Exhibit R-2, RDT&E Budget Item Justification: PB 2011 Navy

APPROPRIATION/BUDGET ACTIVITY R-1 ITEM NOMENCLATURE

1319: Research, Development, Test & Evaluation, Navy PE 0605430N: C/KC-130 Avionics Modernization Program (AMP)

BA 5: Development & Demonstration (SDD)

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COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
Total Program Element	18.922	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	18.922
3199: Avionics Modernization Program	18.922	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	18.922

### A. Mission Description and Budget Item Justification

Avionics Modernization - Due to programmatic delays of the Avionics Modernization Program and USMC decision to pursue an all KC-130J model fleet, the program is being restructured.

Harvest HAWK - The objective of this effort is to integrate an ISR (Intelligence, Surveillance & Reconnaissance) Weapon System Kit into the KC-130J aircraft which provides an armed capability to provide intra-theater suppressive fire support for ground troops as well as intelligence and reconnaissance capability for theater commanders. The new KC-130J is a force multiplier. The J tanker is capable of refueling both fixed wing and rotary wing aircraft, as well as conducting rapid ground refueling. KC-130Js have been continuously deployed in support of world-wide combat operations providing multi-mission, tactical aerial refueling, and fixed-wing assault support. This added capability will provide the Marine Air Group Task Force (MAGTF) commander increased capability for real time intelligence gathering and an armed capability for targets of opportunity and suppressive fire-support. The ISR/Weapon System Kit will consist of a target sight sensor, wing mounted air-to-ground missiles, air-to-ground precision guided munition delivery via the aft cargo door, and a rapid fire 30mm cannon. The system will be configured as a Roll-On/Roll-Off capability to allow for rapid deployment. The program will leverage off of current technology/fielded systems to provide rapid integration of this new capability. Future capabilities will include door modifications to allow the 30mm cannon to be able to fire with the door in the closed position, capability to launch precision guided munitions from within the aircraft while pressurized and moving the Hellfire launch rack from the 330 wing-station to the 430 wing-station.

This program element includes \$5.809 million for the Defense Acquisition Development Fund (DAWDF) in FY 2009.

Exhibit R-2, RDT&E Budget Item Justification: PB 2011 Navy

### APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

1319: Research, Development, Test & Evaluation, Navy

PE 0605430N: C/KC-130 Avionics Modernization Program (AMP)

BA 5: Development & Demonstration (SDD)

# **B. Program Change Summary (\$ in Millions)**

FY 2009	FY 2010	<u>FY 2011 Base</u>	FY 2011 OCO	<u>FY 2011 Total</u>
24.291	0.000	0.000	0.000	0.000
18.922	0.000	0.000	0.000	0.000
-5.369	0.000	0.000	0.000	0.000
	0.000			
	0.000			
0.000	0.000			
	0.000			
	0.000			
-4.742	0.000			
-0.627	0.000			
	24.291 18.922 -5.369 0.000	24.291 0.000 18.922 0.000 -5.369 0.000 0.000 0.000 0.000 0.000 0.000 -4.742 0.000	24.291       0.000       0.000         18.922       0.000       0.000         -5.369       0.000       0.000         0.000       0.000       0.000         0.000       0.000       0.000         -4.742       0.000       0.000	24.291       0.000       0.000       0.000         18.922       0.000       0.000       0.000         -5.369       0.000       0.000       0.000         0.000       0.000       0.000         0.000       0.000       0.000         -4.742       0.000

# **Change Summary Explanation**

Technical: Not applicable.

Schedule: Due to Developmental delays, DT/QRA will not be completed until April 2010.

FY11 from previous President's Budget is shown as zero because no FY11-15 data was presented in President's Budget 2010.

**DATE:** February 2010

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APPROPRIATION/BUDGET ACTIVATION 1319: Research, Development, Tes BA 5: Development & Demonstration	t & Evaluatio	n, Navy		PE 060543	OMENCLA ON: C/KC-13 ion Program	30 Avionics		PROJECT 3199: Avior	nics Moderni.	zation Progra	am
COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
3199: Avionics Modernization	18.922	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	18.922

## A. Mission Description and Budget Item Justification

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navv

Avionics Modernization - Due to programmatic delays of the Avionics Modernization Program and USMC decision to pursue an all KC-130J model fleet, the program is being restructured.

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Harvest HAWK - The objective of this effort is to integrate an ISR (Intelligence, Surveillance & Reconnaissance) Weapon System Kit into the KC-130J aircraft which provides an armed capability to provide intra-theater suppressive fire support for ground troops as well as intelligence and reconnaissance capability for theater commanders. The new KC-130J is a force multiplier. The J tanker is capable of refueling both fixed wing and rotary wing aircraft, as well as conducting rapid ground refueling. KC-130Js have been continuously deployed in support of world-wide combat operations providing multi-mission, tactical aerial refueling, and fixed-wing assault support. This added capability will provide the Marine Air Group Task Force (MAGTF) commander increased capability for real time intelligence gathering and an armed capability for targets of opportunity and suppressive fire-support. The ISR/Weapon System Kit will consist of a target sight sensor, wing mounted air-to-ground missiles, air-to-ground precision guided munition delivery via the aft cargo door, and a rapid fire 30mm cannon. The system will be configured as a Roll-On/Roll-Off capability to allow for rapid deployment. The program will leverage off of current technology/fielded systems to provide rapid integration of this new capability. Future capabilities will include door modifications to allow the 30mm cannon to be able to fire with the door in the closed position, capability to launch precision guided munitions from within the aircraft while pressurized and moving the Hellfire launch rack from the 330 wing-station to the 430 wing-station.

This program element includes \$5.809 million for the Defense Acquisition Development Fund (DAWDF) in FY 2009.

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# B. Accomplishments/Planned Program (\$ in Millions)

		FY 2011	FY 2011	FY 2011	
FY 2009	FY 2010	Base	oco	Total	
13.113	0.000	0.000	0.000	0.000	

Program

Quantity of RDT&E Articles

Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

PROJECT

1319: Research, Development, Test & Evaluation, Navy

PE 0605430N: C/KC-130 Avionics

BA 5: Development & Demonstration (SDD) Modernization Program (AMP)

3199: Avionics Modernization Program

## B. Accomplishments/Planned Program (\$ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
FY 2009 Accomplishments: Avionics Modernization - Due to Programmatic Delays of the Avionics Modernization Program and USMC decision to pursue an all KC-130J model fleet, the program is being restructured.  FY09: Harvest HAWK - Technical Interchange Meeting (TIM) completed 3/09. System Design Review (SDR) completed 7/09.					
DAWDF	5.809	0.000	0.000	0.000	0.000
FY 2009 Accomplishments:  DAWDF Realignment.					
Accomplishments/Planned Programs Subtotals	18.922	0.000	0.000	0.000	0.000

# C. Other Program Funding Summary (\$ in Millions)

			FY 2011	FY 2011	FY 2011					Cost To	
<u>Line Item</u>	FY 2009	FY 2010	<b>Base</b>	OCO	<u>Total</u>	FY 2012	FY 2013	FY 2014	FY 2015	Complete	<b>Total Cost</b>
• APN/0560: C-130 Series (OSIP	2.000	52.324	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	83.224
022-07)											

# **D. Acquisition Strategy**

Avionics Modernization - Due to Programmatic Delays of the Avionics Modernization Program and USMC decision to pursue an all KC-130J model fleet, the program is being restructured.

Harvest HAWK - The Harvest HAWK Program has awarded a FFP contract with Lockheed Martin Marietta / Lockheed Martin Skunkworks to perform system integration and engineering of the Harvest HAWK capability. The strategy is to use one contract to perform both system integration and production.

### **E. Performance Metrics**

Successful completion of Developmental Testing/Quick Assessment Review to suppport OCONUS deployment NLT April 2010.

### **UNCLASSIFIED**

Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Navy

**DATE:** February 2010

APPROPRIATION/BUDGET ACTIVITY

1319: Research, Development, Test & Evaluation, Navy

BA 5: Development & Demonstration (SDD)

R-1 ITEM NOMENCLATURE

PE 0605430N: C/KC-130 Avionics Modernization Program (AMP) **PROJECT** 

3199: Avionics Modernization Program

# **Product Development (\$ in Millions)**

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				FY 20	010	FY 2 Ba		FY 2		FY 2011 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Aircraft Integration	SS/FFP	Lockheed Martin Marietta, GA	22.800	0.000		0.000		0.000		0.000	0.000	22.800	22.800
GFE	MIPR	Various Various	0.874	0.000		0.000		0.000		0.000	0.000	0.874	Continuing
		Subtotal	23.674	0.000		0.000		0.000		0.000	0.000	23.674	22.800

#### Remarks

# **Test and Evaluation (\$ in Millions)**

				FY 2	010	FY 2 Ba		FY 2	2011 CO	FY 2011 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Devlopmental Test & Evaluation	WR	NAWCAD Patuxent River	2.511	0.000		0.000		0.000		0.000	0.000	2.511	Continuing
Operational Test & Evaluation	WR	NAWCAD Patuxent River	3.431	0.000		0.000		0.000		0.000	0.000	3.431	Continuing
Live Fire Test & Evaluation	WR	NAWCWD Patuxent River	0.800	0.000		0.000		0.000		0.000	0.000	0.800	Continuing
		Subtotal	6.742	0.000		0.000		0.000		0.000	0.000	6.742	

#### **Remarks**

Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Navy

**DATE:** February 2010

APPROPRIATION/BUDGET ACTIVITY

1319: Research, Development, Test & Evaluation, Navy

BA 5: Development & Demonstration (SDD)

R-1 ITEM NOMENCLATURE

PE 0605430N: C/KC-130 Avionics Modernization Program (AMP) **PROJECT** 

3199: Avionics Modernization Program

# **Management Services (\$ in Millions)**

				FY 20	)10	FY 2 Ba		FY 2		FY 2011 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Contractor Engineering Support	WR	NAWCAD Patuxent River	0.610	0.000		0.000		0.000		0.000	0.000	0.610	Continuing
Government Engineering Support	WR	Various Various	4.178	0.000		0.000		0.000		0.000	0.000	4.178	Continuing
Program Management Support	WR	NADEP Cherry Point	0.266	0.000		0.000		0.000		0.000	0.000	0.266	Continuing
DAWDF Realignment	Various/ Various	Various Various	5.809	0.000		0.000		0.000		0.000	0.000	5.809	Continuing
		Subtotal	10.863	0.000		0.000		0.000		0.000	0.000	10.863	

#### Remarks

	Total Prior Years Cost	FY 2010	FY 2	2011 ase	FY 2		Cost To	Total Cost	Target Value of Contract
Project Cost Totals	41.279	0.000	0.000		0.000	0.0	0.000	41.279	22.800

#### Remarks

Totals may not add due to rounding.

Exhibit R-4, RDT&E Schedule Profile: PB 2011 Navy

APPROPRIATION/BUDGET ACTIVITY

1319: Research, Development, Test & Evaluation, Navy

BA 5: Development & Demonstration (SDD)

**R-1 ITEM NOMENCLATURE** 

PE 0605430N: C/KC-130 Avionics Modernization Program (AMP) **PROJECT** 

3199: Avionics Modernization Program

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Fiscal Year	21	009			20	10			20	11			20	12			20	13			20	14			20	15	
	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	
Acquisition Milestones																											
New Start Approval	New	Start																									Г
Contract Award		Contra	ct Aw	ard																							Г
First Flight Deliver Aircraft			_Firs		ver Ad	ıft																					
Technical Reviews	TIM	SDI	FRI																								
Test & Evaluation Milestones																											Г
Development Test		GVT▲	*	Flig	ht Te:	st Cor	<u>npl</u> ete																				
Quick Readiness Assesment								nplete Comp																			
Production Milestones																											Γ
LRIP I																											
LRIPII																											
FRP																											
Production Deliveries																											Г

Exhibit R-4A, RDT&E Schedule Details: PB 2011 Navy **DATE:** February 2010

APPROPRIATION/BUDGET ACTIVITY

**PROJECT R-1 ITEM NOMENCLATURE** 1319: Research, Development, Test & Evaluation, Navy PE 0605430N: C/KC-130 Avionics 3199: Avionics Modernization Program

BA 5: Development & Demonstration (SDD) Modernization Program (AMP)

# Schedule Details

	St	art	Er	ıd
Event	Quarter	Year	Quarter	Year
New Start Approval	2	2009	2	2009
Contract Award	3	2009	3	2009
First Flight	4	2009	4	2009
Deliver Aircraft	4	2009	4	2009
Technical Interface Meeting (TIM)	2	2009	2	2009
System Design Review (SDR)	4	2009	4	2009
Flight Readiness Review (FRR)	4	2009	4	2009
Ground Vibration Testing (GVT)	3	2009	4	2009
Flight Test Complete	4	2009	4	2009
Developmental Testing (DT-IIA)	2	2010	2	2010
Quick Readiness Assessment (QRA)	2	2010	3	2010