

Exhibit R-2, RDT&E Budget Item Justification								DATE February 2008	
BUDGET ACTIVITY 07 Operational System Development				PE NUMBER AND TITLE 0401132F C-130J PROGRAM					
Cost (\$ in Millions)	FY 2007 Actual	FY 2008 Estimate	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	FY 2012 Estimate	FY 2013 Estimate	Cost to Complete	Total
Total Program Element (PE) Cost	34.765	73.753	52.354	42.202	59.876	59.903	58.332	Continuing	TBD
5061 C-130J	34.765	73.753	52.354	42.202	59.876	59.903	58.332	Continuing	TBD

(U) **A. Mission Description and Budget Item Justification**

FY08 C-130J program RDT&E funding provides for:

- 1.) Participation in the International Co-operative Systems and Software Upgrade Requirements Management (COSSURM). COSSURM participants include the United Kingdom, Australia, Italy, Denmark, and the United States. COSSURM provides a mechanism to jointly identify, collect, define, analyze, and price requirements. By combining requirements and resources under COSSURM, each participating country will save in aircraft upgrade costs.
- 2.) Continuation of Block 7.0 Upgrades. Block 7.0 is the second phase of at least four block upgrades which primarily address mandated Communication, Navigation, and Surveillance/Air Traffic Management (CNS/ATM) requirements. Block 7.0 is the first Block Upgrade initiative that is a true International partnership, as the development costs will be shared by each participating nation. Block 7.0 requirements include:
 - a.) Communication, Navigation & Identification (CNI) upgrades
 - b.) Dual Multi-Mode Receivers (MMR) with TSO C-129A Civil Global Positioning System (GPS)
 - c.) CNI Special Processor upgrade
 - d.) Tactical Datalink (TDL)
 - e.) Mission Computer (MC) upgrades

Included in Block 7.0 is a systems integration lab which will be used to integrate Block 7.0 (as well as all future Block Upgrades) into the various training systems.
- 3.) AMC Requirements and Planning Council (R&PC) activities. AMC has prioritized requirements that do not fall within the International Block Upgrade program, which primarily addresses deficiencies, system improvements, and diminishing manufacturing sources (DMS). This includes Navigation Safety upgrades, Formation Positioning System (FPS), Large Aircraft Infrared Counter Measures (LAIRCM), and Sensor Cant, among other priorities.

FY09 C-130J program RDT&E funding provides for:

- 1.) Continued participation in COSSURM.
- 2.) Continuation and testing of Block 7.0 Upgrades
- 3.) Continuation of R&PC activities
- 4.) Start of Block 8.0 Upgrades

The C-130J is a medium-sized transport aircraft capable of performing a variety of combat delivery (tactical airlift) operations across a broad range of mission environments. The C-130J aircraft, with its extended (by 15 feet) fuselage, provides additional cargo carrying capacity for the USAF combat delivery mission compared with legacy C-130E/H and the C-130J (Short). Special mission variants of the C-130J conduct airborne psychological operations (EC-130J) and weather

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reconnaissance (WC-130J). These aircraft must be capable of worldwide operations.

This effort is assigned to Budget Activity 7, as it supports an operational system.

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

	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>
(U) Previous President's Budget	40.389	74.223	52.790
(U) Current PBR/President's Budget	34.765	73.753	52.354
(U) Total Adjustments	-5.624		
(U) Congressional Program Reductions			
Congressional Rescissions		-0.470	
Congressional Increases			
Reprogrammings	-4.500		
SBIR/STTR Transfer	-1.124		
(U) <u>Significant Program Changes:</u>			

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Cost (\$ in Millions)	FY 2007 Actual	FY 2008 Estimate	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	FY 2012 Estimate	FY 2013 Estimate	Cost to Complete	Total
5061 C-130J	34.765	73.753	52.354	42.202	59.876	59.903	58.332	Continuing	TBD
Quantity of RDT&E Articles	0	0	0	0	0	0	0		

(U) **A. Mission Description and Budget Item Justification**

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- 2.) Continuation of Block 7.0 Upgrades. Block 7.0 is the second phase of at least four block upgrades which primarily address mandated Communication, Navigation, and Surveillance/Air Traffic Management (CNS/ATM) requirements. Block 7.0 is the first Block Upgrade initiative that is a true International partnership, as the development costs will be shared by each participating nation. Block 7.0 requirements include:
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- 3.) AMC Requirements and Planning Council (R&PC) activities. AMC has prioritized requirements that do not fall within the International Block Upgrade program, which primarily addresses deficiencies, system improvements, and diminishing manufacturing sources (DMS). This includes Navigation Safety upgrades, Formation Positioning System (FPS), Large Aircraft Infrared Counter Measures (LAIRCM), and Sensor Cant, among other priorities.

FY09 C-130J program RDT&E funding provides for:

- 1.) Continued participation in COSSURM.
- 2.) Continuation and testing of Block 7.0 Upgrades
- 3.) Continuation of R&PC activities
- 4.) Start of Block 8.0 Upgrades

The C-130J is a medium-sized transport aircraft capable of performing a variety of combat delivery (tactical airlift) operations across a broad range of mission environments. The C-130J aircraft, with its extended (by 15 feet) fuselage, provides additional cargo carrying capacity for the USAF combat delivery mission compared with legacy C-130E/H and the C-130J (Short). Special mission variants of the C-130J conduct airborne psychological operations (EC-130J) and weather reconnaissance (WC-130J). These aircraft must be capable of worldwide operations.

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This effort is assigned to Budget Activity 7, as it supports an operational system.

(U) B. Accomplishments/Planned Program (\$ in Millions)	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>
(U) COSSURM payment	1.304	1.770	1.900
(U) Congressional Rescissions			
(U) Reprogrammings			
(U) SBIR/STTR Transfer			
(U) Continue Block 6.0 non-recurring engineering design and software development. Conduct laboratory testing of CNS/ATM / nav safety hardware and software modifications. Procure and install hardware on flight test aircraft and one C-130J weapon system trainer.	17.987		
(U) Flight Test	1.134	1.500	1.500
(U) Initiate non-recurring engineering design and software development for Block 7.0 CNS/ATM / nav safety requirements and aircraft deficiencies/product improvements.	11.900		
(U) Continue Block 7.0 non-recurring engineering design and software development. Conduct laboratory testing of CNS/ATM / nav safety hardware and software modifications. Procure and install hardware on flight test aircraft and the C-130J trainer integration lab.	0.000	36.200	11.334
(U) Requirements and Planning Council (R&PC) activities	1.338	30.313	8.560
(U) International Program Office (IPO) Support (A&AS, Travel, Supplies)	1.102	3.970	4.060
(U) International Block Upgrade Savings			25.000
(U) Total Cost	34.765	73.753	52.354

(U) C. Other Program Funding Summary (\$ in Millions)	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>Cost to</u>	<u>Total Cost</u>
	<u>Actual</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Complete</u>	
(U) PE 0401132F, C-130J Procurement (BP1100)									
(U) Mod MN-_1701 Blk 6.0	11.480	3.937	0.312					0.000	15.729
(U) Mod MN-_1411 MWS		1.681	2.523	0.642				0.000	4.846
(U) Mod MN-_2612 Av Sys		28.043	46.491	13.617				0.000	88.151
(U) Mod MN-_6298 Blk 7.0				29.388	56.553	49.600	7.000	0.000	142.541
(U) Mod MN-_8629 LAIRCM				39.295	42.914	44.100	8.792		TBD
(U) Mod MN-_5448 FPS				19.523	12.800	33.631	12.441	0.000	78.395
(U) Mod MN-_5222 Blk 8.0							75.510		TBD

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(U) **D. Acquisition Strategy**

C-130J aircraft will be modified using a 'block upgrade' strategy. The full CNS/ATM / nav safety requirement will be met in four block upgrades: Block 6.0, which began with FY03 RDT&E funding and continues through FY07 RDT&E funding, Block 7.0, which started in FY07, Block 8.0, which will start in FY10, and Block 9.0, which will start in FY13. The proportion of CNS/ATM / nav safety requirements allocated to Blocks 6.0 through 9.0 was determined via a design trade study conducted by Lockheed Martin (the C-130J prime contractor) and verified by the C-130J system program office and AMC. The development costs are being shared via a Global Project arrangement by the United States, the United Kingdom, Italy, Australia, and Denmark. An international program office, with USAF lead (Wright Patterson AFB, OH) manages the block upgrade development effort. Embodiment of a Block on the aircraft is the responsibility of each nation.

Lockheed Martin will be the prime contractor for these efforts, perform the non-recurring engineering and, following the successful conclusion of flight testing and certification of each block upgrade, will provide production retrofit kits on USAF C-130J aircraft. Installation will be performed by contractor, depot, and Air Force personnel.

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Exhibit R-3, RDT&E Project Cost Analysis

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(U) Cost Categories (Tailor to WBS, or System/Item Requirements) (\$ in Millions)	Contract Method & Type	Performing Activity & Location	Total Prior to FY 2007 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	
(U) <u>Product Development</u>													
Block 6.0, Aeronautical Systems Center (AFMC), WPAFB, OH	CPFF	Lockheed Martin Aeronautics, Marietta GA	30.731	17.987	Oct-06						48.718		
Block 7.0, Aeronautical Systems Center (AFMC), WPAFB, OH	CPFF	Lockheed Martin Aeronautics, Marietta GA	0.000	11.900	May-07	26.200	Dec-07	6.334	Oct-08		44.434		
Block 7.0, Aeronautical Systems Center (AFMC), WPAFB, OH	CPFF	Lockheed Martin Information Sytems, Orlando FL				10.000	Jan-08	5.000	Oct-08		15.000		
R&PC, Aeronautical Systems Center (AFMC), WPAFB, OH	CPFF	Lockheed Martin Aeronautics, Marietta GA		1.338		30.313	Mar-08	8.560	Oct-08		40.211		
Subtotal Product Development			30.731	31.225		66.513		19.894		0.000	148.363	0.000	
Remarks:													
(U) <u>Support</u>													
IPO Support	N/A			1.102	Jan-07	3.970	Dec-07	4.060			9.132		
Subtotal Support			0.000	1.102		3.970		4.060		0.000	9.132	0.000	
Remarks:		A&AS, Travel, Supplies - all vary on support needed											
(U) <u>Test & Evaluation</u>													
Air Force Materiel Command (DT&E)				1.134	Oct-06	1.500	Dec-07	1.500	Oct-08		4.134		
Subtotal Test & Evaluation			0.000	1.134		1.500		1.500		0.000	4.134	0.000	
Remarks:													
(U) <u>Management</u>													
COSSURM			3.800	1.304	Oct-06	1.770	Dec-07	1.900	Oct-08		8.774		
International Savings								25.000			25.000		
Subtotal Management			3.800	1.304		1.770		26.900		0.000	33.774	0.000	
Remarks:													
(U) <u>Lockheed Martin Aeronautics, Marietta, GA</u>													
(U) Total Cost			34.531	34.765		73.753		52.354		0.000	195.403	0.000	
Remarks:													

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Exhibit R-4, RDT&E Schedule Profile

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C-130J Block Upgrade Plan

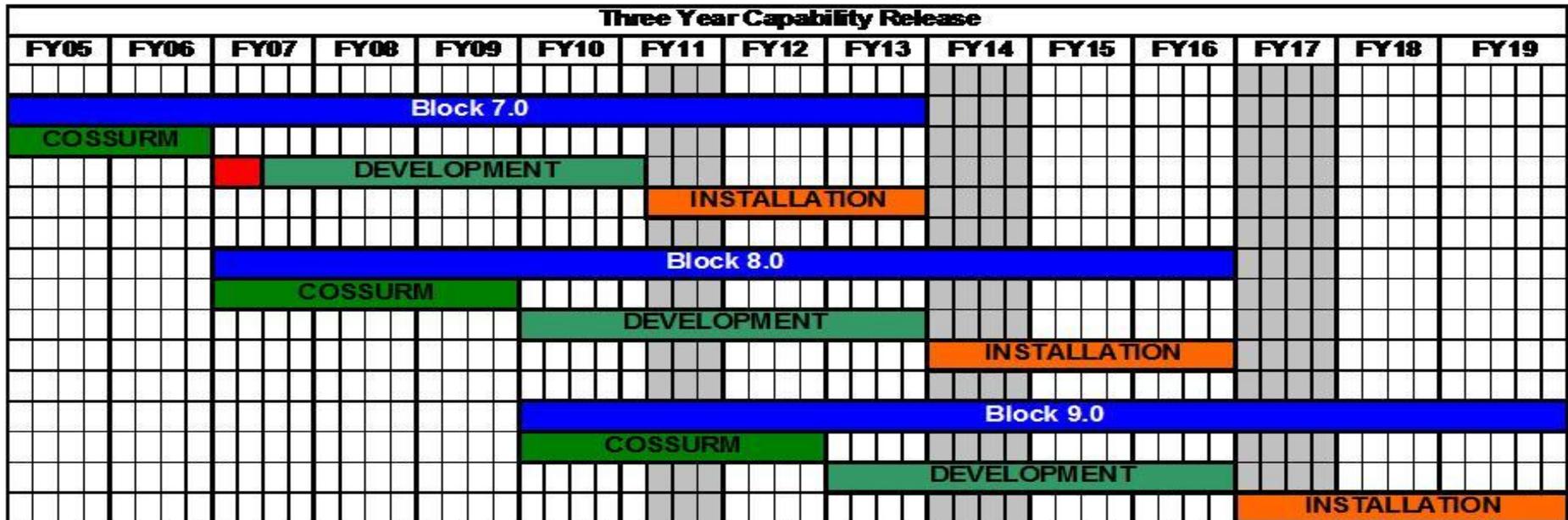


Exhibit R-4a, RDT&E Schedule Detail

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(U) Schedule Profile

FY 2007

FY 2008

FY 2009

(U) Block 6.0 FY07 award

1Q

(U) Block 7.0 FY07 contract award

3Q

(U) Block 7.0 FY08 award

1Q

(U) Block 7.0 FY09 award

1Q