

CLASSIFICATION:

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A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

The Multi-mission Maritime Aircraft (MMA) program provides the replacement system(s) for the aging P-3 aircraft. The MMA program was initiated in response to the JROC validated MNS, "Broad Area Maritime and Littoral Armed Intelligence, Surveillance and Reconnaissance" and the requirements for the program are defined in the MMA Operational Requirements Document (ORD)/ Capability Development Document (CDD), validated and approved by JROC on 08 December 2003. The MMA program received Milestone 0 approval to proceed into Concept Exploration (CE) on 22 March 2000. Concept exploration activities began in June 2000 under Program Element 0702207N / Project Unit W2737. Approval to enter Component Advanced Development (CAD) was attained from the Overarching Integrated Product Team on 18 January 2002 and the Milestone Decision Authority (USD(AT&L)) approved the program Acquisition Strategy on 8 February 2002. Approval to enter System Demonstration and Development (SDD) was attained at the Defense Acquisition Board (DAB) on 28 May 2004. At the DAB approval was granted to award the SDD contract. The contract was awarded to Boeing on 14 June 2004.

The primary objectives of SDD are to: perform the system detailed design, develop and produce Systems Integration Labs, develop and build ground and flight test articles and prepare for Milestone C. Seven flight test aircraft will be built during SDD. These test aircraft will be grouped into two stages based on which phase of the test program the aircraft will support. SDD Stage I flight test aircraft (FY06/Qty-3) will support initial combined Developmental/Operational Testing (DT/OT). SDD Stage II flight test aircraft (FY08/Qty-4) will support the completion of combined DT/OT and Initial Operational Test and Evaluation (IOT&E) after being updated to the production configuration. MMA plans to enter Production and Deployment (PD) in the 3rd quarter of FY10 after completing the Milestone C DAB.

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EXHIBIT R-2a, RDT&E Project Justification							DATE: February 2005	
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-5	PROGRAM ELEMENT NUMBER AND NAME 0605500N MULTI-MISSION MARITIME AIRCRAFT				PROJECT NUMBER AND NAME 2696 MULTI-MISSION MARITIME AIRCRAFT			
COST (\$ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
Project Cost	66.827	490.249	964.067	1,138.465	886.103	1,107.020	1,089.992	745.599
RDT&E Articles Qty			3		4			

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B. Accomplishments/Planned Program				
	FY 04	FY 05	FY 06	FY 07
Accomplishments/Effort/Subtotal Cost	6.000	0.000	0.000	0.000
RDT&E Articles Quantity				
<div style="border: 1px solid black; padding: 5px;"> <p>Component Advanced Development (CAD) contracts initiated in FY02 to evaluate MMA system alternative concepts. Scope of effort includes: Designed MMA alternative concept's weapon system architectures. Technical, logistic, cost, and risk analysis of each proposed MMA alternative concept. Applied Modeling & Simulation tools to validate proposed risk mitigations for each MMA alternative concept. Evaluated system requirements through cost/performance trade-offs analysis. CAD contracts were completed in FY04.</p> </div>				
Accomplishments/Effort/Subtotal Cost	43.727	473.504	939.752	1,108.524
RDT&E Articles Quantity			3	
<div style="border: 1px solid black; padding: 5px;"> <p>Initiate System Development and Demonstration (SDD) phase. Work effort started in FY04 at the completion of the CAD contracts. Scope of effort includes: Design, develop, build, and test MMA aircraft, avionics, mission systems, Systems Integration Lab(s), wind tunnel test models, ground and flight test articles (SDD Stage I, FY06, Qty3; SDD Stage II, FY08, Qty4), other test articles, and integration of UAV Tactical Control System (TCS), modifications to the Tactical Support Center (TSC). Conduct the Integrated Baseline Review (IBR) and prepare for and conduct technical reviews such as the System Functional Review (SFR), Preliminary Design Review (PDR), and Critical Design Review (CDR). Work effort initiated in FY04 and will continue until the end of the SDD contract planned in FY13.</p> </div>				
Accomplishments/Effort/Subtotal Cost	17.100	16.745	24.315	29.941
RDT&E Articles Quantity				
<div style="border: 1px solid black; padding: 5px;"> <p>Test, GFE, Engineering and Technical Development for the CAD and SDD contracts. Effort includes: analysis of contracted deliverables; evaluation of an unmanned aerial vehicle (UAV) in the maritime role (technical and cost analysis), refine UAV system integration requirements, and evaluate UAV concept of operations; direct technical and logistic support of system development and delivery; assessment of contractors readiness to proceed in design/development; evaluate contract cost, schedule, and performance; test preparations, provide necessary government furnished equipment and test articles, and conduct testing; risk assessment/mitigation; program control; performance status; and plan and prepare for future Milestone/Decision Reviews and develop associated documentation. Modeling & Simulation tools will be developed to assess proposed risk mitigations and to support Development Test and Evaluation. Work effort initiated will continue until the end of the SDD contract planned in FY13.</p> </div>				

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Exhibit R-2a, RD TEN Project Justification
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EXHIBIT R-2a, RDT&E Project Justification			DATE: February 2005																																																																							
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-5	PROGRAM ELEMENT NUMBER AND NAME 0605500N MULTI-MISSION MARITIME AIRCRAFT	PROJECT NUMBER AND NAME 2696 MULTI-MISSION MARITIME AIRCRAFT																																																																								
<p>C. PROGRAM CHANGE SUMMARY:</p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left; width: 35%;">Funding:</th> <th style="text-align: right; width: 15%;">FY 2004</th> <th style="text-align: right; width: 15%;">FY 2005</th> <th style="text-align: right; width: 15%;">FY 2006</th> <th style="text-align: right; width: 15%;">FY 2007</th> </tr> </thead> <tbody> <tr> <td>Previous President's Budget:</td> <td style="text-align: right;">71.413</td> <td style="text-align: right;">496.029</td> <td style="text-align: right;">963.041</td> <td style="text-align: right;">932.838</td> </tr> <tr> <td>Current BES/President's Budget</td> <td style="text-align: right;">66.827</td> <td style="text-align: right;">490.249</td> <td style="text-align: right;">964.067</td> <td style="text-align: right;">1,138.465</td> </tr> <tr> <td>Total Adjustments</td> <td style="text-align: right; border-top: 1px solid black;">-4.586</td> <td style="text-align: right; border-top: 1px solid black;">-5.780</td> <td style="text-align: right; border-top: 1px solid black;">1.026</td> <td style="text-align: right; border-top: 1px solid black;">205.627</td> </tr> <tr> <td colspan="5" style="padding-top: 10px;">Summary of Adjustments</td> </tr> <tr> <td> Congressional program reductions</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td> Congressional undistributed reductions</td> <td></td> <td style="text-align: right;">-4.725</td> <td></td> <td></td> </tr> <tr> <td> Congressional rescissions</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td> SBIR/STTR Transfer</td> <td style="text-align: right;">-1.434</td> <td></td> <td></td> <td></td> </tr> <tr> <td> Other Adjustments</td> <td></td> <td style="text-align: right;">-1.055</td> <td style="text-align: right;">-8.456</td> <td style="text-align: right;">190.972</td> </tr> <tr> <td> Economic Assumptions</td> <td style="text-align: right;">-0.066</td> <td></td> <td style="text-align: right;">9.482</td> <td style="text-align: right;">14.655</td> </tr> <tr> <td> Reprogrammings</td> <td style="text-align: right;">-3.086</td> <td></td> <td></td> <td></td> </tr> <tr> <td> Congressional increases</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Subtotal</td> <td style="text-align: right; border-top: 1px solid black;">-4.586</td> <td style="text-align: right; border-top: 1px solid black;">-5.780</td> <td style="text-align: right; border-top: 1px solid black;">1.026</td> <td style="text-align: right; border-top: 1px solid black;">205.627</td> </tr> </tbody> </table> <p style="margin-top: 20px;">Schedule:</p> <p>As a result to changes incorporated into the MMA Acquisition Strategy as part of the review process for the Milestone B Defense Acquisition Board, the following changes have been made to the program schedule: Design Readiness Review (DRR) was moved from 3Q/07 to 4Q/07; an Interim Program Review (IPR) was added to the schedule in 3Q/09; Milestone C was changed from 4Q/08 to 3Q/10; System Development and Demonstration (SDD) was extended through 4Q/13; added Ground Test program (includes Developmental and Live Fire Test & Evaluation) 1Q/06 through 4Q/10; LRIP work activities will be initiated in 3Q/10 to align with Milestone C; added SDD Stage II flight test aircraft contract award in 2Q/08, Advance Procurement (AP) for LRIP Lot #1 in 3Q/09, LRIP Lot #1 (& AP for LRIP #2) in 3Q/10, and LRIP Lot #2 (& AP for LRIP #3) in 2Q/11; adjusted the start of the Integrated Developmental and Operational Flight test program to 4Q/09 from 1Q/08; flight test aircraft quantities were moved from FY06 (Qty-1), FY07 (Qty-1), and FY08 (Qty-1) to FY06 (Qty-3) to reflect the year the effort will be initiated; and flight test aircraft (Qty-4) were added to FY08, the year the effort will be initiated.</p> <p style="margin-top: 20px;">Technical:</p> <p>Not Applicable</p>					Funding:	FY 2004	FY 2005	FY 2006	FY 2007	Previous President's Budget:	71.413	496.029	963.041	932.838	Current BES/President's Budget	66.827	490.249	964.067	1,138.465	Total Adjustments	-4.586	-5.780	1.026	205.627	Summary of Adjustments					Congressional program reductions					Congressional undistributed reductions		-4.725			Congressional rescissions					SBIR/STTR Transfer	-1.434				Other Adjustments		-1.055	-8.456	190.972	Economic Assumptions	-0.066		9.482	14.655	Reprogrammings	-3.086				Congressional increases					Subtotal	-4.586	-5.780	1.026	205.627
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EXHIBIT R-2a, RDT&E Project Justification						DATE: February 2005				
APPROPRIATION/BUDGET ACTIVITY		PROGRAM ELEMENT NUMBER AND NAME			PROJECT NUMBER AND NAME					
RDT&E, N / BA-5		0605500N MULTI-MISSION MARITIME AIRCRAFT			2696 MULTI-MISSION MARITIME AIRCRAFT					
D. OTHER PROGRAM FUNDING SUMMARY:										
Line Item No. & Name	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	To Complete	Total Cost
APN PE 0204251N BLI 019300 MMA						110.789	1,788.841	2,056.247	19,455.447	23,411.324
APN BLI 060510 Initial Spares - MMA							45.954	74.955	1,262.859	1,383.768
MILCON PE 0805376 - Project P-146 & P-147			5.800	14.090						19.890
E. ACQUISITION STRATEGY:										
<p>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 (CAD) was attained from the Overarching Integrated Product Team on 18 Jan 2002 and the Milestone Decision Authority (USD(AT&L)) approved the program Aquisition Strategy on 8 Feb 2002. The CAD was 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 occurred at MS B decision review on 28 May 2004. The contract was awarded to Boeing on 14 June 2004. The SDD phase is being used to design, develop and test the MMA system. The MMA program was initiated in response to the JROC validated MNS, "Broad Area Maritime and Littoral Armed Intelligence, Surveillance and Reconnaissance" and the requirements for the program are defined in the MMA Operational Requirements Document (ORD)/ Capability Development Document (CDD), validated and approved by JROC on 08 December 2003. MMA IOC objective is FY 2013.</p>										

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Exhibit R-2a, RDTEN Project Justification
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Exhibit R-3, Project Cost Analysis
(Exhibit R-3, page 6 of 11)

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Exhibit R-3, Project Cost Analysis
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Exhibit R-3 Cost Analysis (page 3)										DATE: February 2005		
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT			PROJECT NUMBER AND NAME						
RDTE&E, N / BA-5			0605500N MULTI-MISSION MARITIME AIRCRAFT			2696 MULTI-MISSION MARITIME AIRCRAFT						
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 05 Cost	FY 05 Award Date	FY 06 Cost	FY 06 Award Date	FY 07 Cost	FY 07 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Developmental Test & Evaluation	WX	Various				5.487	01/06	8.133	01/07	140.680	154.300	
Operational Test & Evaluation	WX	Various				0.200	02/06	0.350	02/07	16.100	16.650	
Live Fire Test & Evaluation	WX	Various				5.681	02/06	2.767	02/07	18.467	26.915	
Test Assets	WX	Various				4.902	03/06	1.692	03/07	9.586	16.180	
GFE	PID/RX	Various				2.000	03/06	10.500	03/07	85.200	97.700	97.700
											0.000	
											0.000	
Subtotal T&E			0.000	0.000		18.270		23.442		270.033	311.745	
Remarks:												
Contractor Engineering Support	C/FFP	RBC Inc., VA	5.881	2.300	01/05	2.254	01/06	2.316	01/07	21.056	33.807	33.807
Government Engineering Support	WX	NAWCAD, Pax River, MD	8.680								8.680	
Program Management Support	WX	NAWCAD, Pax River, MD	6.122	0.991	01/05	1.051	01/06	1.225	01/07	9.050	18.439	
Travel	WX	NAWCAD, Pax River, MD	0.480	0.180	11/04	0.261	11/05	0.295	11/06	1.850	3.066	
											0.000	
											0.000	
Subtotal Management			21.163	3.471		3.566		3.836		31.956	63.992	
Remarks:												
Total Cost			169.418	490.249		964.067		1,138.465		4,213.301	6,975.500	
Remarks:												

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Exhibit R-3, Project Cost Analysis
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EXHIBIT R4, Schedule Profile																										DATE: February 2005												
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-5										PROGRAM ELEMENT NUMBER AND NAME 0605500N MULTI-MISSION MARITIME AIRCRAFT										PROJECT NUMBER AND NAME 2696 MULTI-MISSION MARITIME AIRCRAFT																		
Fiscal Year	2004				2005				2006				2007				2008				2009				2010				2011									
	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			MS B ▲												DRR △						IPR △				MS C △													
Acquisition Phases	CAD			System Development and Demonstration																																		
MMA System									PDR △					CDR △																								
Contract Awards			SDD (Includes Stage I) ▲												SDD Stage II aircraft △																							
RDT&E, N																					AP for LRIP #1 △				LRIP #1 & AP LRIP #2 △			LRIP #2 & AP LRIP #3 △										
Production																																						
Test & Evaluation Milestones Ground Testing Flight Test Program									Ground Testing																						DT/OT Flight Testing							
Production																													LRIP									
Deliveries SDD Test Aircraft																																						

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Exhibit R-4a, Schedule Detail
(Exhibit R-4a, page 10 of 11)

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Termination Liability Funding
For Major Defense Acquisition Programs,
RDT&E Funding
(\$000)

Program	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
	0	0	0	0	0	0	0	0

This program does not budget/fund termination liability separately. A Limitation of Funds (LoF) clause (FAR 52.232-22) is inserted in all incrementally funded R&D contracts. This clause is designed to limit the government's legal liability to the amount obligated.