### **CLASSIFICATION:**

## **UNCLASSIFIED**

EXHIBIT R-2, RDT&E Budget Item Justification							DATE:	
							Februa	ry 2003
APPROPRIATION/BUDGET ACTIVITY					R-1 ITEM NOMEN	CLATURE		
RESEARCH DEVELOPMENT TEST & EVALUAT	ION, NAVY /	BA-5			0605500N MULTI	-MISSION MARITI	ME AIRCRAFT	
COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Total PE Cost	41.741	68.123	76.243	343.800	505.272	474.897	442.386	403.836
H2696 MULTI-MISSION MARITIME AIRCRAFT	41.741	68.123	76.243	343.800	505.272	474.897	442.386	403.836

#### A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

The Multi-mission Maritime Aircraft (MMA) program provides the replacement system(s) for the aging P-3/EP-3 aircraft. The MMA program is intended to meet the Broad Area Maritime and Littoral Armed Intelligence, Surveillance and Reconaissance Mission Need Statement (MNS) which was validated by the Joint Requirements Oversight Council on 29 FEB 00. The MMA program received Milestone 0 approval to proceed into Concept Exploration (CE) on 22 MAR 2000. Concept exploration activities began in June, 2000 under Program Element 0702207N / Project Unit W2737. Approval to enter Component Advanced Development was attained from the Overarching Integrated Product Team on 18 JAN 2002 and the Milestone Decision Authority (USD(AT&L)) approved the program Acquisition Strategy on 8 FEB 2002.

The primary objectives of CAD are to: refine system requirements, define system architectures for the alternative concepts, identify and mitigate concept risks, reconcile concept life cycle cost estimates and prepare for Milestone B. MMA plans to enter System Development and Demonstration (SDD) in the 2nd quarter of FY04 after completing the Milestone B Defense Acquisition Board. SDD effort will include: design, development and testing of Engineering Development Model aircraft, development and use of test articles (e.g., static, fatigue, Live Fire Test and Evaluation, wind tunnel test articles), the development of the aircraft avionics and mission systems, and development of the Systems Integration Lab.

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Exhibit R-2, RDTEN Budget Item Justification (Exhibit R-2, page 1 of 9)

#### CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification							DATE:	
							Februa	ry 2003
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMI	ENT NUMBER AND	NAME		PROJECT NUMBE	R AND NAME		
RDT&E, N / BA-5	0605500N MULTI-	MISSION MARITIN	//E AIRCRAFT		H2696 MULTI-MIS	SSION MARITIME A	AIRCRAFT	
COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Project Cost	41.741	68.123	76.243	343.800	505.272	474.897	442.386	403.836
RDT&E Articles Qty					1	1	1	

#### A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

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The primary objectives of CAD are to: refine system requirements, define system architectures for the alternative concepts, identify and mitigate concept risks, reconcile concept life cycle cost estimates and prepare for Milestone B. MMA plans to enter System Development and Demonstration (SDD) in the 2nd quarter of FY04 after completing the Milestone B Defense Acquisition Board. SDD effort will include: design, development and testing of Engineering Development Model aircraft, development and use of test articles (e.g., static, fatigue, Live Fire Test and Evaluation, wind tunnel test articles), the development of the aircraft avionics and mission systems, and development of the Systems Integration Lab.

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### CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification				DATE:	
					ruary 2003
PROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUM	BER AND NAME	PROJECT NUMBER AND N	AME	
OT&E, N / BA-5	0605500N MULTI-MISSION	MARITIME AIRCRAFT	H2696 MULTI-MISSION MA	RITIME AIRCRAFT	
B. Accomplishments/Planned Program					
	FY 02	FY 03	FY 04	FY 05	7
Accomplishments/Effort/Subtotal Cost	41.416	68.123	76.243	343.800	7
RDT&E Articles Quantity					
SDD Contracts	0	0	48.000	324.596	
CAD Contracts	25.927	43.592	6.000	0	
integration requirements and evaluate concept of op- Provided engineering, management, and technical st Initiate System Development and Demonstration (SE	erations. upport for the MS B acquisition D) phase contract. Scope of a	documentation, the AoA and	1A detailed design, avionics ar	vanced Development (CAL	s Integration Lab(s) and
integration requirements and evaluate concept of op- Provided engineering, management, and technical st	erations. upport for the MS B acquisition D) phase contract. Scope of a d mission systems, Systems I	documentation, the AoA and a deffort includes: Develop MN integration Lab(s) and test a	nd the industry Component Ad	vanced Development (CAL	is) and refine UAV system  ) studies.  s Integration Lab(s) and
integration requirements and evaluate concept of op- Provided engineering, management, and technical st Initiate System Development and Demonstration (SD test articles. Begin development of MMA avionics ar	erations.  upport for the MS B acquisition  D) phase contract. Scope of a mission systems, Systems I and to support Development T	documentation, the AoA and a deffort includes: Develop MN antegration Lab(s) and test a dest and Evaluation.	nd the industry Component Add Add the industry Component Add Add the industry Add the indus	vanced Development (CAL d mission systems, Systen ical analysis support for SI	is) and refine UAV system  ) studies.  s Integration Lab(s) and
integration requirements and evaluate concept of op- Provided engineering, management, and technical standard substantial subs	erations.  upport for the MS B acquisition  D) phase contract. Scope of a mission systems, Systems I and to support Development T	documentation, the AoA and a deffort includes: Develop MN integration Lab(s) and test a	nd the industry Component Ad	vanced Development (CAL	is) and refine UAV system  ) studies.  s Integration Lab(s) and
integration requirements and evaluate concept of op- Provided engineering, management, and technical st Initiate System Development and Demonstration (SD test articles. Begin development of MMA avionics ar	erations.  upport for the MS B acquisition  D) phase contract. Scope of a mission systems, Systems I and to support Development T	documentation, the AoA and a deffort includes: Develop MN antegration Lab(s) and test a dest and Evaluation.	nd the industry Component Add Add the industry Component Add Add the industry Add the indus	vanced Development (CAL d mission systems, Systen ical analysis support for SI	is) and refine UAV system  ) studies.  s Integration Lab(s) and

### CLASSIFICATION:

Not Applicable

HBIT R-2a, RDT&E Project Justification					DATE: February 2003
ROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER A	ND NAME		PROJECT NUMBER AI	
Γ&E, N / BA-5	0605500N MULTI-MISSION MARI	TIME AIRCRA	\FT	H2696 MULTI-MISSION	N MARITIME AIRCRAFT
(U) C. PROGRAM CHANGE SUMMARY:					
(U) Funding:	FY 2002	FY 2003	FY 2004	FY 2005	
Previous President's Budget:	53.329	74.531	218.861	198.566	
Current BES/President's Budget	41.741	68.123	76.243	343.800	
Total Adjustments	-11.588	-6.408	-142.618	145.234	
Summary of Adjustments					
Congressional program reductions		-5.000			
Congressional undistributed reductions		-0.458			
Congressional rescissions	-0.229				
SBIR/STTR Transfer	-1.600				
Economic Assumptions	-0.127	-0.950	-1.830	-7.438	
Reprogrammings	-9.632				
Reprioritization of requirements					
Other Navy/OSD Adjustments			-140.788	152.672	
Congressional increases					
Subtotal	-11.588	-6.408	-142.618	145.234	
(U) Schedule:					
Component Advanced Development contract a					Review from 3Q/04 to 1Q/05; System Development
					Review 4Q/05; Milestone C - 2Q/08 based on initial v Rate Initial Production Contract Award - 2Q/08
based on initial input from Industry during CAD		out Cyclec		(0.12) 100tilg, a.i.a 2011	
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									February	2003	
APPROPRIATION/BUDGET ACTIVITY		PROGRAM E	LEMENT NUM	IBER AND NAM	ИE	PROJECT NUM	BER AND NAM	ΛΕ			
RDT&E, N / BA-5		0605500N M	ULTI-MISSION	I MARITIME AI	RCRAFT	H2696 MULTI-	MISSION MARI	TIME AIRCRA	FT		
(U) D. OTHER PROGRAM FUNDING SU  Line Item No. & Name	MMARY: FY 2002	FY 2003	<u>FY 2004</u>	FY 2005	FY 2006	FY 2007	FY 2008	<u>FY 2009</u>	To <u>Complete</u>	Total <u>Cost</u>	
APN BLI 019300 Inventory Sustainme APN BLI 060510 Initial Spares - MMA							38.841	1412.273 48.799	21804.166 1139.221	23255.280 1188.020	

### (U) E. ACQUISITION STRATEGY: \*

EXHIBIT R-2a, RDT&E Project Justification

The Multi-Mission Maritime Aircraft (MMA) Milestone 0 was approved 22 March 2000 and the resulting Acquisition Decision Memorandum directed MMA to begin the CE phase consisting of an AoA and industry concept studies. These activities began 3Q/01 and were funded under Program Element 0702207N / Project Unit W2737. Approval to enter Component Advanced Development was attained from the Overarching Integrated Product Team on 18 Jan 2002 and the Milestone Decision Authority (USD(AT&L)) approved the program Aquisition Strategry on 8 Feb 2002. The CAD will be a competitive award to multiple contractors to define alternative MMA concept system architectures and evaluate associated risks and proposed mitigations. Selection of MMA concept and approval to enter System Development and Demonstration (SDD) phase will occur at a MS B decision review in FY2004. The schedule after Milestone B is dependent upon alternative concept selected at the end of CAD. The MMA program was initiated in response to the JROC validated MNS, "Broad Area Maritime and Littoral Armed Intelligence, Surveillance and Reconnaissance". The procurement of Engineering Development Model (EDM) aircraft from FY2004 to FY2006, delaying the Initial Operational Capability by two years to the FY2012-14 time period.

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	4\							DATE:		F-1		
Exhibit R-3 Cost Analysis (pa										February 200	13	
APPROPRIATION/BUDGET ACTI	/ITY	PROGRAM EI	LEMENT			PROJECT NU						
RDT&E, N / BA-5		0605500N MU	LTI-MISSION	MARITIME AIR	CRAFT	H2696 MUL	ΓΙ-MISSION	MARITIME AI	RCRAFT			
Cost Categories	Contract	Performing	Total		FY 03		FY 04		FY 05			
	Method	Activity &	PY s	FY 03	Award	FY 04	Award	FY 05	Award	Cost to	Total	Target Value
	& Type	Location	Cost	Cost	Date	Cost	Date	Cost	Date	Complete	Cost	of Contract
Primary Hardware Development	C/CR	TBD				48.000	02/04	324.596	01/05	1,667.804	2,040.400	2,040.400
Systems Engineering	C/FFP	Various	25.927								25.927	25.92
	C/FFP	Boeing		21.796	02/03	3.000	11/03				24.796	24.796
	C/FFP	Lockheed Martin		21.796	02/03	3.000	11/03				24.796	24.796
Subtotal Product Development			25.927	43.592		54.000		324.596	i	1,667.804	2,115.919	)

Technical Development	WX	NAWCAD / NAWCWD		15.571	01/03	16.444	01/04	12.000	01/05	84.621	128.636	
Studies & Analysis	SS/FFP	CNA, VA	0.325								0.325	0.325
Studies & Analysis	C/FFP	Johns Hopkins Univ	2.240	2.200	01/03	1.100	01/04				5.540	5.540
Studies & Analysis	C/FFP	TBD						2.224	01/05		2.224	2.224
Integrated Logistics Support	WX	NAWCAD, Pax River, MD	0.600	0.600	11/02	0.600	11/03	0.600	11/04	4.200	6.600	
Configuration Management	TBD	TBD								5.000	5.000	
Technical Data	TBD	TBD								8.000	8.000	
Subtotal Support			3.165	18.371		18.144		14.824		101.821	156.325	

Remarks:

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### CLASSIFICATION:

									DATE:				
Exhibit R-3 Cost Analysis (pag	je 2)										February 200	03	
APPROPRIATION/BUDGET ACTIV	ITY		PROGRAM EL	EMENT			PROJECT NU						
RDT&E, N / BA-5			0605500N MU		MARITIME AIR				MARITIME AII				
Cost Categories	Contract	Performing		Total	E) / 00	FY 03		FY 04	F) / 05	FY 05			
	Method & Type	Activity & Location				Award Date	FY 04 Cost	Award Date	FY 05 Cost	Award Date	Cost to Complete	Total Cost	Target Value of Contract
Developmental Test & Evaluation	TBD	TBD		0031	OUSI	Date	Cost	Date	COST	Date	326.000		
Operational Test & Evaluation	TBD	TBD									81.600		
Live Fire Test & Evaluation	TBD	TBD									37.000		
Test Assets	TBD	TBD									36.800		_
Subtotal T&E				0.000	0.000		0.000		0.000		481.400		
Contractor Engineering Support	C/FFP	RBC Inc., VA		1.910	2.000	01/03	2.300	01/04	2.300	01/05	16.100		
Government Engineering Support	WX	NAWCAD, Pa		9.189								9.189	
Program Management Support	WX	NAWCAD, Par	·	1.400	4.000	01/03	1.629		1.900		13.300		
Travel	WX	NAWCAD, Par	x River, MD	0.150	0.160	11/02	0.170	11/03	0.180	11/04	1.290		
							-		-			0.000	1
Subtotal Management				12.649	6.160		4.099		4.380		30.690	57.978	3
Takel Coat		ı		44 744	69.400		76.040	ı	242,000	I	2 204 745	2 044 000	
Total Cost		<u> </u>		41.741	68.123		76.243		343.800		2,281.715	2,811.622	4
Remarks:													

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Remarks:

### CLASSIFICATION:

EXHIBIT R4, Schedule F																									DATE	≣:	F	ebrua	ry 20	03		
APPROPRIATION/BUDGET	ACTIVI	TY							PROG												PROJ	ECT N	IUMBE	ER AN	ID NAI	ИΕ						
RDT&E, N /	BA-5	5							06055	00N N	/ULTI-	MISSI	ON MA	ARITIM	1E AIR	CRAF	Т				H2696	MUL	TI-MIS	SION	MARI	TIME A	AIRCRA	ŀFΤ				
Fiscal Year		20	02			200	03			20	04			200	05			20	006			20	07			20	800			200	9	
	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	1	2	3	4
Acquisition Milestones	C/	AD DR								MS B																MS C △						
Acquisition Phases	Conce Explor	Co	mpone	ent Ad	vanced	Deve	opmeı	nt		Sy	stem [	Develo	pment	and D	emons	tration						\ 	>									
MMA System  Dates are tentative;  dependent upon concept selec	ted												PDR			CDR										[	RIP					
Contract Awards CAD SDD				$\triangle$						$\triangle$																						
Test & Evaluation Milestones																																
Development Test Dates are tentative																										DT						
Production Milestones																																·——
Deliveries																																

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### **CLASSIFICATION:**

Exhibit R-4a, Schedule Detail						DATE:	ebruary 20	03
APPROPRIATION/BUDGET ACTIVITY	PROGRAM EL	EMENT			PROJECT NU	MBER AND NA	ME	
RDT&E, N / BA-5	0605500N ML	JLTI-MISSION	MARITIME AIR	CRAFT	H2696 MULT	T-MISSION M	ARITIME AIR	CRAFT
Schedule Profile	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Component Advanced Development Decision Review	2Q							
Component Advanced Development begins	2Q	1Q-4Q	1Q					
Component Advanced Development Contract Award	4Q							
Milestone B DAB (MS B)			2Q					
System Development and Demonstration Phase begins			2Q					
System Development and Demonstration Contract Award			2Q					
Preliminary Design Review (PDR)				1Q				
Critical Design Review (CDR)				4Q				
Developmental Testing						4Q		4Q
Milestone C							2Q	
Low Rate Initial Production							2Q-TBD	
Low Rate Initial Floadction							2Q-100	
					1			

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