### **CLASSIFICATION:**

EXH	BIT R-2, RDT	&E Budget	Item Justifica	ation				DATE:				
		·							JU	NE 2001		
APPROPRIATION/BUDGET ACTIVITY						R-1 ITEM NOMENCLATURE						
RESEARCH DEVELOPMENT TEST & EVALUA	TION, NAVY	/	BA-7			0204152N, E-2 SQUADRONS						
	Prior										Total	
COST (\$ in Millions)	Year Cost	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	Cost to Complete	Program	
Total PE Cost	56.584	38.694	44.890	20.583								
		*	****									
E0463 - (E-2C Improvements)		16.172	23.218	7.052								
		**	***									
E2321 - (E-2 Radar Modernization)	56.584	22.522	21.672	13.531								
Quantity of RDT&E Articles	14											

<sup>\*</sup> The FY2000 budget reflects a \$5.400 million Congressional add for the UHF Electronically Scanned Antenna (UESA) executed under (E2806) which has been decreased by \$.030 million for Congressional undistributed reductions and a \$3.000 million Congressional add for the Follow-on Advanced Support Aircraft (ASA) executed under (E2805) which has been decreased by \$.041 million for Congressional undistributed reductions.

### (U) A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

E-2C Improvements provides pre-planned product improvements for the evolution of E-2C airborne warning system capabilities in support of naval warfare command and control requirements. It has previously funded developments for the modification/replacement of selected weapon replaceable assemblies of current installed subsystems. This has resulted in a new capability configuration referred to as Group II aircraft. The program has developed a Mission Computer Upgrade (MCU), applying on-going developments in data processing and target detection, which will relieve current bottlenecks in signal and processing. The MCU will permit incorporation of additional functional capabilities to satisfy evolving operational requirements, e.g., Cooperative Engagement Capability (CEC), Satellite Communications (SATCOM), and permits the evolutionary growth of Cruise Missile Defense (CMD) capability.

<sup>\*\*</sup> The FY2000 budget reflects a \$12.000 million Congressional add for RMP/MCU Upgrade Development executed under (E2804) which has been decreased by \$.357 million for Congressional undistributed reductions.

<sup>\*\*\*</sup> The FY2001 budget reflects a \$15.000 million Congressional add for RMP Littoral Surveillance for the E-2C which will be executed under E2978, which has been decreased by \$0.540 million for Congressional undistributed reductions.

<sup>\*\*\*\*</sup> The FY2001 budget reflects Congressional Adds for Eight Blade Composite Propeller (\$4.000 million), Middleware Technology and Advanced Processing Buiilds (\$5.000 million), Improved Composite Rotordome (\$2.000 million), and NCW Development, Test and Evaluation in Support of Naval Fires Network Demo (\$6.000 million) which will be executed under E2975, E2976, E2979, and E2977 respectively.

## **CLASSIFICATION:**

	EXHIBIT R-2, RDT&E Budget Item Justification		DATE:
			JUNE 2001
APPROPRIATION/BU	DGET ACTIVITY	R-1 ITEM NOMENCLATURI	E
RDT&E, N /	BA-7	0204152N, E-2 SQUADRO	NS
and requirements in areas: participation  The Radar Moderniz primary sensor of the integrated are sp substantially improve battlefield awareness demonstrated in group FY2002 followed by statement requirements.	r evaluation of technology for new emergent systems and subsystems. This initiative allows for dicluding Cruise Missile Defense, littoral warfare, combat identification, and Single Integrated Air Pi in exercises to assess capabilities against emerging threats; identify deficiencies; identification of zation Program (RMP) is a ground and flight prototype test demonstration and risk mitigation of mile E-2C Weapon system to provide a definitive littoral surveillance capability integral to the Navy's face-time adaptive processing (STAP), electronically scanning array (ESA), solid state transmitter, and overland performance, enhancing all current required mission areas while simultaneously control is provided by this improved airborne early warning system will substantially contribute to the development in FY1999 and will be flight tested in FY2001 through FY2003. The P.E. will be a phased E&MD for RMP, with phase I Littoral Surveillance beginning in FY2003 followed by phaents.  N FOR BUDGET ACTIVITY: This program is funded under OPERATIONAL SYSTEMS DEVELOR	cture as well as parts and syst candidate solutions; and grountliple technologies. It initiates Theater Air Missile Defense (, and high dynamic range digit ributing to the emerging TAMI elopment of a single integrated utilized for RMP pre-engineer use II pre-planned product imp	stems obsolescence. Emphasis will be upon the following und/airborne demonstration of the identified technologies.  Is the application of new radar technologies to modernize the (TAMD) Integrated Warfare Architecture. Key technologies to tal receivers. The resulting detection system will provide a D mission requirements. The impact of the dominant d air picture. These technologies and resultant equipment ring and manufacturing development (Pre-E&MD) FY2001 - provement (P3 I) which will meet the full JTAMD mission needs

R-1 SHOPPING LIST - Item No. 181

**UNCLASSIFIED** 

#### CLASSIFICATION:

	EXHIBIT R-2a, RDT&E Project Justification											
PROPRIATION/BUDGET ACTIVITY PROGRAM ELEMENT NUMBER AND NAME PROJECT NUMBER AND NA												
RDT&E, N / BA-7	<b>DT&amp;E, N / BA-7</b> 0204152N, E-2 SQUADRONS											
	Prior										Total	
COST (\$ in Millions)	Year Cost	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	Cost to Complete	Program	
		*	**									
Project Cost		16.172	23.218	7.052								
RDT&E Articles Qty 14												

<sup>\*</sup> The FY2000 budget reflects a \$5.400 million Congressional add for the UHF Electronically Scanned Antenna (UESA) executed under (E2806) which has been decreased by \$.030 million for Congressional undistributed reductions and a \$3.000 million Congressional add for the Follow-on Advanced Support Aircraft (ASA) executed under (E2805), which has been decreased by \$.041 million for Congressional undistributed reductions.

(U) A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION: E-2C Improvements provides pre-planned product improvements for the evolution of E-2C airborne weapon system capabilities in support of naval warfare command and control requirements. It has previously funded developments for the modification/replacement of selected weapon replaceable assemblies of current installed subsystems. This has resulted in a new baseline capability configuration referred to as Group II aircraft. The program has developed a Mission Computer Upgrade (MCU), applying on-going developments in data processing and target detection, which will relieve current bottlenecks in signal and data processing. The MCU will permit incorporation of additional functional capabilities to satisfy evolving operational requirements, e.g., Cooperative Engagement Capability (CEC), Satellite Communications (SATCOM), and permits the evolutionary growth of a Cruise Missile Defense (CMD) Capability.

Funding provides for evaluation of technology for new emergent systems and subsystems. This initiative allows for data collection and the evaluation of new technologies in the context of emerging missions and requirements including Cruise Missile Defense, Ballistic Missile Defense, littoral warfare, combat indentification, and Single Integrated Air Picture as well as parts and systems obsolescence. Emphasis will be upon the following areas: participation in exercises to assess capabilities against emerging threats; identify deficiencies: identification of candidate solutions; and ground/airborne demonstrations of the identified technologies.

#### (U) PROGRAM ACCOMPLISHMENTS AND PLANS:

- 1. FY 2000 ACCOMPLISHMENTS:
  - (U) (\$4.004) Completed MCU DT-IIC.
  - (U) (\$2.959) Initiated Advanced Support Aircraft (ASA) Study.
  - (U) (\$5.370) Initiated UHF Electronically Scanned Antenna (UESA) Integration.
  - (U) (\$3.839) Completed MCU TECHEVAL/OPEVAL.

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<sup>\*\*</sup> The FY2001 budget reflects Congressional Adds for Eight Blade Composite Propeller (\$4.000 million), Middleware Technology and Advanced Processing Buiilds (\$5.000 million), Improved Composite Rotordome (\$2.000 million), and NCW Development, Test and Evaluation in Support of Naval Fires Network Demo (\$6.000 million) which will be executed under E2975, E2976, E2976, E2979, and E2977 respectively.

#### CLASSIFICATION:

	EXHIBIT R-2a, RDT&E Project Justification		DATE:
			JUNE 2001
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NA	AME
RDT&E, N / BA-7	0204152N, E-2 SQUADRONS	E0463, E-2C IMPROVEMEN	TS

### 2. FY 2001 PLANS:

- (U) (\$6.272) Collect Sensor Data. Down Select Infra Red and Multi Source Integration Technologies. Perform Analysis and Requirements Generation for Future Engineering Change Proposals (ECPs) for E-2C.
- -(U) (\$1.916) Improved Composite Rotordome (E2979). Analyze composite radome options for the UESA and support composite UESA radome analysis.
- (U) (\$4.790) Middleware Technology & Advanced Processing Builds (E2976). Perform ADA to C++ conversion of E-2C FCI software, analysis of applicability of Middleware technology to future E-2C software configurations, and support Middleware Study and ADA code conversion.
- (U) (\$5.847) NCW Development (E2977). Develop Tactical Dissemination Module, support Prototype USS Coronado, install S-Band Phased Array Antenna, support Program Development, and support Limited Objective Experiments and Fleet Battle Experiment India.
- (U) (\$3.880) Eight Blade Composite Propeller (E2975). Provide Flight and Ground Test for C-2/E-2 aircraft and Integration Support.
- (U) (\$0.513) Portion of extramural program reserved for Small Business Innovation Research assessment in accordance with 15USC 68.

#### 3. FY 2002 PLANS:

- (U) (\$1.768) Continue Analysis and Requirements Generation for Future ECPs for E-2C.
- (U) (\$1.983) Support MSI Phase I Flight Test Evaluation for E-2C.
- (U) (\$1.000) Develop Advanced Middleware Software for Operational Flight Program Portability for E-2C.
- (U) (\$1.500) Support Fleet Battle Group Interoperability Testing and Evaluation for E-2C.
- (U) (\$0.400) Develop E-2C Joint Mission Planning System (JMPS) software.
- (U) (\$0.300) Develop and evaluate ALQ-217 database.
- (U) (\$0.100) Provide Tactical Aircraft Mission Planning System (TAMPS) support.

### **CLASSIFICATION:**

EXI	HIBIT R-2a, RDT&E I	Project Justif	ication		DATE:
					JUNE 2001
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELE	MENT NUMBE	R AND NAME	PROJECT NUMBER AND N	AME
RDT&E, N / BA-7	0204152N, E-2	SQUADRONS		E0463, E-2C IMPROVEMEN	NTS
(U) B. PROGRAM CHANGE SUMMARY:					
(0) B. I ROOKAW CHANGE SOMMAKT.					
	FY2000	FY2001	FY2002		
(U) FY 2001 President's Budget:	12.379	6.444	6.335		
(U) Adjustments from the President's Budget:	3.793	16.774	0.717		
(U) FY 2002 President's Budget Submit:	16.172	23.218	7.052		

#### CHANGE SUMMARY EXPLANATION:

(U) Funding: The FY 2000 net increase of \$3.793 million consist of a \$3.839 million reprogramming from APN to R&D for MCU support and a \$.064 increase for reprioritization of requirements offset by a \$.059 million decrease for a Small Business Innovation Research assessment, \$.048 million decrease for a Congressional Recission, and a \$.003 million decrease for reprioritization of requirements within the Navy. The FY 2001 net increase of \$16.774 million consist of Congressional Adds for Eight Blade Composite Propeller (\$4.000 million), Middleware Technology and Advanced Processing Builds (\$5.000 million), Improved Composite Rotordome (\$2.000 million), NCW Development, Test and Evaluation in Support of Naval Fires Network Demo (\$6.000 million) offset by a \$.164 million decrease for Congressional Reduction, \$.011 million decrease for reprioritization of requirements within the Navy, and \$.051 million decrease for Congressional Recission. The FY 2002 net increase of \$.717 million consists of \$.800 million increase for Realignment of Support Costs offset by a \$.033 million decrease for

reprioritization of requirements within the Navy and a \$.051 million decrease for economic assumptions.

(U) Schedule: Not Applicable.

(U) Technical: Not Applicable.

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## CLASSIFICATION:

EX	HIBIT R-2a, RDT&E Pr	oject Justification		DATE:	
A DDD ODDIATION/DUDOST A OTIVITY	DDOODAMA	THE MENT AND MADED AND MANE	DDO IEOT NII IMBED	AND MANE	JUNE 2001
APPROPRIATION/BUDGET ACTIVITY		ELEMENT NUMBER AND NAME	PROJECT NUMBER		
RDT&E, N / BA-7	0204152N, E	-2 SQUADRONS	E0463, E-2C IMPRO	VEMENTS	
(U) C. OTHER PROGRAM FUNDING SUMM  Line Item No. & Name  APN 1/E-2C (LI #10 &11)  APN 5/E-2C (LI #35)  APN 6/E-2C (LI #48)  Related RDT&E  (U) 0603658N (Ship Self Defense, CEC)  (U) D. ACQUISITION STRATEGY: Not Ap  (U) E. SCHEDULE PROFILE:	FY 2000 FY 2001 381.264 314.709 71.485 42.095 11.218 16.98	FY 2002 FY 2003 FY 2004 278.937 14.636 21.711	FY 2005 FY 2006	FY 2007	To Complete Total Cost
(U) Program Milestones		FY 2001  3Q/01 MCU MSIII Infra Red Search & Track (IRST) Demo	FY 2002	FY 2003	TO COMPLETE
(U) Engineering Milestones		Lasar Radar (LADAR) Demo Multi Source/Multi Sensor Integration			
(U) T&E Milestones	2Q/00 MCU DT-IIC 3Q/00 MCU DT-IID/TECHEV 4Q/00 MCU OPEVAL	Ground Demo AL			
(U) Contract Milestones		4Q/01 MCU FRP			

## CLASSIFICATION:

(Tailor to WBS, or System/Item Method								DATE:			
APPROPRIATION/BUDGET ACTIVITY  RDT&E, N / BA-7  Cost Categories Control (Tailor to WBS, or System/Item Meth-									JUNE 2001		
Cost Categories Control (Tailor to WBS, or System/Item Methods)		PROGRAM EL	EMENT			PROJECT NU	JMBER AND	NAME			
(Tailor to WBS, or System/Item Method		0204152N, E2	SQUADRON	S		E0463, E-2C		ENTS			
Poguromonte) 18 Tur		I	Total PY s Cost	FY 01 Cost	FY 01 Award Date	FY 02 Cost	FY 02 Award Date		Cost to Complete	Total Cost	Target Value of Contract
	PIF GAC. NY/FL		157.460	Cost	Date	Cost	Date		Complete	157.460	
Hardware/Software Dev CEC/MCU SS/C	/		12.194							12.194	
	PFF GAC, NY/FL		13.998							13.998	<u> </u>
Hardware/Software Dev. Misc MCUSS/C	, -		1.021							1.021	1.02
Hardware/Software Dev Prior Yr Eft	GAC, NY/FL	-	254.800							254.800	254.80
Hardware/Software Dev C/CPI			201.000			4.745	10/01			4.745	
Hardware/Software Dev SS/CF				4.950	02/01					4.950	4.95
Hardware/Software Dev TBD	DRS San Die	go. CA		0.500	11/00					0.500	0.50
Hardware/Software Modification-ICR SS/CF		3-, -		1.980	02/01					1.980	1.98
Hardware/Software TBD	Rolls Royce/H	Hamilton Std		2.500	05/01					2.500	2.50
Hardware/Software - JMPS/TAMPS C/CPI	FF PMA-233					0.700	12/01			0.700	0.70
Subtotal Product Development			439.473	9.930		5.445			0.000	454.848	454.84
Remarks:											
					T	T	T				I
Government Eng. Spt WX/F	- ,	PAX RIVER, MD	13.261							13.261	
Government Eng. Spt WX/F Government Eng. Spt - Prior Yr Eft WX/F	RC NAWCAD, F	PAX RIVER, MD	58.800							58.800	
Government Eng. Spt WX/F Government Eng. Spt - Prior Yr Eft WX/F Government Eng. Spt (AIR 4.2) - MCU WX/F	RC NAWCAD, F	,	58.800 0.397							58.800 0.397	
Government Eng. Spt WX/F Government Eng. Spt - Prior Yr Eft WX/F Government Eng. Spt (AIR 4.2) - MCU WX/F Government Eng. Spt - ASA/UESA C/CP	RC NAWCAD, F RC NAWCAD, F PFF Classified	PAX RIVER, MD	58.800 0.397 5.520							58.800 0.397 5.520	5.52
Government Eng. Spt WX/F Government Eng. Spt - Prior Yr Eft WX/F Government Eng. Spt (AIR 4.2) - MCU WX/F Government Eng. Spt - ASA/UESA C/CP Government Eng. Spt - ASA MIPR	RC NAWCAD, F RC NAWCAD, F PFF Classified NRL, Wash, I	PAX RIVER, MD PAX RIVER, MD D.C.	58.800 0.397				1000			58.800 0.397 5.520 0.600	5.52
Government Eng. Spt WX/F Government Eng. Spt - Prior Yr Eft WX/F Government Eng. Spt (AIR 4.2) - MCU WX/F Government Eng. Spt - ASA/UESA C/CP Government Eng. Spt - ASA MIPR Government Eng. Spt - Improvements WX/R	RC NAWCAD, F RC NAWCAD, F PFF Classified NRL, Wash, I RC NAWCAD, PA	PAX RIVER, MD PAX RIVER, MD D.C.	58.800 0.397 5.520			0.904			Continuing	58.800 0.397 5.520 0.600 Continuing	5.52
Government Eng. Spt WX/F Government Eng. Spt - Prior Yr Eft WX/F Government Eng. Spt (AIR 4.2) - MCU WX/F Government Eng. Spt - ASA/UESA C/CP Government Eng. Spt - ASA MIPR Government Eng. Spt - Improvements WX/R Government Eng. Spt-JMPS/TAMPS WX/R	RC NAWCAD, F RC NAWCAD, F PFF Classified NRL, Wash, I RC NAWCAD, PA RC PMA-233	PAX RIVER, MD PAX RIVER, MD D.C. AX, MD	58.800 0.397 5.520		4400	0.904 0.100			Continuing	58.800 0.397 5.520 0.600 Continuing 0.100	5.52
Government Eng. Spt WX/F Government Eng. Spt - Prior Yr Eft WX/F Government Eng. Spt (AIR 4.2) - MCU WX/F Government Eng. Spt - ASA/UESA C/CP Government Eng. Spt - ASA MIPR Government Eng. Spt - Improvements WX/R Government Eng. Spt-JMPS/TAMPS WX/R Government Eng. Spt WX/R	RC NAWCAD, F RC NAWCAD, F PFF Classified NRL, Wash, I RC NAWCAD, PA RC PMA-233 RC NSWC (Vario	PAX RIVER, MD PAX RIVER, MD D.C. AX, MD	58.800 0.397 5.520	0.800	11/00				Continuing	58.800 0.397 5.520 0.600 Continuing 0.100 0.800	5.52
Government Eng. Spt WX/F Government Eng. Spt - Prior Yr Eft WX/F Government Eng. Spt (AIR 4.2) - MCU WX/F Government Eng. Spt - ASA/UESA C/CP Government Eng. Spt - ASA MIPR Government Eng. Spt - Improvements WX/R Government Eng. Spt-JMPS/TAMPS WX/R	RC NAWCAD, F RC NAWCAD, F PFF Classified NRL, Wash, I RC NAWCAD, PA RC PMA-233 RC NSWC (Vario	PAX RIVER, MD PAX RIVER, MD D.C. AX, MD	58.800 0.397 5.520	0.800	11/00 11/00				Continuing	58.800 0.397 5.520 0.600 Continuing 0.100	5.52

## CLASSIFICATION:

								DATE:			
Exhibit R-3 Cost Analysis (pag	e 2)								JUNE 2001		
APPROPRIATION/BUDGET ACTIVIT	TY	PROGRAM EL	LEMENT			PROJECT NU	JMBER AND N	NAME			
RDT&E, N / BA-7		0204152N, E2	2 SQUADRON				<b>IMPROVEMEN</b>	NTS			
Cost Categories			Total		FY 01		FY 02				
	Method	,	PY s		Award	FY 02	Award		Cost to	Total	Target Value
	& Type		Cost		Date	Cost	Date		Complete	Cost	of Contract
Test & Evaluation - MCU		NAWCAD, PAX RIVER, MD	38.578	1	<del> </del>		<b></b>			38.578	
		NAWCAD, PAX RIVER, MD	39.200		<b></b>					39.200	
ACIS (PMS-440)	PD	NAVSEA	2.483		<b></b>		<u> </u>			2.483	
LEAR JET - MCU	PD	PMA-207	0.601							0.601	
Test & Evaluation - MCU	WX	PMRF, HAWAII	1.500		<u> </u>					1.500	1
Miscellaneous - MCU	MIPR	Various	0.666	,						0.666	i
Test & Evaluation - IMPROV	WX	NAWCAD, PAX RIVER, MD	2.639	4.440	10/00					7.079	,
Test & Evaluation - Contract/Improv.	MIPR		0.325	,						0.325	,
Test & Evaluation - Improvements	WX	NAWCAD, PAX RIVER, MD	0.800	1.415	10/00	0.587	10/01		Continuing	Continuing	j
Test & Evaluation - EBC Flt Test	WX	NAWCAD, PAX RIVER, MD		1.460	05/01					1.460	,
Test & Evaluation	TBD	Northrop		0.900	11/00					0.900	,
Test & Evaluation	TBD	Various		0.500	11/00					0.500	,
Test & Evaluation	TBD	Various		0.300	11/00					0.300	,
Test & Evaluation	TBD	DRS, San Diego, CA		0.800	11/00					0.800	,
Subtotal T&E			86.792	9.815		0.587			Continuing	Continuing	
Remarks:	•		,				•		•	•	
Management	WX/RX	NAWCAD, PAX RIVER, MD	0.091							0.091	
Travel	WX	NAWCAD, PAX RIVER, MD	0.106	0.016	10/00	0.015	10/01		Continuing	Continuing	,
SBIR Assessment				0.513							
Subtotal Management			0.197	0.529		0.015			Continuing	Continuing	,
Remarks:											
Total Cost			605.040	23.218		7.051			Continuing	Continuing	,
Remarks:											

#### CLASSIFICATION:

E	XHIBIT R-2a,	RDT&E Pro	ject Justifica	tion				DATE:						
									JUI	NE 2001				
APPROPRIATION/BUDGET ACTIVITY	PPROPRIATION/BUDGET ACTIVITY PROGRAM ELEMENT NUMBER AND NAME								PROJECT NUMBER AND NAME					
DT&E, N / BA-7 0204152N, E-2 SQUADRONS							R MODERNIZ	ATION PROGE	RAM					
	Prior										Total			
COST (\$ in Millions)	Year Cost	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	Cost to Complete	Program			
		* **												
Project Cost	56.584	22.522	21.672	13.531										
RDT&E Articles Qty Not Applicable														

<sup>\*</sup> The FY2000 budget reflects a \$12.000 million Congressional add for RMP/MCU Upgrade Development executed under (E2804) which has been decreased by \$.357 million for Congressional undistributed reductions.

- (U) A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION: The Radar Modernization Program (RMP) is a ground and flight prototype test demonstration and risk mitigation of multiple technologies. It initiates the application of new radar technologies to modernize the primary sensor of the E-2C weapon system to provide a definitive littoral surveillance capability integral to the Navy's Theater Air Missile Defense (TAMD) Integrated Warfare Architecture. Key technologies to be integrated are space-time adaptive processing (STAP), electronically scanning array (ESA), solid state transmitter, and high dynamic range digital receivers. The resulting detection system will provide a substantially improved overland performance, enhancing all current required mission areas while simultaneously contributing to the emerging TAMD mission requirements. The impact of the dominant battlefield awareness provided by this improved airborne early warning system will substantially contribute to the development of a single integrated air picture. These technologies and resultant equipment demonstrated in ground environment in FY1999, will be tested in FY2001 through FY2003. The P.E. will be utilized for RMP pre-engineering and manufacturing development (Pre-E&MD) FY2001 FY2002 followed by a phased E&MD for RMP, with phase I Littoral Surveillance beginning in FY2003 followed by phase II pre-planned product improvement (P3 I) which will meet the full JTAMD mission needs statement requirements.
  - (U) PROGRAM ACCOMPLISHMENTS AND PLANS:
    - 1. FY 2000 ACCOMPLISHMENTS:
      - (U) (\$4,906) Completed Modification and Fabrication of Hardware and Installation Provisions in C-130.
      - (U) (\$5.973) Initiated integration and checkout (IACO) of Flight Test System in C-130.
      - (U) (\$0.407) Completed an initial program definition for Post Multi Year Production for RMP/MCU Engineering and Manufacturing Development.
      - (U) (\$2.213) Completed Independent Validation & Verification (IV&V) of Future Growth Potential.
      - (U) (\$3.717) Improved Mission Computer Upgrade (MCU) ACIS Interoperation.
      - (U) (\$5.306) Initiated C-130 Littoral Configuration Development.

R-1 SHOPPING LIST - Item No.

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<sup>\*\*</sup> FY2001 budget includes a \$15.000 million Congressional add for RMP LIttoral Survellance for the E-2C which will be executed under E2978, which has been decreased by \$0.540 million for Congressional undistributed reductions.

### **CLASSIFICATION:**

	EXHIBIT R-2a, RDT&E Project Justification	DATE:
		JUNE 2001
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME
RDT&E, N / BA-7	0204152N, E-2 SQUADRONS	E2321, RADAR MODERNIZATION PROGRAM

### 2. FY 2001 PLANS:

- (U) (\$ 6.523) Complete the IACO of C-130 Test Bed, install Flight Test Instrumentation, conduct Subsystem Flight Test, perform Elemental Data Analysis/Generate Quicklook Report, and initiate Preliminary Design of C-130 Littoral Configuration Processing Suite.
- -(U) (\$14.460) Radar Modernization Program Plus-Up (E2804). Perform Weapon system performance requirements analysis for the E-2C RMP Littoral Surveillance aircraft. Perform engineering effort necessary to build a 21 channel antenna rotary coupler equipment cooling system, fabricate Identify Friend or Foe (IFF) antenna beam forming device, provide analysis, design, and modification of an existing IFF system, conduct IACO and demonstration of an existing IFF system, and conduct co-aligned IFF antenna feasibility analysis.
- -(U) (\$ 0.689) Portion of extramural program reserved for Small Business Innovation Research assessment in accordance with 15USC 68.

#### 3. FY 2002 PLANS:

- (U) (\$2.233) Complete Subsystem Flight Test.
- (U) (\$0.675) Complete Elemental Data Analysis/Generate Final Rep.
- (U) (\$2.853) Complete Design of C-130 Littoral Configuration Processing Suite.
- (U) (\$6.774) Complete Parts/Fabrication of C-130 Littoral Configuration Processing Suite.
- (U) (\$0.993) Initiate C-130 IACO of Processing Suite.

## **CLASSIFICATION:**

	EXHIE	BIT R-2a, RDT&E	Project Justif	ication		DATE:
APPROPRIATION/BUDG	GET ACTIVITY	PROGRAM ELE	MENT NUMBE	R AND NAME	PROJECT NUMBER AND N	JUNE 2001
RDT&E, N /	BA-7	0204152N, E-2	_	ir ( ) ii	E2321, RADAR MODERNIZ	
(U) B. PROGRAM CHAN	NGE SUMMARY:	,				
(U) FY 2001 President's (U) Adjustments from th (U) FY 2002 President's	· Budget: e President's Budget:	FY2000 23.951 -1.429 22.522	FY2001 12.254 9.418 21.672	FY2002 13.586 -0.055 13.531		
CHANGE SUMMARY	EXPLANATION:					
(U) Funding:	within the Navy, and \$.094 m for RMP Littoral Sureillance of	nillion decrease for Conffset by a \$5.332 milli	ngressional Recond decrease for	cission. The FY 200 reprioritization of re	1 net increase of \$9.418 million con	ease for reprioritization of requirements asists of a \$15.000 million Congressional Add million decrease for Congressional Reduction, n of requirements within the Navy.
(U) Schedule:	Program plan adjustment for	FY2000 reflect a rest	tructured integra	ated schedule.		
(U) Technical:	Not Applicable.					
U) C. OTHER PROGRA	AM FUNDING SUMMARY: No	t Applicable				
U) D. ACQUISITION ST	RATEGY: Not applicable. Nor	n-acquisition ground a	and flight prototy	pe test demonstration	on and risk mitigation of multiple tecl	hnologies.
U) E. SCHEDULE PRO	FILE: Not applicable. Non-acc	quisition ground and fl	ight prototype to	est demonstration an	nd risk mitigation of mulltiple technol	logies.

## CLASSIFICATION:

									DATE:				
Exhibit R-3 Cost Analysis (pa	ige 1)										JUNE 20	01	
APPROPRIATION/BUDGET ACTI		PROGRAM E	LEMENT				PROJECT NU	IMBER AND N	IAME				
RDT&E, N / BA-7			2 SQUADRON	NS .					ATION PROGRAM	1			
Cost Categories		Performing	Total			FY 01		FY 02					L
(Tailor to WBS, or System/Item	Method	Activity &	PY s	FY 01		Award		Award			Cost to	Total	Target Value
Requirements) Hardware/Software Dev.	& Type	Location	Cost 53.752	Cost	_	Date		Date 10/01			Complete	Cost	of Contract
Hardware/Software Dev.		Classified GAC, NY	15.167		254 886	10/00 10/00	6.814 4.351	10/01					
Hardware/Software Dev.	MIPR	Hanscomb AFB, MA	0.748		000	10/00	4.351	10/01					
		,											
Hardware/Software Dev.	BAAs	BAAs	0.406	1							+		
Hardware/Software Dev.	SS/CPFF	Kirkland AFB, TX	0.476	5									
							+				+		
Hardware (Oaft and Mark Arabaia	CPFF	TBD		_	007	01/01							
Hardware/Software Mod/Analysis	CPFF	IRD		5.	.607	01/01							
Subtotal Product Development			70.549	16	.747		11.165						
Remarks:													
Government Eng. Support	WR/WX	NAWCAD, PAX RIVER, MD	1.837	0.	938	10/00	0.881	10/01					
Government Eng. Support	CPFF	Classified	0.865	0.	165	10/00	0.180	10/01					
Subtotal Support			2.702	2 1.	.103		1.061						
Remarks:													

## CLASSIFICATION:

													DATE:					
Exhibit R-3 Cost Analysis (page 2)													JUNE 2001					
APPROPRIATION/BUD	PROGRAM ELEMENT						PROJECT NUMBER AND NAME											
RDT&E, N / BA-7										E2321, RADAR MODERNIZATION PROGRAM								
Cost Categories		Contract	Performing		Total				FY 01			Y 02						
		Method & Type	Activity & Location		PY s Cost		FY 01 Cost		Award Date	FY 02 Cost		ward ate			Cost to	Total Cost		Target Value of Contract
Test & Evaluation		WX/WR	NAWCAD, PAX	DIVED MD	Cost	3.840		0.528	10/00	0.86	_	10/01			Complete	Cost		or Contract
Test & Evaluation		C/CPFF	Classified	KIVEK, IVID	+	0.895		0.330	10/00	0.36	_	10/01					$\longrightarrow$	
Lear Jet - RMP		PD	PMA-207			0.380		7.330	10/00	0.30		10/01					$\rightarrow$	
Gear Boxes		PD	AIR-5.0			0.550											-	
Test & Evaluation		WR/WX	PMRF Hawaii			0.000		2.200	10/00									
SBIR Assessment		,,						0.689	. 0, 00									
ODIT ( ) LOCATION IN								3.000										
Subtotal T&E						5.665	;	3.747		1.22	22							
Remarks:													_					
Management		C/CPFF	Classified			0.105	(	0.055	10/00	0.06	0	10/01						
Travel		WX	NAWCAD, PAX	RIVER, MD		0.085	(	0.020	10/00	0.02	20	10/01						
Subtotal Management						0.190	(	0.075		0.08	80							
Remarks:																		
Total Cost						79.106	2	1.672		13.52	28							
Remarks:																		