

EXHIBIT R-2, RDT&E Budget Item Justification							DATE: February 2008	
APPROPRIATION/BUDGET ACTIVITY RESEARCH DEVELOPMENT TEST & EVALUATION, NAVY / BA-7					R-1 ITEM NOMENCLATURE 0305205N Endurance Unmanned Aerial Vehicles			
COST (\$ in Millions)		FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
Total PE Cost		26.238	121.315	480.098	557.037	462.773	383.737	279.193
4020 BAMS UAS		26.238	115.915	480.098	557.037	462.773	383.737	279.193
9999 CONGRESSIONAL ADDS			5.400					
<p>A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:</p> <p>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. NOTE: The DoD Unmanned Aircraft System (UAS) Roadmap introduced the standardized term "UAS" to replace the term "UAV", reflecting the fact that the unmanned aircraft is part of a system that includes ground control and other components.</p> <p>Broad Area Maritime Surveillance (BAMS) Unmanned Aircraft System (UAS)</p> <p>The BAMS UAS, which is an adjunct to the P-8A Multi-Mission Maritime Aircraft (MMA) / P-3, is integral in recapitalizing the Navy's Maritime Patrol and Reconnaissance Force. BAMS UAS will play a significant role in the Sea Shield and FORCENet pillars of Sea Power 21. In its Sea Shield role, BAMS UAS on-station time and range enables unmatched awareness of the maritime battlespace by sustaining the common operational tactical picture (COTP) 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 (IPOE).</p> <p>BAMS UAS will include an endurance-class UAS that will operate from land-based sites around the world. Sufficient unmanned aircraft at each operating location will provide persistent maritime ISR by being airborne 24 hours a day, 7 days a week out to ranges of 2,000 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 UAS and the MMA/P-3 have related complementary missions, it is intended that BAMS UAS will leverage the Maritime Patrol and Reconnaissance Forces (MPRF) community to enhance manpower, training and maintenance efficiencies.</p> <p>BAMS UAS sensors will provide detection, classification, tracking and identification of maritime targets. Anticipated sensors to fulfill mission requirements include maritime radar, electro-optical/infrared (EO/IR) and Electronic Support Measures (ESM) systems. Additionally, BAMS UAS 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 UAS will support the Fleet Commander's common operational tactical picture (COTP) of the battlespace, day and night. The UAS will cue other Navy assets for further situational investigation and/or attack, and will also provide battle damage assessment of the area of interest. Tactical-level data analysis will occur in real-time at shore-based Mission Control Systems via satellite communications. Further intelligence exploitation can be conducted at shore-based sites or aboard Carrier Vessel Nuclear (CVN) / Landing Helicopter Dock (LHD) ships.</p> <p>Congressional Adds (FY08)</p> <p>Advanced Airship Flying Laboratory The Advanced Airship Flying Laboratory provides an airship-based capability to develop, test and demonstrate airborne mission systems equipment (Command, Control, Communications, Computers and Intelligence (C4I) and Infrared Search and Track (IRST)). Allows studies for development of a modernized naval airship featuring contemporary composited, digital flight controls, vectored thrust and remote piloted capabilities.</p> <p>Coastal Airship Surveillance Demonstrator The Coastal Airship Surveillance Demonstrator funding will be used to operate, demonstrate and assess the capabilities of an airship to perform the coastal surveillance and intelligence-gathering mission.</p> <p>Skybus 80k and 130k LTA-UAS Multirole Technologies Development, test, design and build of the Skybus 80K will provide a platform to evaluate airship capability in performing multirole, persistent ISR and long-dwell missions in both hostile and non-threatening environments.</p>								

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<p>B. PROGRAM CHANGE SUMMARY:</p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Funding:</th> <th style="text-align: right;">FY 07</th> <th style="text-align: right;">FY 08</th> <th style="text-align: right;">FY 09</th> </tr> </thead> <tbody> <tr> <td>Previous President's Budget:</td> <td style="text-align: right;">26.238</td> <td style="text-align: right;">116.666</td> <td style="text-align: right;">480.323</td> </tr> <tr> <td>Current BES Budget:</td> <td style="text-align: right;">26.238</td> <td style="text-align: right;">121.315</td> <td style="text-align: right;">480.098</td> </tr> <tr> <td>Total Adjustments</td> <td style="text-align: right; border-top: 1px solid black;">0.000</td> <td style="text-align: right; border-top: 1px solid black;">4.649</td> <td style="text-align: right; border-top: 1px solid black;">-0.225</td> </tr> <tr> <td colspan="4" style="padding-left: 20px;">Summary of Adjustments</td> </tr> <tr> <td style="padding-left: 40px;">Congressional Reductions</td> <td></td> <td></td> <td></td> </tr> <tr> <td style="padding-left: 40px;">Congressional Rescissions</td> <td></td> <td></td> <td></td> </tr> <tr> <td style="padding-left: 40px;">Congressional Undistributed Reductions</td> <td></td> <td style="text-align: right;">-0.751</td> <td></td> </tr> <tr> <td style="padding-left: 40px;">Congressional Increases</td> <td></td> <td style="text-align: right;">5.400</td> <td></td> </tr> <tr> <td style="padding-left: 40px;">Economic Assumptions</td> <td></td> <td></td> <td style="text-align: right;">-0.114</td> </tr> <tr> <td style="padding-left: 40px;">Miscellaneous Adjustments</td> <td></td> <td></td> <td style="text-align: right;">-0.111</td> </tr> <tr> <td style="padding-left: 40px;">Subtotal</td> <td style="text-align: right; border-top: 1px solid black;">0.000</td> <td style="text-align: right; border-top: 1px solid black;">4.649</td> <td style="text-align: right; border-top: 1px solid black;">-0.225</td> </tr> </tbody> </table> <p style="margin-top: 20px;">Schedule:</p> <p style="margin-left: 20px;">MS B realigned from 4Q FY07 to 2Q FY08 to match source selection / DAB schedule. In conjunction, SDD CA, SRR, and SFR moved one quarter due to associated MS B change. EDM deliveries begin in 2Q FY11 vice 3Q FY11 in order to align with Airworthiness First Flight.</p> <p style="margin-top: 20px;">Technical:</p> <p style="margin-left: 20px;">Not applicable</p>			Funding:	FY 07	FY 08	FY 09	Previous President's Budget:	26.238	116.666	480.323	Current BES Budget:	26.238	121.315	480.098	Total Adjustments	0.000	4.649	-0.225	Summary of Adjustments				Congressional Reductions				Congressional Rescissions				Congressional Undistributed Reductions		-0.751		Congressional Increases		5.400		Economic Assumptions			-0.114	Miscellaneous Adjustments			-0.111	Subtotal	0.000	4.649	-0.225
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EXHIBIT R-2a, RDT&E Project Justification						DATE: February 2008		
APPROPRIATION/BUDGET ACTIVITY RDT&E,N / BA-7		PROGRAM ELEMENT NUMBER AND NAME 0305205N, ENDURANCE UNMANNED AERIAL VEHICLES			PROJECT NUMBER AND NAME 4020, BAMS UAS			
COST (\$ in Millions)		FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
4020 BAMS UAS		26.238	115.915	480.098	557.037	462.773	383.737	279.193
RDT&E Articles Qty				2		4		

A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

Along with the Multi-Mission Maritime Aircraft (MMA) and the EPX (follow on to the EP-3), the BAMS UAS is integral in recapitalizing the Navy's Maritime Patrol and Reconnaissance Force. Specifically, the BAMS UAS is intended to provide persistent, tactical airborne Intelligence, Surveillance and Reconnaissance (ISR) support to the Joint / Coalition Force Maritime Component Commander, including Navy Strike Groups (Carrier, Expeditionary and Surface). BAMS UAS addresses a unique capability gap in the Joint Force's ability to provide persistent, tactical-level ISR support to maritime commanders in the maritime environment. However, it is anticipated that the mission payloads which will be integrated with the system will support other Joint Force missions as needed. Within the Navy's Sea Power 21 concept, BAMS UAS will play a significant role in the Sea Shield and FORCEnet pillars. In its Sea Shield role, BAMS UAS on-station time supports the maritime commander's awareness of the maritime battlespace by sustaining the maritime Common Operational Tactical Picture (COTP) for Surface Warfare (SUW). In its FORCEnet role, BAMS UAS will conduct Intelligence Preparation Of The Environment (IPOE) and Maritime Domain Awareness (MDA) missions supporting the Global War on Terrorism (GWOT), Maritime Homeland Defense (MHL) and Surface Warfare (SUW). The Navy intends to rely on unmanned aircraft to execute persistent ISR, saving service life on its future manned patrol and reconnaissance aircraft by using BAMS UAS as a trip wire to enable the Fleet Response Plan (FRP).

BAMS UAS will include an endurance-class UAS that will operate from land-based sites around the world. Sufficient unmanned aircraft at each operating location will provide persistence by being airborne 24 hours a day, 7 days a week out to ranges of 2,000 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 UAS, the MMA/P-8A and the EPX have related, complementary missions, it is intended that BAMS UAS will leverage the Maritime Patrol Reconnaissance Forces (MPRF) community to enhance manpower, training and maintenance efficiencies.

BAMS UAS sensors will provide detection, classification and identification of maritime targets. Anticipated sensors to fulfill mission requirements include maritime radar, electro-optical/infrared (EO/IR) and Electronic Support Measures (ESM) systems. Additionally, BAMS UASs 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 UAS will support the Fleet Commander's common operational tactical picture of the battlespace day and night. It will cue other Navy assets for further situational investigation and/or attack, and also will provide battle damage assessment. Tactical data analysis will occur in real-time at shore-based Mission Control Systems via satellite communications. Further intelligence exploitation can be conducted at shore-based sites or aboard Carrier Vessel Nuclear (CVN) / Landing Helicopter Dock (LHD) ships.

The BAMS UAS will be an evolutionary based acquisition, using an incremental development approach. During the pre-Milestone B phase, the program performed technical risk reduction through studies and demonstrations, System Development and Demonstration (SDD) contract preparation, and Milestone B documentation development activities. Milestone B is planned for 2Q FY 2008 and SDD award in 2Q FY 2008. The SDD contract will be based on a competitive selection process for a Prime Contractor.

Two Mission Need Statements (MNSs) support the requirement; 1) BAMS and Littoral Armed ISR MNS, and 2) Long Endurance, Reconnaissance, Surveillance and Target Acquisition (RSTA) Capability MNS. The BAMS UAS Capabilities Development Document (CDD) was approved May 2007 by the Joint Requirements Oversight Council (JROC).

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APPROPRIATION/BUDGET ACTIVITY RDT&E,N / BA-7	PROGRAM ELEMENT NUMBER AND NAME 0305205N, ENDURANCE UNMANNED AERIAL VEHICLES	PROJECT NUMBER AND NAME 4020, BAMS UAS

B. ACCOMPLISHMENTS / PLANNED PROGRAM:

SD&D CONTRACT	FY 2007	FY 2008	FY 2009
Accomplishments / Effort / Sub-total Cost		96.446	458.856
RDT&E Articles Qty			2

Award contract in FY08 to initiate the System Development Demonstration (SDD) efforts for the BAMS UAS program in 2Q FY 2008. Continue SDD in FY09. The Prime Contractor will be responsible for overall system development and performance, as well as associated management, engineering and logistics activities.

SENSORS, AND MODELING & SIMULATION	FY 2007	FY 2008	FY 2009
Accomplishments / Effort / Sub-total Cost	4.900	3.494	2.561
RDT&E Articles Qty			

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

ENGINEERING AND TECHNICAL SERVICES	FY 2007	FY 2008	FY 2009
Accomplishments / Effort / Sub-total Cost	21.338	15.975	16.141
RDT&E Articles Qty			

Continue the following: 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 2007	FY 2008	FY 2009
Accomplishments / Effort / Sub-total Cost			2.540
RDT&E Articles Qty			

Initiate developmental testing to support fielding of the BAMS UAS.

C. OTHER PROGRAM FUNDING SUMMARY:

	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	20.003	363.771	359.813	Cont	Cont
APN Initial Spares: 060510 BAMS UAV	0	0	0	0	0	16.538	18.637	Cont	Cont

D. ACQUISITION STRATEGY:

The BAMS UAS will be an evolutionary based acquisition, using an incremental development approach. During the pre-Milestone B phase, the program performed technical risk reduction through studies and demonstrations, System Development and Demonstration (SDD) contract preparation, and Milestone B documentation development activities. Milestone B is planned for 2Q FY 2008 and SDD award in 2Q FY 2008. The SDD contract will be based on a competitive selection process for a Prime Contractor.

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Exhibit R-3 Cost Analysis (page 1)										DATE: February 2008		
APPROPRIATION/BUDGET ACTIVITY RDT&E,N / BA-7		PROGRAM ELEMENT 0305205N, ENDURANCE UNMANNED AERIAL VEHICLES				PROJECT NUMBER AND NAME 4020, BAMS UAS						
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s 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												
Primary Hardware Development	C/CPAF	TBD				93.800	02/08	435.206	11/08	Continuing	Continuing	
Primary Hardware Development	Various	Various	16.469								16.469	
Ancillary Hardware Development	C/CPAF	TBD				2.646	02/08	23.650	11/08	Continuing	Continuing	
SUBTOTAL PRODUCT DEVELOPMENT			16.469			96.446		458.856		Continuing	Continuing	

Remarks: BAMS is currently conducting a competitive source selection. The Award Fee is being negotiated, and will not be determined until a contractor is selected in 2Q FY08. Due to the sensitivity of the award fee negotiations, an estimated award fee cannot be provided at this time.

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	2.024	11/07	1.011	11/08	Continuing	Continuing	
Studies & Analysis	MP	MASS INST TECH, CAMBRIDGE MA	.500								.500	
SUBTOTAL SUPPORT			4.648	4.900		3.494		2.561		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 and Log Sup	VARIOUS	VARIOUS		2.972	11/06	1.944	11/07	2.140	11/08	Continuing	Continuing	
Government Eng and Log 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	4.486	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		16.141		Continuing	Continuing	

Remarks:

Total Cost			57.270	26.238		115.915		480.098		Continuing	Continuing	
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Remarks:

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Exhibit R-4a, Schedule Detail					DATE: February 2008		
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-7	PROGRAM ELEMENT 0305205N Endurance Unmanned Aerial Vehicles				PROJECT NUMBER AND NAME 4020, BAMS UAS		
Schedule Profile	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
Pre-Systems Acquisition	1Q-4Q	1Q					
Draft Request for Proposal (RFP)	1Q						
Final Request for Proposal (RFP)	2Q						
Milestone B (MS-B)		2Q					
System Development & Demonstration award (SDD/CA)		2Q					
System Readiness Review (SRR)		3Q					
System Functional Review (SFR)			1Q				
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		
SDD Engineering Development Model (EDM) delivery					2Q & 3Q		
Milestone C (MS-C)					4Q		
Low Rate Initial Production 1 (LRIP 1) CA					4Q		
Low Rate Initial Production 2 (LRIP 2) CA						3Q	
Low Rate Initial Production 3 (LRIP 3) CA							3Q
Low Rate Initial Production 1 (LRIP 1) Delivery							3Q-4Q
OPEVAL							4Q

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COST (\$ in Millions)		FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012
9999 Congressional Adds			5.400				
RDT&E Articles Qty							

A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

Congressional Adds

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B. Accomplishments/Planned Program

Advanced Airship Flying Laboratory	FY 07	FY 08	FY 09
Accomplishments/Effort/Subtotal Cost		2.000	
RDT&E Articles Quantity			

Advanced Airship Flying Laboratory. Continue the development of new technologies to advance modern airships, such as digital automated flight controls, bow thrusters, and heavy fuel engines. Government Engineering Support, contractor support services, and travel.

Coastal Airship Surveillance Demonstrator	FY 07	FY 08	FY 09
Accomplishments/Effort/Subtotal Cost		1.600	
RDT&E Articles Quantity			

Develop and conduct Coastal Airship Surveillance demonstrations. Government Engineering Support, contractor support services, and travel.

Skybus 80k and 130k LTA-UAS Multirole Technologies	FY 07	FY 08	FY 09
Accomplishments/Effort/Subtotal Cost		1.800	
RDT&E Articles Quantity			

Development and testing of the Skybus 80K and 130K. Government Engineering Support, contractor support services, and travel.