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CLASSIFICATION:

EXHIBIT R-2, RDT&E Budget Item Justification							DATE: February 2008	
APPROPRIATION/BUDGET ACTIVITY RESEARCH DEVELOPMENT TEST & EVALUATION, NAVY / BA-5					R-1 ITEM NOMENCLATURE 0605430N, C/KC-130 AVIONICS MODERNIZATION PROGRAM (AMP)			
COST (\$ in Millions)		FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
Total PE Cost				24.407	28.969			
3199/Avionics Modernization				24.407	28.969			

A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

Communication, Navigation, and Surveillance/Air Traffic Management (CNS/ATM) C-130 Avionics Modernization Program (AMP): The mission of the C/KC-130T is to provide aerial refueling service in support of fleet USN and USMC air operations and provide assault air transport for personnel, equipment, and supplies. The forty-eight (48) C/KC-130T aircraft are operating with avionics systems that require immediate attention to the issues of equipment obsolescence, supportability, commercial standardization, global navigation and flight safety. The Secretary of Defense and Regulatory Agencies are imposing initiatives and mandates for precision navigation and improved flight safety requirements for aircraft operating as air transport and troop carriers in the U.S. and abroad. These issues have significant impact on cost, reliability and maintainability. The present state of these aircraft is that they will not be operable assets by the latter half of the next decade without a major upgrade to the avionics suite and the electrical systems. Current reliability data indicates an increase in maintenance actions will be required unless an upgrade to existing systems is accomplished. Unless an avionics modernization program is implemented, aircraft availability and the ability to respond to critical missions will be decreased. To ensure global airspace access, joint service solutions in CNS/ATM are required. These improvements are driven by major restructure of airspace architecture and Air Traffic Control (ATC) procedures worldwide. CNS/ATM enhancements are categorized into three areas: navigation, communication and surveillance. The CNS/ATM C-130 AMP modification will allow the C-130 to operate within the ATM environment and comply with Euro-control standards. Communication upgrades are required to allow continued operation in all theater airspace, including data link and digitized voice capacity. Surveillance functions will identify aircraft position for ATM purposes.

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<p>B. PROGRAM CHANGE SUMMARY: 0605430 is a new Program Element (PE). Funds were transferred from previous PE 0604215N.</p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;"></th> <th style="text-align: center;">FY 07</th> <th style="text-align: center;">FY 08</th> <th style="text-align: center;">FY 09</th> </tr> </thead> <tbody> <tr> <td>Funding: Not Applicable</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Previous President's Budget:</td> <td></td> <td></td> <td style="text-align: right;">0.000</td> </tr> <tr> <td>Current BES Budget</td> <td></td> <td></td> <td style="text-align: right;">24.407</td> </tr> <tr> <td>Total Adjustments</td> <td></td> <td></td> <td style="text-align: right;">24.407</td> </tr> <tr> <td colspan="4">Summary of Adjustments: Not Applicable</td> </tr> <tr> <td> Congressional Reductions</td> <td></td> <td></td> <td></td> </tr> <tr> <td> Congressional Rescissions</td> <td></td> <td></td> <td></td> </tr> <tr> <td> Congressional Undistributed Reductions</td> <td></td> <td></td> <td></td> </tr> <tr> <td> Congressional Increases</td> <td></td> <td></td> <td></td> </tr> <tr> <td> Economic Assumptions</td> <td></td> <td></td> <td></td> </tr> <tr> <td> Miscellaneous Adjustments</td> <td></td> <td></td> <td style="text-align: right;">24.407</td> </tr> <tr> <td> Subtotal</td> <td></td> <td></td> <td style="text-align: right;">24.407</td> </tr> </tbody> </table> <p>Schedule: Not Applicable</p> <p>Technical: Not Applicable</p>				FY 07	FY 08	FY 09	Funding: Not Applicable				Previous President's Budget:			0.000	Current BES Budget			24.407	Total Adjustments			24.407	Summary of Adjustments: Not Applicable				Congressional Reductions				Congressional Rescissions				Congressional Undistributed Reductions				Congressional Increases				Economic Assumptions				Miscellaneous Adjustments			24.407	Subtotal			24.407
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EXHIBIT R-2a, RDT&E Project Justification							DATE: February 2008	
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-5		PROGRAM ELEMENT NUMBER AND NAME 0605430N, C/KC-130 AVIONICS MODERNIZATION PROGRAM (AMP)			PROJECT NUMBER AND NAME 3199/Avionics Modernization			
COST (\$ in Millions)		FY 2007	FY 2008	FY 2009				
Project Cost				24.407				
RDT&E Articles Qty								

A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

Communication, Navigation, and Surveillance/Air Traffic Management (CNS/ATM) C-130 Avionics Modernization Program (AMP): The mission of the C/KC-130T is to provide aerial refueling service in support of fleet USN and USMC air operations and provide assault air transport for personnel, equipment, and supplies. The forty-eight (48) C/KC-130T aircraft are operating with avionics systems that require immediate attention to the issues of equipment obsolescence, supportability, commercial standardization, global navigation and flight safety. The Secretary of Defense and Regulatory Agencies are imposing initiatives and mandates for precision navigation and improved flight safety requirements for aircraft operating as air transport and troop carriers in the U.S. and abroad. These issues have significant impact on cost, reliability and maintainability. The present state of these aircraft is that they will not be operable assets by the latter half of the next decade without a major upgrade to the avionics suite and the electrical systems. Current reliability data indicates an increase in maintenance actions will be required unless an upgrade to existing systems is accomplished. Unless an avionics modernization program is implemented, aircraft availability and the ability to respond to critical missions will be decreased. To ensure global airspace access, joint service solutions in CNS/ATM are required. These improvements are driven by major restructure of airspace architecture and Air Traffic Control (ATC) procedures worldwide. CNS/ATM enhancements are categorized into three areas: navigation, communication and surveillance. The CNS/ATM C-130 AMP modification will allow the C-130 to operate within the ATM environment and comply with Euro-control standards. Communication upgrades are required to allow continued operation in all theater airspace, including data link and digitized voice capacity. Surveillance functions will identify aircraft position for ATM purposes.

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B. Accomplishments/Planned Program

	FY 07	FY 08	FY 09
Avionics Modernization Engineering Events			
Accomplishments/Effort/Subtotal Cost			24.407
RDT&E Articles Quantity Not Applicable			

Avionics Modernization - Critical Design Review (CDR), Test Readiness Review (TRR), Operational Test Readiness Review (OTRR), Conduct Integrated Development and Operational Tests

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APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-5	PROGRAM ELEMENT NUMBER AND NAME 0605430N, C/KC-130 AVIONICS MODERNIZATION PROGRAM (AMP)	PROJECT NUMBER AND NAME 3199/Avionics Modernization												
<p>C. OTHER PROGRAM FUNDING SUMMARY:</p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left; border-bottom: 1px solid black;"><u>Line Item No. & Name</u></th> <th style="text-align: center; border-bottom: 1px solid black;"><u>FY 2007</u></th> <th style="text-align: center; border-bottom: 1px solid black;"><u>FY 2008</u></th> <th style="text-align: center; border-bottom: 1px solid black;"><u>FY 2009</u></th> </tr> </thead> <tbody> <tr> <td style="padding-left: 20px;">*C-130 Series, APN Line Item 056000 PE 0502504M, 0502379N 0604215N Standards Development</td> <td></td> <td style="text-align: center;">31.305</td> <td></td> </tr> <tr> <td style="padding-left: 20px;">* FY 10 & Out.</td> <td></td> <td></td> <td></td> </tr> </tbody> </table> <p>D. ACQUISITION STRATEGY: Avionics Modernization</p> <p>The USN/USMC Communication, Navigation, and Surveillance/Air Traffic Management (CNS/ATM) C-130 Avionics Modernization Program (AMP) will issue a Request for Proposal for full and open competition to modify its 48 C/KC-130T aircraft. The strategy is to utilize a single contract to perform both system integration and production. Market research has revealed several contractors with developed systems and experience in integration and installation providing significant competition for the AMP to leverage off an existing commercial base. The requirements of the program can be met with Commercial Off the Shelf/Non-Developmental Items (COTS/NDI) subsystems integrated into an AMP system. The program will enter the acquisition framework post MS-B for integration and test kit installation on one aircraft. Integrated Testing will be utilized with a Full Rate Production Decision following successful test and MS-C decision.</p>			<u>Line Item No. & Name</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	*C-130 Series, APN Line Item 056000 PE 0502504M, 0502379N 0604215N Standards Development		31.305		* FY 10 & Out.			
<u>Line Item No. & Name</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>											
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Exhibit R-3 Cost Analysis (page 1)								DATE: February 2008				
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT			PROJECT NUMBER AND NAME						
RDT&E, N / BA-5			0605430N, C/KC-130 AVIONICS MODERNIZATION PRO			3199/Avonics Modernizaton						
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 07 Cost	FY 07 Award Date	FY 08 Cost	FY 08 Award Date	FY 09 Cost	FY 09 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Primary Hardware Development												
Ancillary Hardware Development												
Aircraft Integration	C/CPIF	TBD						15.810	04/09	15.390	31.200	31.200
Ship Integration												
Ship Suitability												
Systems Engineering												
Training Development												
Licenses												
Tooling												
GFE												
Award Fees												
Subtotal Product Development								15.810		15.390	31.200	
Remarks:												
Development Support												
Software Development	WX	NADEP, Cherry Point NC						0.563	11/08	0.573	1.135	
Integrated Logistics Support	Various	Various						1.446	Various	1.562	3.008	3.008
Configuration Management	SS-CPAF	NTA, Alexandria, VA						0.192	11/08	0.202	0.394	0.394
Technical Data	Various	Various						1.845	Various	2.352	4.197	4.197
Studies & Analyses												
GFE												
Award Fees												
Subtotal Support								4.045		4.689	8.734	
Remarks: Dollars may not add due to rounding.												

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Exhibit R-3 Cost Analysis (page 2)										DATE: February 2008		
APPROPRIATION/BUDGET ACTIVITY RDTE&E, N / BA-5			PROGRAM ELEMENT 0605430N, C/KC-130 AVIONICS MODERNIZATION PRO				PROJECT NUMBER AND NAME 3199/Avonics Modernizaton					
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 07 Cost	FY 07 Award Date	FY 08 Cost	FY 08 Award Date	FY 09 Cost	FY 09 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Developmental Test & Evaluation	WX	NAWCAD, Patuxent River MD						0.634	11/08		0.634	
Operational Test & Evaluation	WX	NAWCAD, Patuxent River MD								4.398	4.398	
Live Fire Test & Evaluation												
Test Assets												
Tooling												
GFE												
Award Fees												
Subtotal T&E								0.634		4.398	5.032	
Remarks:												
Contractor Engineering Support	Various	Various						0.361	Various	0.378	0.739	0.739
Government Engineering Support	Various	Various						3.223	Various	3.797	7.020	7.020
Program Management Support	Various	Various						0.334	Various	0.317	0.651	0.651
Travel												
Transportation												
SBIR Assessment												
Subtotal Management								3.918		4.492	8.410	
Remarks: Dollars may not add due to rounding.												
Total Cost								24.407		28.969	53.376	
Remarks:												

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EXHIBIT R4, Schedule Profile																								DATE: February 2008				
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-5								PROGRAM ELEMENT NUMBER AND NAME 0605430N, C/KC-130 AVIONICS MODERNIZATION PROGRAM (AMP)								PROJECT NUMBER AND NAME 3199/Avionics Modernization												
Fiscal Year	2007				2008				2009				2010				2011				2012				2013			
	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																												
USN/USMC FRP																												
Contract Events																												
RFP/SDD Contract Award																												
Test Kit Procurement																												
Test Kit Installation																												
Engineering Events																												
SRR/PDR/CDR/TRR/OTRR																												
Test & Evaluation Milestones																												
Integrated Development Test																												
Operational Test																												
Deliveries																												
Production Deliveries																												

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