Award Date	FY00 Cost	FY00 Award Date			Cost To Complete	Total Cost	Target Value of Contract
Design Development	FFP	Lockheed Martin Sunnyvale, CA	1.0							0	1.0	1.0
AGOR SWATH Construction	FFP	TBD	40.5							0	40.5	40.5
Subtotal Product Development			41.5							0	41.5	41.5

Remarks:

Development Support Equipment												
Software Development												
Training Development												
Integrated Logistics Support												
Configuration Management												
Technical Data												
GFE												
Subtotal Support												

Remarks:

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Cost Categories (Tailor to WBS, or System/Item Requirements)	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY99 Cost	FY99 Award Date	FY00 Cost	FY00 Award Date				Cost To Complete	Total Cost	Target Value of Contract
Developmental Test & Evaluation													
Operational Test & Evaluation													
Tooling													
GFE													
Subtotal T&E													
Remarks:													
Contractor Engineering Support													
Government Engineering Support													
Program Management Support	Misc	Misc	3.5								0	3.5	3.5
Program Management Personnel													
Travel													
Labor (Research Personnel)													
Overhead													
Subtotal Management			3.5								0	3.5	3.5
Remarks:													
Total Cost			45.0								0	45.0	45.0
Remarks:													

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Exhibit R-3 Project Cost Analysis
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