

UNCLASSIFIED

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 than 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.

R-1 SHOPPING LIST - Item No.

200

Exhibit R-2, RDTEN Project Justification
(Exhibit R-2, page 1 of 8)

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APPROPRIATION/BUDGET ACTIVITY RDT&E, N /	PROGRAM ELEMENT NUMBER AND NAME 0305149N/COBRA JUDY	PROJECT NUMBER AND NAME K4021/Cobra Judy Replacement System Engineering																	
B. Accomplishments/Planned Program																			
<table border="1" style="width: 100%; border-collapse: collapse;"><thead><tr><th style="width: 30%;"></th><th style="width: 15%;">FY 02</th><th style="width: 15%;">FY 03</th><th style="width: 15%;">FY 04</th><th style="width: 15%;">FY 05</th></tr></thead><tbody><tr><td>Accomplishments/Effort/Subtotal Cost</td><td style="text-align: center;">0.000</td><td style="text-align: center;">0.000</td><td style="text-align: center;">0.000</td><td style="text-align: center;">0.000</td></tr><tr><td>RDT&E Articles Quantity</td><td style="text-align: center;">0</td><td style="text-align: center;">0</td><td style="text-align: center;">0</td><td style="text-align: center;">0</td></tr></tbody></table>						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
	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															
<div style="border: 1px solid black; padding: 5px;"><p>Accomplishments: AIR FORCE FUNDS TRANSFERED FROM PE 031315F.</p><ul style="list-style-type: none">- 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 .</div>																			
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RDT&E Articles Quantity	0	0	0	0															
<div style="border: 1px solid black; padding: 5px;"><p>DESIGN AND RISK REDUCTION</p><p>Planned:</p><ul style="list-style-type: none">- 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</div>																			
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	FY 02	FY 03	FY 04	FY 05															
Accomplishments/Effort/Subtotal Cost	0.000	0.000	22.500	25.000															
RDT&E Articles Quantity																			
<div style="border: 1px solid black; padding: 5px;"><p>SHIPBUILDING / CONVERSION</p><p>Planned:</p><ul style="list-style-type: none">- Complete ship selection studies- Contract for ship and integration- Initiate ship construction</div>																			

R-1 SHOPPING LIST - Item No. 200

UNCLASSIFIED

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B. Accomplishments/Planned Program (Cont.)																			
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	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															
<div style="border: 1px solid black; padding: 5px;">SYSTEM ENGINEERING Planned:<ul style="list-style-type: none">- Requirements development and analysis- Development of specifications- Complete designs for non-prime mission equipment (C4I, data handling, classified mission equipment)</div>																			
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Accomplishments/Effort/Subtotal Cost	0.000	6.395	5.550	5.520															
RDT&E Articles Quantity	0	0	0	0															
<div style="border: 1px solid black; padding: 5px;">PROGRAM MANAGEMENT SUPPORT Planned:<ul style="list-style-type: none">- 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</div>																			
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	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															
<div style="border: 1px solid black; padding: 5px;">RADAR SYSTEM PRODUCTION Planned:<ul style="list-style-type: none">- Initiate radar production- Begin radar system integration detail design</div>																			

R-1 SHOPPING LIST - Item No. 200

UNCLASSIFIED

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EXHIBIT R-2, RDT&E Project Justification				DATE:	
				FEBRUARY 2003	
APPROPRIATION/BUDGET ACTIVITY		PROGRAM ELEMENT NUMBER AND NAME		PROJECT NUMBER AND NAME	
RDT&E,N / BA-7		0305149N/COBRA JUDY		K4021/Cobra Judy Replacement System Engineering	
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
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).					
Schedule:					
Not Applicable.					
Technical:					
Not Applicable.					

R-1 SHOPPING LIST - Item No. 200

UNCLASSIFIED

Exhibit R-2, RD TEN Project Justification
(Exhibit R-2, page 4 of 8)

UNCLASSIFIED

CLASSIFICATION:

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APPROPRIATION/BUDGET ACTIVITY RDT&E,N / BA-7			PROGRAM ELEMENT NUMBER AND NAME 0305149N/COBRA JUDY			PROJECT NUMBER AND NAME K4021/Cobra Judy Replacement System Engineering			

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
									Continuing	Continuing

Element Managers for additional details.

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

R-1 SHOPPING LIST - Item No. 200

UNCLASSIFIED

UNCLASSIFIED

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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: * Competetive 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	

R-1 SHOPPING LIST - Item No. 200

UNCLASSIFIED

Exhibit R-3, Project Cost Analysis
(Exhibit R-3, page 6 of 8)

UNCLASSIFIED

EXHIBIT R4, Schedule Profile																											DATE: FEBRUARY 2003					
APPROPRIATION/BUDGET ACTIVITY										PROGRAM ELEMENT NUMBER AND NAME										PROJECT NUMBER AND NAME												
RDT&E,N / BA-7										0305149N/COBRA JUDY										K4021/Cobra Judy Replacement System Engineering												
Fiscal Year	2002				2003				2004				2005				2006				2007				2008				2009			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4				
ACQUISITION MILESTONES & DECISION REVIEWS																																
MISSION EQUIPMENT Contract Award(s), Technical Reviews, & Delivery - ME Suite																																
X-Band Radar																																
S-Band Radar																																
Radar Integration																																
SHIP Contract Award(s) & Deliveries																																
TEST & EVALUATION																																
Developmental Test & Evaluation																																
Operational Test & Evaluation																																

* 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-4a, Schedule Detail						DATE: FEBRUARY 2003		
APPROPRIATION/BUDGET ACTIVITY RDT&E,N / BA-7	PROGRAM ELEMENT 0305149N/COBRA JUDY				PROJECT NUMBER AND NAME 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 Contruccion 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

R-1 SHOPPING LIST - Item No. 200

UNCLASSIFIED

Exhibit R-4a, Schedule Detail
(Exhibit R-4a, page 8 of 8)