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CLASSIFICATION:

EXHIBIT R-2, RDT&E Budget Item Justification							DATE: February 2007	
APPROPRIATION/BUDGET ACTIVITY RESEARCH DEVELOPMENT TEST & EVALUATION, NAVY / BA-7					R-1 ITEM NOMENCLATURE 0305205N Endurance Unmanned Aerial Vehicles			
COST (\$ in Millions)	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
Total PE Cost		26.238	116.666	480.323	560.908	466.233	386.607	281.561
4020 BAMS UAV		26.238	116.666	480.323	560.908	466.233	386.607	281.561
A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:								
This program element provides for the development of endurance type Unmanned Aerial Vehicles (UAV) and systems that will provide warfighters with a persistent Intelligence, Surveillance and Reconnaissance (ISR) capability.								
Broad Area Maritime Surveillance (BAMS) UAV. The BAMS UAV, which is an adjunct to the MMA/P-3, is integral in recapitalizing the Navy's airborne ISR force. BAMS UAV will play a significant role in the Sea Shield and FORCEnet pillars of Sea Power 21. In its Sea Shield role, BAMS UAV on-station time and range enables unmatched awareness of the maritime battlespace by sustaining the common operational picture for Surface Warfare (SUW) and the Global War on Terrorism (GWOT). The system will serve as a Fleet Response Plan enabler while acting as a trip wire for Intelligence Preparation of the Environment (IPE).								
BAMS UAV will include an endurance-class UAV that will operate from land-based sites around the world. Sufficient air vehicles at each operating location will provide persistent maritime ISR by being airborne 24 hours a day, 7 days a week out to ranges of 2000 nautical miles. Worldwide access will be achieved by providing coverage to nearly all the world's high-density sea-lanes, littorals and areas of national interest from its operating locations. Because BAMS UAV and the MMA/P-3 have related complementary missions, it is intended that BAMS UAV will leverage the Maritime Patrol and Reconnaissance Forces (MPRF) community to enhance manpower, training and maintenance efficiencies.								
BAMS UAV sensors will provide detection, classification, tracking and identification of maritime targets. Anticipated sensors to fulfill mission requirements include a maritime radar, electro-optical/infrared (EO/IR) and Electronic Support Measures (ESM) systems. Additionally, BAMS UAV will have a communications relay capability linking dispersed forces in the theater of operation and serving as a node in the Navy's FORCEnet strategy. The BAMS UAV will provide the Fleet Commander a Common Operational Tactical Picture (COTP) of the battlespace day and night. The UAV will queue other Navy assets for further situational investigation and/or attack and will also provide battle damage assessment of the area of interest. Data analysis will occur in real-time at shore-based Mission Control Systems via satellite communications. Further exploitation can be conducted at shore-based sites or aboard Carrier Vessel Nuclear (CVN)/ Landing Helicopter Dock (LHD)ships.								
Note: BAMS FY05 funding supported FY06 activities.								

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APPROPRIATION/BUDGET ACTIVITY RESEARCH DEVELOPMENT TEST & EVALUATION, NAVY / BA-7		R-1 ITEM NOMENCLATURE 0305205N Endurance Unmanned Aerial Vehicles			
B. PROGRAM CHANGE SUMMARY:					
Funding:		FY 06	FY 07	FY 08	FY 09
Previous President's Budget:		0.000	26.357	118.964	251.780
Current President's Budget:		0.000	26.238	116.666	480.323
Total Adjustments		0.000	-0.119	-2.298	228.543
Summary of Adjustments					
Congressional Reductions		-0.119			
Congressional Rescissions					
Congressional Increases					
Economic Assumptions				-0.093	0.224
Miscellaneous Adjustments				-2.205	228.319
Subtotal		0.000	-0.119	-2.298	228.543
Schedule:					
Due to program restructuring, Initial Operational Capability (IOC) will be FY2014. Preliminary Design Review (PDR), Critical Design Review (CDR), and Integrated Test and Evaluation realigned to support FY2014 IOC.					
Technical:					
Not Applicable					

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EXHIBIT R-2a, RDT&E Project Justification						DATE: February 2007			
APPROPRIATION/BUDGET ACTIVITY RDT&E,N / BA-7		PROGRAM ELEMENT NUMBER AND NAME 0305205N, ENDURANCE UNMANNED AERIAL VEHICLES			PROJECT NUMBER AND NAME 4020, BAMS UAV				
COST (\$ in Millions)		FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
4020 BAMS UAV			26.238	116.666	480.323	560.908	466.233	386.607	281.561
RDT&E Articles Qty					2		4		

A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

Along with the Multi-mission Maritime Aircraft (MMA), the BAMS UAV is integral in recapitalizing the Navy's airborne Intelligence, Surveillance and Reconnaissance (ISR) force. BAMS UAV will provide a persistent maritime ISR capability that will play a significant role in the Sea Shield and FORCENet pillars of Sea Power 21. In its Sea Shield role, BAMS UAV's on-station time enables unmatched awareness of the maritime battlespace by sustaining the maritime Common Operational Tactical Picture for Surface Warfare (SUW) and the Global War on Terrorism (GWOT). The system will serve as a Fleet Response Plan enabler while acting as a trip wire for Intelligence Preparation for the Environment (IPE).

BAMS UAV will include an endurance-class UAV that will operate from land-based sites around the world. Sufficient air vehicles at each operating location will provide persistence by being airborne 24 hours a day, 7 days a week out to ranges of 2000 nautical miles. Worldwide access will be achieved by providing coverage to nearly all the world's high-density sea-lanes, littorals and areas of national interest from its operating locations. Because BAMS UAV and the MMA/P-3 have related, complementary missions, it is intended that BAMS UAV will leverage the Maritime Patrol Reconnaissance Forces community to enhance manpower, training and maintenance efficiencies.

BAMS UAV sensors will provide detection, classification and identification of maritime targets. Anticipated sensors to fulfill mission requirements include a maritime radar, electro-optical/infrared (EO/IR) and Electronic Support Measures (ESM) systems. Additionally, BAMS UAVs will have a communications relay capability linking dispersed forces in the theater of operation and serving as a communications node in the Navy's FORCENet strategy. The UAV will provide the Fleet Commander a common operational tactical picture of the battlespace day and night. It will queue other Navy assets for further situational investigation and/or attack and also will provide battle damage assessment. Data analysis will occur in real-time at shore-based Mission Control Systems via satellite communications. Further exploitation can be conducted at shore-based sites or aboard Carrier Vessel Nuclear/Landing Helicopter Dock ships.

The BAMS UAV will be an evolutionary based acquisition, using an incremental development approach. The program is in a pre-Milestone B phase during FY2005-2007, to address technical risk reduction through studies and demonstrations, System Development Demonstration (SDD) contract preparation and Milestone B documentation development activities. Milestone B is planned for late FY 2007 and SDD award in 1Q FY 2008. The SDD contract will be based on a competitive selection process for a Prime Contractor. The first Low Rate Initial Production (LRIP) procurement is planned for FY2011, with deliveries supporting an Initial Operational Capability (IOC) in FY2014.

Two Mission Need Statements (MNS) support the requirement; 1) BAMS and Littoral Armed ISR MNS, and 2) Long Endurance, Reconnaissance, Surveillance and Target Acquisition (RSTA) Capability MNS. The BAMS UAV ORD was signed by the CNO 17 May 2004. BAMS UAV requirements are currently being updated through the Joint Capabilities Integration and Development System (JCIDS) process resulting in a Capabilities Development Document (CDD) in time to support the Milestone B decision.

B. ACCOMPLISHMENTS / PLANNED PROGRAM:

SD&D CONTRACT	FY 2006	FY 2007	FY 2008	FY 2009
Accomplishments / Effort / Sub-total Cost		5.518	97.000	458.856
RDT&E Articles Qty				2

Award contract to initiate the System Development Demonstration (SDD) efforts for the BAMS UAV program in 1Q FY 2008. The Prime Contractor will be responsible for overall system development and performance as well as associated management, engineering and logistics activities.

APPROPRIATION/BUDGET ACTIVITY RDT&E,N / BA-7	PROGRAM ELEMENT NUMBER AND NAME 0305205N, ENDURANCE UNMANNED AERIAL VEHICLES	PROJECT NUMBER AND NAME 4020, BAMS UAV
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SENSORS, AND MODELING & SIMULATION	FY 2006	FY 2007	FY 2008	FY 2009
Accomplishments / Effort / Sub-total Cost		4.900	3.691	2.675
RDT&E Articles Qty				

Continue sensor risk reduction, modeling & simulation integrated logistics support, and technical data to support fielding of the BAMS UAV capabilities.

ENGINEERING AND TECHNICAL SERVICES	FY 2006	FY 2007	FY 2008	FY 2009
Accomplishments / Effort / Sub-total Cost		15.820	15.975	16.252
RDT&E Articles Qty				

Continue Contractor Support Services, Program Management Support and travel, technical support teaming on systems trade studies; solicitation activities; development of milestone and acquisition-related documentation; capability refinement and open systems architecture development; metric development and tracking; affordability assessments and cost analyses; test and evaluation planning, modeling and simulation activities; logistics supportability analyses and environmental planning; development of manpower and basing assessments; risk reduction and risk management; system integration and interoperability planning; systems engineering and technology maturity reviews; program protection planning, corrosion prevention planning, anti-tamper provisioning planning, and Joint and International Cooperation efforts.

DEVELOPMENTAL TESTING	FY 2006	FY 2007	FY 2008	FY 2009
Accomplishments / Effort / Sub-total Cost				2.540
RDT&E Articles Qty				

Initiate developmental test to support fielding of the BAMS UAV in FY2014

C. OTHER PROGRAM FUNDING SUMMARY:	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	To Complete	Total Cost
APN 044200 BAMS UAV	0	0	0	0	0	20.009	363.877	359.917		743.803
APN Initial Spares: 060510 BAMS UAV	0	0	0	0	0	0	16.183	19.192		35.375

D. ACQUISITION STRATEGY:

The BAMS UAV program will develop and field a persistent maritime Intelligence Surveillance Reconnaissance capability. Commonality with existing unmanned and manned systems will be utilized to the greatest extent possible for all segments of the BAMS UAV program (i.e., air-vehicle, ground segment and payloads).

The BAMS UAV will be an evolutionary based acquisition, using an incremental development approach. The program is in a pre-Milestone B phase between FY2005-2007 to address technical risk reduction through studies and demonstrations, prepare the SDD contract and develop Milestone B documentation. Milestone B is planned for late FY2007 and SDD award in 1Q FY 2008. The SDD contract will be based on a competitive selection process for a Prime Contractor. The first Low Rate Initial Production (LRIP) contract is planned for FY2011, with deliveries supporting an Initial Operational Capability (IOC) in FY2014.

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Exhibit R-3 Cost Analysis (page 1)										DATE: February 2007		
APPROPRIATION/BUDGET ACTIVITY RDT&E,N / BA-7			PROGRAM ELEMENT 0305205N, ENDURANCE UNMANNED AERIAL VEHICLES				PROJECT NUMBER AND NAME 4020, BAMS UAV					
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2007 Cost	FY 2007 Award Date	FY 2008 Cost	FY 2008 Award Date	FY 2009 Cost	FY 2009 Award Date	Cost to Complete	Total Cost	Target Value of Contract
PRODUCT DEVELOPMENT												
Ancillary Hdw Development	C/CPAF	TBD				3.200	11/07	23.650	11/08	Continuing	Continuing	
Primary Hdw Development	VARIOUS	VARIOUS	16.469								16.469	
Primary Hdw Development	C/CPAF	TBD				93.800	11/07	435.206	11/08	Continuing	Continuing	
SUBTOTAL PRODUCT DEVELOPMENT			16.469			97.000		458.856		Continuing	Continuing	

Remarks:
 A competitively selected SDD contract will be awarded in 4Q FY2007. Award fee values will be established during contract negotiations.
 Funding in FY2007 will support program initiation to enable the Prime Contractor to establish team manning, program controls and system engineering processes.

SUPPORT												
Integrated Logistics Sup	WX	VARIOUS	4.148	1.245	11/06	1.470	11/07	1.550	11/08	Continuing	Continuing	
Studies & Analysis	VARIOUS	VARIOUS		3.655	11/06	2.221	11/07	1.125	11/08	Continuing	Continuing	
Studies & Analysis	MP	MASS INST TECH, CAMBRIDGE MA	.500								.500	
SUBTOTAL SUPPORT			4.648	4.900		3.691		2.675		Continuing	Continuing	

Remarks:

TEST & EVALUATION												
Developmental Test & Eval	VARIOUS	VARIOUS						2.540	11/08	Continuing	Continuing	
SUBTOTAL TEST & EVALUATION								2.540		Continuing	Continuing	

Remarks:

MANAGEMENT												
Contractor Eng Sup	VARIOUS	VARIOUS		2.972	11/06	1.944	11/07	2.140	11/08	Continuing	Continuing	
Government Eng Sup	WX	VARIOUS	21.258	13.954	11/06	9.500	11/07	9.350	11/08	Continuing	Continuing	
Program Mgmt Sup	VARIOUS	VARIOUS	14.728	4.337	11/06	4.381	11/07	4.597	11/08	Continuing	Continuing	
Travel	TO	VARIOUS	.167	.075	10/06	.150	10/07	.165	10/08	Continuing	Continuing	
SUBTOTAL MANAGEMENT			36.153	21.338		15.975		16.252		Continuing	Continuing	

Remarks:

Total Cost			57.270	26.238		116.666		480.323		Continuing	Continuing	
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Remarks:

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Exhibit R-4a, Schedule Detail						DATE: February 2007		
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-7	PROGRAM ELEMENT 0305205N Endurance Unmanned Aerial Vehicles				PROJECT NUMBER AND NAME 4020 BAMS UAV			
Schedule Profile	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
Pre-Systems Acquisition	1Q-4Q	1Q-3Q						
Draft RFP		1Q						
Final RFP		2Q						
Milestone B (MS-B)		4Q						
System Development Demonstration (SDD/CA)			1Q					
System Readiness Review (SRR)			2Q					
System Financial Review (SFR)			4Q					
Preliminary Design Review (PDR)				3Q				
Integrated Test CT/DT/OT				4Q	1Q-4Q	1Q-4Q	1Q-4Q	1Q-4Q
Critical Design Review (CDR)					2Q			
Airworthiness First Flight						2Q		
System Development Demonstration Delivery (EDM)						3Q & 4Q		
Low Rate Initial Production 1 (LRIP 1) CA						4Q		
Milestone C (MS-C)						4Q		
Low Rate Initial Production 2 (LRIP 2) CA							3Q	
Low Rate Initial Production 3 (LRIP 3) CA								3Q
Low Rate Initial Production 1 Delivery								3Q-4Q
OPEVAL								4Q