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CLASSIFICATION:

EXHIBIT R-2, RDT&E Project Justification							DATE: FEBRUARY 2003	
APPROPRIATION/BUDGET ACTIVITY RDT&E,N / BA-7	PROGRAM ELEMENT NUMBER AND NAME 0305149N/COBRA JUDY				PROJECT NUMBER AND NAME K4021/COBRA JUDY REPLACEMENT (CRJ) SYSTEM ENGINEERING			
COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Project Cost	0.000	50.858	69.369	81.000	57.500	50.000	51.100	52.200
RDT&E Articles Qty	0	0	0	0	0	0	0	0

(U) MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

A. (U) Mission Description

COBRA Judy is a program that has been transferred from the Air Force to the Navy, per an Office of the Secretary of Defense (OSD) Milestone A Acquisition Decision Memorandum dated 6 August 2002. Current FY03 funding represents half of the total budget.

COBRA Judy funds will replace the current U.S. Naval Ship (USNS) Observation Island which has become unsustainable and due to leave service no later that 2012. This program will fund the development of a single ship-based radar suite for world wide technical data collection against ballistic missiles in flight. Prior funding provided instrumentation of quality radar data and imaging, detailing threat assessment of ballistic missile development, testing and range augmentation and monitored or verified specific aspects of United States treaties with other countries. To avoid vulnerabilities in our national security it is imperative we replace the current capability of COBRA Judy in a timely manner to prevent any potential gap in coverage. Prior studies have indicated that a ship-based radar replacement is the most timely and cost effective solution.

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Exhibit R-2, RDTEN Project Justification
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B. Accomplishments/Planned Program

	FY 02	FY 03	FY 04	FY 05
Accomplishments/Effort/Subtotal Cost	0.000	0.000	0.000	0.000
RDT&E Articles Quantity	0	0	0	0

Accomplishments: AIR FORCE FUNDS TRANSFERRED FROM PE 031315F.

- Successfully completed Milestone A Defense Acquisition Board (DAB), establishing Cobra Judy Replacement as an ACAT-1D program.
- Established Cobra Judy Replacement Program Office within Navy PEO(IWS) / IWS 2.0 Radar Systems Directorate.
- Developed key draft acquisition documentation for Milestone B staffing.
- Initiated ship selection studies for appropriate, cost-effective platform.
- Air Force completed consolidation and transfer of Program Element funds / TOA to United States Navy .

	FY 02	FY 03	FY 04	FY 05
Accomplishments/Effort/Subtotal Cost	0.000	25.797	27.000	10.000
RDT&E Articles Quantity	0	0	0	0

DESIGN AND RISK REDUCTION

Planned:

- Complete acquisition and contracting strategy for radars, ship, and integration.
- Award key contracts for S-band and X-band radars
- Complete critical designs for prime mission (X-band and S-band) radars

	FY 02	FY 03	FY 04	FY 05
Accomplishments/Effort/Subtotal Cost	0.000	0.000	22.500	25.000
RDT&E Articles Quantity				

SHIPBUILDING / CONVERSION

Planned:

- Complete ship selection studies
- Contract for ship and integration
- Initiate ship construction

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B. Accomplishments/Planned Program (Cont.)

	FY 02	FY 03	FY 04	FY 05
Accomplishments/Effort/Subtotal Cost	0.000	18.666	14.319	6.480
RDT&E Articles Quantity	0	0	0	0

SYSTEM ENGINEERING

Planned:

- Requirements development and analysis
- Development of specifications
- Complete designs for non-prime mission equipment (C4I, data handling, classified mission equipment)

	FY 02	FY 03	FY 04	FY 05
Accomplishments/Effort/Subtotal Cost	0.000	6.395	5.550	5.520
RDT&E Articles Quantity	0	0	0	0

PROGRAM MANAGEMENT SUPPORT

Planned:

- Program planning, assessment of technical alternatives, risk identification and mitigation.
- Cost and schedule development and execution
- Complete milestone documentation in preparation for Milestones B/C
- Complete Milestones B/C

	FY 02	FY 03	FY 04	FY 05
Accomplishments/Effort/Subtotal Cost	0.000	0.000	0.000	34.000
RDT&E Articles Quantity	0	0	0	0

RADAR SYSTEM PRODUCTION

Planned:

- Initiate radar production
- Begin radar system integration detail design

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C. (U) PROGRAM CHANGE SUMMARY:					
Funding:		FY 2002	FY 2003	FY 2004	FY 2005
Previous President's Budget:		0.000	0.000	0.000	0.000
Current BES/President's Budget: (FY04/05 Pres Controls)		0.000	50.858	69.369	81.000
Total Adjustments		0.000	50.858	69.369	81.000
Summary of Adjustments					
PROGAM TRANSFER		0.000	51.061	71.000	81.000
Economic Assumptions		0.000	-0.203	-1.631	
Subtotal		0.000	50.858	69.369	81.000
<p>Funding for the Cobra Judy Replacement Program was established via the Department of Defense funding adds in FY02. The Air Force (prior to transfer of program to Navy) was notified after submission of the President Budget Request (PBR).</p> <p>Schedule: Not Applicable.</p> <p>Technical: Not Applicable.</p>					

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D. OTHER PROGRAM FUNDING SUMMARY:

<u>Line Item No. & Name</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	To <u>Complete</u> Continuing	Total <u>Cost</u> Continuing
<p>Element Managers for additional details.</p>										

E. ACQUISITION STRATEGY:

(U) The preliminary acquisition strategy calls for leveraging ongoing Navy Ballistic Missile Defense (BMD) radar development, updating existing user interface/communications/data handling equipment designs from a similar operational unit, and purchasing and integrating the mission equipment aboard an appropriate merchant-class hull. System design will be accomplished using in-hand technologies and commercial standards to lower schedule risk and produce a product with the lowest possible life-cycle cost. Shipbuilding/conversion and integration efforts will be competitively procured. Existing Navy radar contracts may be modified to include development of two mission radars, pending approval of the sole-source approach.

F. MAJOR PERFORMERS: N/A

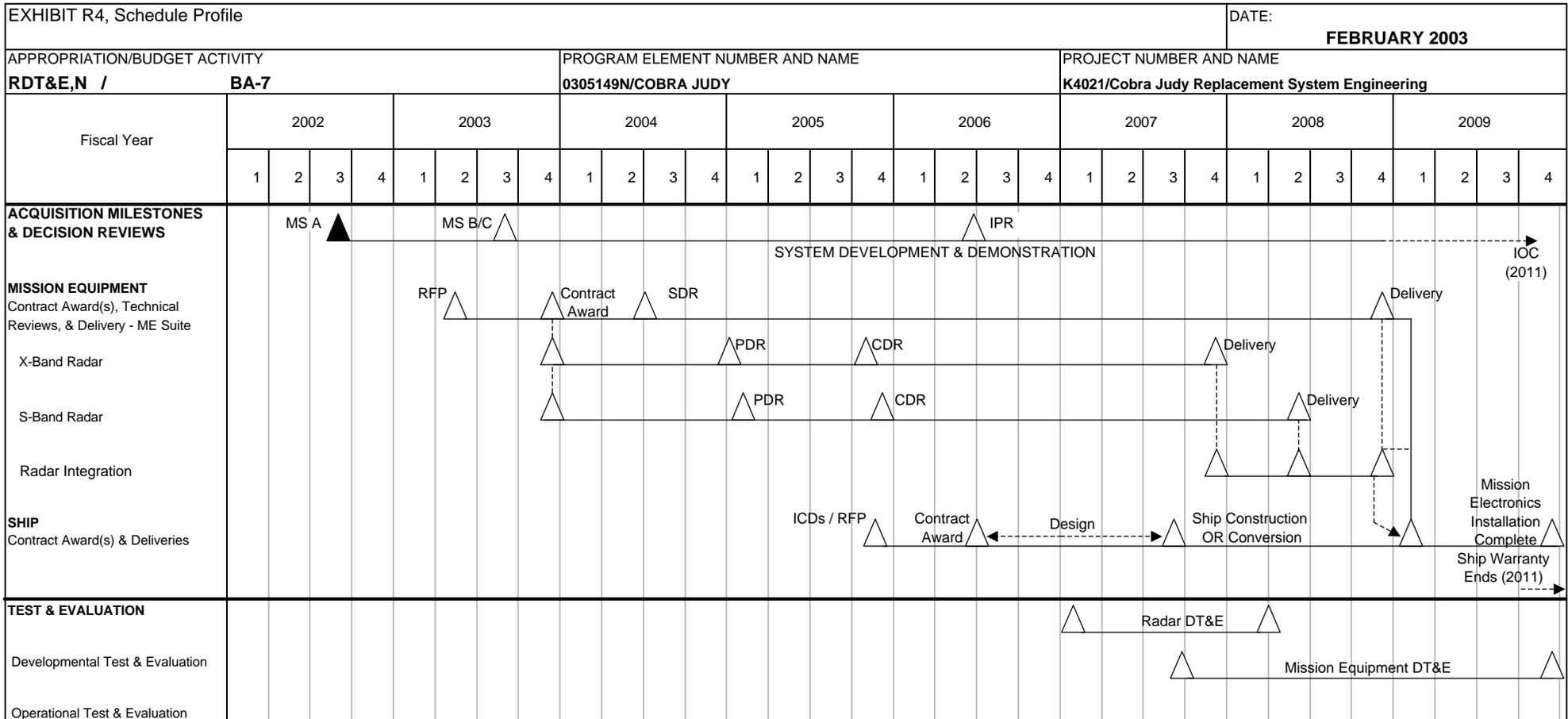
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Exhibit R-3 Cost Analysis (page 1)								DATE: FEBRUARY 2003				
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT NAME AND NUMBER			PROJECT NUMBER AND NAME						
RDT&E, N / BA - 7			0305149N/COBRA JUDY			K4021/Cobra Judy Replacement System Engineering						
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 03 Cost	FY 03 Award Date	FY 04 Cost	FY 04 Award Date	FY 05 Cost	FY 05 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Product Development												
Design and Risk Reduction	* TBD	* TBD	0.000	25.797	09/03	27.000	TBD	10.000	TBD	Continuing	Continuing	TBD
Shipbuilding / Conversion	TBD	Various (TBD)	0.000	0.000	N/A	22.500	TBD	25.000	TBD	Continuing	Continuing	TBD
System Engineering	WR/RCP	Various	0.000	10.402		14.319		6.480		Continuing	Continuing	N/A
	WR	NSWC DD		2.154								
	CPFF	JHU/APL		2.200	02/03							
	MIPR	MIT/LL		3.000	02/03							
	WR	SPAWAR		0.250								
	WR	NRL		0.225								
	WR	NSWC PHD		0.435								
Radar System Production	TBD	Various (TBD)	0.000	0.000	N/A	0.000	N/A	34.000	TBD	Continuing	Continuing	N/A
Test and Evaluation			0.000	0.000		0.000		0.000		Continuing	Continuing	
Subtotal Product Development			0.000	44.463		63.819		75.480		Continuing	Continuing	
Remarks: * Competitive procurement anticipated in FY03 post Milestones B/C.												
Support / Management Services	GSA	Technology Svcs Corp		0.800	02/03							0.800
	GSA	Computer Science Corp		2.150								2.150
	GSA	Systems Planning Anal		1.900								1.900
	GSA	BAE Systems		1.250								1.250
	CPFF	DTI		0.295	02/03							0.295
	TBD	Various				5.550		5.520				11.070
												0.000
Subtotal Support			0.000	6.395		5.550		5.520		0.000		17.465
Remarks: Increased FY03 Management Services Support due to Milestones B/C documentation preparation.												
Total Cost				50.858		69.369		81.000		Continuing	Continuing	

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* Not required for Budget Activities 1, 2, 3, and 6

LEGEND			
CDR	Critical Design Review	MS	Milestone
DT&E	Developmental Test and Evaluation	PDR	Preliminary Design Review
ICD	Interface Control Document	RFP	Request for Proposal
IOC	Initial Operational Capability	SDR	System Design Review
IPR	Interim Progress Review		

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Exhibit R-4, Schedule Profile
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Exhibit R-4a, Schedule Detail						DATE: FEBRUARY 2003		
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT				PROJECT NUMBER AND NAME			
RDT&E,N / BA-7	0305149N/COBRA JUDY				K4021/CRJ SYS ENGR			
Schedule Profile	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
ACQUISITION MILESTONES & DECISION REVIEWS								
Milestone A (MS A)	3Q							
Milestones B/C (MS B/C)		3Q						
Interim Progress Review (IPR)					2Q			
System Development & Demonstration	3Q-4Q	1Q-4Q	1Q-4Q	1Q-4Q	1Q-4Q	1Q-4Q	1Q-4Q	1Q-4Q
MISSION EQUIPMENT								
Request for Proposal (RFP)		2Q						
Contract Award(s)		4Q						
System Design Review (SDR)			2Q					
Delivery							4Q	
X-Band Radar								
Contract Award		4Q						
Preliminary Design Review (PDR)				1Q				
Critical Design Review (CDR)				4Q				
Delivery						4Q		
S-Band Radar								
Contract Award		4Q						
Preliminary Design Review (PDR)				1Q				
Critical Design Review (CDR)				4Q				
Delivery							2Q	
Radar Integration								
Delivery						4Q	2Q, 4Q	
SHIP								
Interface Control Documents (ICDs) / Request for Proposal (RFP)				4Q				
Contract Award					3Q			
Ship Design					3Q-4Q	1Q-3Q		
Ship Construction or Conversion						3Q		
Delivery								1Q
Mission Electronics Installaion Completion								4Q
TEST AND EVALUATION								
Radar Developmental Test & Evaluation (DT&E)						1Q-4Q	1Q	
Mission Equipment Developmental Test& Evaluation (DT&E)						3Q-4Q	1Q-4Q	1Q-4Q

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Exhibit R-4a, Schedule Detail
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