

CLASSIFICATION:

**UNCLASSIFIED**

EXHIBIT R-2, RDT&E Budget Item Justification	DATE: <b>February 2005</b>
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APPROPRIATION/BUDGET ACTIVITY <b>RESEARCH DEVELOPMENT TEST &amp; EVALUATION, NAVY / BA-7</b>				R-1 ITEM NOMENCLATURE 0307207N Aerial Common Sensor				
COST (\$ in Millions)	*FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
Total PE Cost		<b>24.683</b>	<b>133.642</b>	<b>123.669</b>	<b>173.973</b>	<b>110.946</b>	<b>40.777</b>	<b>16.320</b>
3015 Aerial Common Sensor		<b>24.683</b>	<b>133.642</b>	<b>123.669</b>	<b>173.973</b>	<b>110.946</b>	<b>40.777</b>	<b>16.320</b>

A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

Provides funding for the Navy's Aerial Common Sensor (ACS) involvement in a post-Milestone B joint Army/Navy program. Provide funds for Navy's share of ACS platform development and for Navy unique requirements. ACS is the Navy's recapitalization of existing EP-3E capabilities and offers a transformational platform to fulfill the Navy and OSD requirements for migration to the Joint Airborne SIGINT Architecture (JASA). RDT&E efforts under ACS will integrate additional workstations, ensure connectivity to multi-service platforms and ground stations, procure two ACS test platforms and develop an initial mission systems spiral that will integrate the Navy's unique maritime Intelligence, Surveillance and Reconnaissance (ISR) mission requirements. ACS contract awarded 4th quarter FY2004 to Lockheed Martin Integrated Systems and Solutions, Littleton, Colorado.

\* FY 2004 funding was a congressional add in PE 0605152N Studies and Analysis Support for Future SIGINT Requirements/Joint ACS Program. Those funds were executed in that R-1 line item and used to study the available replacement options and the viability of ACS as a replacement program for the EP-3. Follow on development funding for ACS is budgeted and will be executed in this R-1 line item.

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APPROPRIATION/BUDGET ACTIVITY <b>RDT&amp;E, N / BA-7</b>		PROGRAM ELEMENT NUMBER AND NAME 0307207N Aerial Common Sensor			PROJECT NUMBER AND NAME 3015 Aerial Common Sensor			
COST (\$ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
Project Cost		<b>24.683</b>	<b>133.642</b>	<b>123.669</b>	<b>173.973</b>	<b>110.946</b>	<b>40.777</b>	<b>16.320</b>
RDT&E Articles Qty				<b>1</b>	<b>1</b>			

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

Provides funding for the Navy's Aerial Common Sensor (ACS) involvement in a post-Milestone B joint Army/Navy program. Provide funds for Navy's share of ACS platform development and for Navy unique requirements. ACS is the Navy's recapitalization of existing EP-3E capabilities and offers a transformational platform to fulfill the Navy and OSD requirements for migration to the Joint Airborne SIGINT Architecture (JASA). RDT&E efforts under ACS will integrate additional workstations, ensure connectivity to multi-service platforms and ground stations, procure two ACS test platforms and develop an initial mission systems spiral that will integrate the Navy's unique maritime Intelligence, Surveillance and Reconnaissance (ISR) mission requirements.

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**B. Accomplishments/Planned Program**

System Development and Development Support	FY 04	FY 05	FY 06	FY 07
Accomplishments/Effort/Subtotal Cost		20.483	127.310	109.819
RDT&E Articles Quantity				1

Awarded SDD contract with Lockheed Martin. Entered into SDD for ACS Program; conduct engineering and development efforts in preparation for the Preliminary / Critical Design Reviews (PDR / CDR) for the ACS weapon system. Conduct engineering, loads analysis, design, preparation, installation and ground test calibration of instrumentation and loads test. Test program risk reduction efforts. Fund ramp up for Preliminary / Critical Design Reviews (PDR / CDR). Conduct development and support of a reachback capability and interoperability to multiservice platforms and ground stations.

Development /Operational Test & Evaluation	FY 04	FY 05	FY 06	FY 07
Accomplishments/Effort/Subtotal Cost			2.203	9.377
RDT&E Articles Quantity				

Conduct development, integration and test in preparation for Developmental Test (DT) and Limited User Test (LUT) / Operational Assessment (OA). Support Developmental Test and Limited User Test (LUT) / Operational Assessment (OA).

ACS Program Management and Engineering Support	FY 04	FY 05	FY 06	FY 07
Accomplishments/Effort/Subtotal Cost		4.200	4.129	4.473
RDT&E Articles Quantity				

Fund ACS government and contractor systems engineering and engineering support. Fund ACS program management.

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APPROPRIATION/BUDGET ACTIVITY <b>RDT&amp;E, N / BA-7</b>	PROGRAM ELEMENT NUMBER AND NAME 0307207N Aerial Common Sensor	PROJECT NUMBER AND NAME 3015 Aerial Common Sensor			
<b>C. PROGRAM CHANGE SUMMARY:</b>					
Funding:		FY 2004	FY 2005	FY 2006	FY 2007
Previous President's Budget:		0.000	24.909	49.864	99.783
Current BES/President's Budget:		0.000	24.683	133.642	123.669
Total Adjustments		0.000	-0.226	83.778	23.886
Summary of Adjustments					
OSD			-0.005	-4.607	-4.790
Congressional undistributed reductions			-0.221		
Congressional rescissions					
SBIR/STTR Transfer					
Other Adjustments				87.000	26.860
Economic Assumptions				1.385	1.816
Reprogrammings					
Congressional increases					
Subtotal		0.000	-0.226	83.778	23.886
Schedule:					
Adjusted to reflect Army's ACS Schedule Baseline					
Technical:					
Not Applicable.					

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APPROPRIATION/BUDGET ACTIVITY <b>RDT&amp;E, N / BA-7</b>			PROGRAM ELEMENT NUMBER AND NAME 0307207N Aerial Common Sensor			PROJECT NUMBER AND NAME 3015 Aerial Common Sensor				
<b>D. OTHER PROGRAM FUNDING SUMMARY:</b>										
<u>Line Item No. &amp; Name</u>	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>To Complete</u>	<u>Total Cost</u>
0605152N (H9411) Future SIGINT Rqmts/Joint ACS Pgm	3.842									3.842
APN BLI 019100 Aerial Common Sensor (ACS)					6.065	131.444	397.951	529.745	607.140	1,672.345
APN BLI 060510 Initial Spares							11.217	17.887	110.986	140.090
<b>E. ACQUISITION STRATEGY:</b>										
<p>Leverages off of the Army's ACS development efforts to provide the Navy an affordable joint solution to recapitalize EP-3E capabilities. Army Acquisition Strategy signed by the MDA, USD (ATL) on 19 Dec 2003. Army Milestone B approval to proceed with System Development and Demonstration (SDD) occurred 4th QTR FY2004. ACS contract awarded 4th QTR FY2004 to Lockheed Martin Integrated Systems and Solutions, Littleton, Colorado. The Navy will modify the Army's Acquisition Strategy and have it approved prior to its In-Process Review (IPR) to the DAB during 2nd QTR FY2005.</p>										

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Exhibit R-3 Cost Analysis (page 1)								DATE: <b>February 2005</b>				
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT			PROJECT NUMBER AND NAME						
<b>RDT&amp;E, N / BA-7</b>			0307207N Aerial Common Sensor			3015 Aerial Common Sensor						
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
Primary Hardware Development	C/CPAF	Army Prime Lockheed Martin		15.000	12/04	119.714	12/05	96.662	12/06	232.913	464.289	464.658
Systems Engineering	WX	NAWC/AD, Pax River, MD				1.845	11/05	2.742	11/06	15.095	19.682	
Training Development	C/CPAF	Army Prime Lockheed Martin						3.500	12/06	18.002	21.502	21.502
Training Development	WX	NAWC/TSD, Orlando, FL				0.894	11/05	1.015	11/06	2.428	4.337	
											0.000	
											0.000	
											0.000	
											0.000	
											0.000	
											0.000	
Subtotal Product Development			0.000	15.000		122.453		103.919		268.438	509.810	
Remarks: Award Fee managed, monitored and funded by Army Program Office												
Development Support	C/CPFF	TBD		1.000	12/04	1.801	12/05	2.306	12/06	8.245	13.352	13.352
Development Support	WX	NAWC/WD, China Lake, CA		4.483	12/04	0.485	11/05	0.500	11/06	2.153	7.621	
Development Support	WX	NAWC/AD, Pax River				0.746	11/05	1.115	11/06	5.192	7.053	
Integrated Logistics Support	WX	NAWC/AD, Pax River				1.404	11/05	1.545	11/06	6.474	9.423	
Technical Data	WX	NAWC/AD, Pax River, MD				0.421	11/05	0.434	11/06	2.413	3.268	
											0.000	
											0.000	
											0.000	
Subtotal Support			0.000	5.483		4.857		5.900		24.477	40.717	
Remarks:												

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Exhibit R-3 Cost Analysis (page 2)										DATE: <b>February 2005</b>		
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT			PROJECT NUMBER AND NAME						
<b>RDT&amp;E, N / BA-7</b>			0307207N Aerial Common Sensor			3015 Aerial Common Sensor						
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	NAWC/AD, Pax River, MD				2.203	11/05	9.377	11/06	20.060	31.640	
Operational Test & Evaluation	WX	TBD								11.302	11.302	
											0.000	
											0.000	
											0.000	
											0.000	
Subtotal T&E			0.000	0.000		2.203		9.377		31.362	42.942	
Remarks:												
Contractor Engineering Support	C/CPFF	AT&T		0.400	12/04	1.213	12/05	1.315	12/06	5.004	7.932	7.932
Government Engineering Support	WX	NAWC/AD, Pax River, MD		2.500	12/04	1.603	11/05	1.859	11/06	7.632	13.594	
Program Management Support	WX	NAWC/AD, Pax River, MD		1.000	12/04	1.113	11/05	1.099	11/06	4.279	7.491	
Travel	WX	NAWC/AD, Pax River, MD		0.300	12/04	0.200	11/05	0.200	11/06	0.824	1.524	
											0.000	
											0.000	
Subtotal Management			0.000	4.200		4.129		4.473		17.739	30.541	
Remarks:												
Total Cost			0.000	24.683		133.642		123.669		342.016	624.010	
Remarks:												

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EXHIBIT R4, Schedule Profile																							DATE: <b>February 2005</b>									
APPROPRIATION/BUDGET ACTIVITY <b>RDT&amp;E, N / BA-7</b>										PROGRAM ELEMENT NUMBER AND NAME 0307207N Aerial Common Sensor										PROJECT NUMBER AND NAME 3015 Aerial Common Sensor												
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	1	2	3	4
<b>Acquisition Milestones</b>			△ MS B		△ Navy IPR to DAB								△ IPR/DRR								△ MS C				△ Army / Navy FRP	△ Army FUE*						
<b>Contract Milestone</b>			△ SDD Contract Award																		△ Army / Navy LRIP											
<b>ACS System Development</b>					△ IBR	△ PDR			△ CDR																							
<b>Test &amp; Evaluation Milestones</b>																																
Development Test																																
Operational Test																																
<b>Production Milestones</b>																																
<b>Deliveries</b>																																

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\* First Unit Equipped (FUE), equates to IOC

\*\* Limited User Test (LUT), equates to Operational Assessment (OA)

\*\*\* Navy Sys 1 & 2 are RDT&E assets

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Exhibit R-4a, Schedule Detail						DATE: <b>February 2005</b>		
<b>APPROPRIATION/BUDGET ACTIVITY</b>	<b>PROGRAM ELEMENT</b>				<b>PROJECT NUMBER AND NAME</b>			
<b>RDT&amp;BA-7</b>	0307207N Aerial Common Sensor				3015 Aerial Common Sensor			
Schedule Profile	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
Acquisition Milestones - Milestone B (Army)	3Q							
Acquisition Milestones - Navy IPR to DAB		2Q						
Acquisition Milestones - Design Readiness Review				1Q				
Acquisition Milestones - Milestone C								
Contract Milestones - SDD Award	4Q							
Contract Milestones - Navy LRIP								
ACS System Development - Preliminary Design Review		3Q						
ACS System Development - Critical Design Review			1Q					
Test & Evaluation Milestones - Developmental Test 1				2Q-3Q				
Test & Evaluation Milestones - Developmental Test 2								
Test & Evaluation Milestones - Operational Assessment / Limited User Test								
Test & Evaluation Milestones - Operational Readiness Demo								
Test & Evaluation Milestones - Initial Operational Test & Evaluation								
Production Milestones - LRIP Start								
Production Milestones - Full-Rate Production								
Integrated Baseline Review		2Q						

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**Exhibit R-4a, Schedule Detail**  
(Exhibit R-4a, page 9 of 9)