Exhibit R-2, RDT&E Budget Item Justification: PB 2012 Air Force

DAIL

DATE: February 2011

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

3600: Research, Development, Test & Evaluation, Air Force

PE 0401132F: *C-130J PROGRAM*

BA 7: Operational Systems Development

COST (\$ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost
Total Program Element	29.072	26.770	39.537	-	39.537	23.195	38.220	23.838	24.258	Continuing	Continuing
675061: <i>C-130J</i>	29.072	26.770	39.537	-	39.537	23.195	38.220	23.838	24.258	Continuing	Continuing

Note

Prior Years funding estimate is \$155.2M. The To Complete funding estimate is \$123.3M.

A. Mission Description and Budget Item Justification

Totals include funding for PRCP Program Number 220, C-130J. The C-130J program is in Budget Activity 7, Operational System Development because this budget activity includes development efforts to upgrade systems that have been fielded and production funding is anticipated in the current or subsequent fiscal year.

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), weather reconnaissance (WC-130J), search and rescue (HC-130J), and special operations (MC-130J). All aircraft variants must be capable of worldwide operations.

FY12 C-130J program RDT&E funds provided for:

- 1) Participation in the International Cooperative Systems and Software Upgrade Requirements Management (COSSURM). COSSURM participants include the United Kingdom, Australia, Italy, Denmark, Canada, Norway 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 Upgrades, testing, and trial kit installation(s). Block 7 is the second phase of a three-block upgrade initiative which primarily addresses mandated Communication, Navigation, and Surveillance/Air Traffic Management (CNS/ATM) requirements. Block 7 is the first Block Upgrade initiative that is a true International partnership, as the development costs are being shared by each participating nation. Block 7 requirements include: a.) Communication, Navigation, and Surveillance (CNS) b.) Civil Global Positioning System (GPS) c.) New flight management system (FMS) d.) Link 16 e.) Mission Computer (MC) upgrades. Block 7 (as well as all future Block Upgrades) will be integrated into the training systems integration lab prior to incorporation into the fielded trainers.
- 3) Start of Block 8 Upgrades. Block 8 is the last phase of three block upgrades which will complete all known mandated Communication, Navigation, and Surveillance/Air Traffic Control (CNS/ATM) requirements. Block 8 will again be an International partnership with cost being shared by each participating nation. Block 8 requirements include: a.) TEMPEST Compliance b.) Identification Friend or FOE (IFF) transponder Mode-5 c.) Civil Data-link d.)Automatic Dependent Surveillance-Broadcast (ADS-B) e.) Mission Computer (MC) upgrades

Air Force Page 1 of 10 R-1 Line Item #218

Exhibit R-2, RDT&E Budget Item Justification: PB 2012 Air Force

DATE: February 2011

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

3600: Research, Development, Test & Evaluation, Air Force

PE 0401132F: C-130J PROGRAM

BA 7: Operational Systems Development

4) Other AMC approved initiatives. AMC has prioritized requirements that do not fall within the International Block Upgrade program, which primarily address deficiencies, system improvements, and may alleviate diminishing manufacturing sources (DMS) issues. This includes Navigation Safety upgrades, and Joint Precision Airdrop System (JPADS), among other priorities.

B. Program Change Summary (\$ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total
Previous President's Budget	30.019	26.770	31.569	-	31.569
Current President's Budget	29.072	26.770	39.537	-	39.537
Total Adjustments	-0.947	-	7.968	-	7.968
 Congressional General Reductions 		-			
 Congressional Directed Reductions 		-			
 Congressional Rescissions 	-	-			
 Congressional Adds 		-			
 Congressional Directed Transfers 		-			
 Reprogrammings 	-0.947	-			
SBIR/STTR Transfer	-	-			
Other Adjustments	-	-	7.968	-	7.968

Change Summary Explanation

Additional funds were required in FY12 to fully fund the USAF's share of the C-130J Block 8.1 effort. Block 7.0, the first phase of the C-130J International Project Arrangement, experienced a schedule slip in 2010 requiring Block 8.1 funds to be diverted to Block 7.0. All seven countries have committed to fully-fund Block 8.1. Block 8.1 contract award planned for April 2011.

Air Force Page 2 of 10 R-1 Line Item #218

DATE: February 2011

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APPROPRIATION/BUDGET ACTIV	-	R-1 ITEM N	OMENCLA ^T	ΓURE	_	PROJECT	-				
3600: Research, Development, Test	PE 0401132	2F: <i>C-130J F</i>	PROGRAM		675061: C-	130J					
BA 7: Operational Systems Develop	BA 7: Operational Systems Development										
COST (\$ in Millions)				FY 2012	FY 2012					Cost To	

COST (\$ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost
675061: <i>C-130J</i>	29.072	26.770	39.537	-	39.537	23.195	38.220	23.838	24.258	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

A. Mission Description and Budget Item Justification

Exhibit P-2A PDT&E Project Justification: DR 2012 Air Force

Totals include funding for PRCP Program Number 220, C-130J. The C-130J program is in Budget Activity 7, Operational System Development because this budget activity includes development efforts to upgrade systems that have been fielded and production funding is anticipated in the current or subsequent fiscal year.

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), weather reconnaissance (WC-130J), search and rescue (HC-130J), and special operations (MC-130J). All aircraft variants must be capable of worldwide operations.

FY12 C-130J program RDT&E funds provided for:

- 1) Participation in the International Cooperative Systems and Software Upgrade Requirements Management (COSSURM). COSSURM participants include the United Kingdom, Australia, Italy, Denmark, Canada, Norway 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 Upgrades, testing, and trial kit installation(s). Block 7 is the second phase of a three-block upgrade initiative which primarily addresses mandated Communication, Navigation, and Surveillance/Air Traffic Management (CNS/ATM) requirements. Block 7 is the first Block Upgrade initiative that is a true International partnership, as the development costs are being shared by each participating nation. Block 7 requirements include: a.) Communication, Navigation, and Surveillance (CNS) b.) Civil Global Positioning System (GPS) c.) New flight management system (FMS) d.) Link 16 e.) Mission Computer (MC) upgrades. Block 7 (as well as all future Block Upgrades) will be integrated into the training systems integration lab prior to incorporation into the fielded trainers.
- 3) Start of Block 8 Upgrades. Block 8 is the last phase of three block upgrades which will complete all known mandated Communication, Navigation, and Surveillance/Air Traffic Control (CNS/ATM) requirements. Block 8 will again be an International partnership with cost being shared by each participating nation. Block 8 requirements include: a.) TEMPEST Compliance b.) Identification Friend or FOE (IFF) transponder Mode-5 c.) Civil Data-link d.)Automatic Dependent Surveillance-Broadcast (ADS-B) e.) Mission Computer (MC) upgrades
- 4) Other AMC approved initiatives. AMC has prioritized requirements that do not fall within the International Block Upgrade program, which primarily address deficiencies, system improvements, and may alleviate diminishing manufacturing sources (DMS) issues. This includes Navigation Safety upgrades, and Joint Precision Airdrop System (JPADS), among other priorities.

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Exhibit R-2A, RDT&E Project Justification: PB 2012 Air Force			D	ATE: Febru	ary 2011	
APPROPRIATION/BUDGET ACTIVITY 3600: Research, Development, Test & Evaluation, Air Force BA 7: Operational Systems Development	R-1 ITEM NOMENCLATURE PE 0401132F: C-130J PROGRAM		ROJECT 5061: <i>C-13</i>	0J		
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total
Title: Cooperative Systems and Software Upgrade Requirements N	Management (COSSURM)	0.008	0.421	0.500	-	0.500
Description: Cooperative Systems and Software Upgrade Require all potential requirements for inclusion into a Block Upgrade.	ements Management (COSSURM) - Collects					
FY 2010 Accomplishments: COSSURM efforts begin for Blk 9.0. Major milestones expected to Clarification Meeting (CCM), the Initial Capabilities Approval Meeting Approach Approval Meeting.						
FY 2011 Plans: the Block 9.0 COSSURM efforts continue. Major milestones expect Systems Requirements Review (SRR), System Description Approv Approval Meeting (BRAM) #1.						
FY 2012 Base Plans: Block 9.0 COSSURM efforts will continue. Major milestones expect Systems Requirements Review (SRR), System Description Approv Approval Meeting (BRAM) #2.						
FY 2012 OCO Plans:						
Title: Block 7.0		27.302	19.750	7.200	-	7.200
Description: BLOCK 7.0: Adds Link 16, a new Flight Managemen System (GPS) Navigation, and a Special Mission Processor-Interfa						
FY 2010 Accomplishments: Conclude development of the Common Core hardware and softwar and Common Core Trial Kit Installation (TKI) phase. Major mileston Design Review (CDR) Phase II and Aircraft Receipt.						
FY 2011 Plans: Continue the test and Common Core TKI phase. Major milestones Readiness Review (TRR) and completion of Joint Developmental T						
FY 2012 Base Plans:						
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Exhibit R-2A, RDT&E Project Justification: PB 2012 Air Force			D	ATE: Febru	ary 2011	
APPROPRIATION/BUDGET ACTIVITY 3600: Research, Development, Test & Evaluation, Air Force BA 7: Operational Systems Development	R-1 ITEM NOMENCLATURE PE 0401132F: C-130J PROGRAM	I	ROJECT 5061: <i>C-13</i> 6	OJ.		
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total
Conclude the test and Common Core TKI phase, effectively closing the US Marine Corps (USMC), the US Coast Guard (USCG), for Air Comba Command (AMC) platforms, will be begin.						
FY 2012 OCO Plans:						
Title: Block 8.1		0.076	5.999	31.237	-	31.237
Description: BLOCK 8.1. Adds Identification Friend or Foe (IFF) Mode Surveillance - Broadcast (ADS-B)	e 5, Civil Data Link, Automatic Dependent					
FY 2010 Accomplishments: Received the proposal and conducted fact-finding.						
FY 2011 Plans: Award contract and Common Core hardware and software developmen	t will begin.					
FY 2012 Base Plans: The Block 8.1 effort will continue with the Common Core hardware and expected to be completed include Systems Requirements Review (SRF Critical Design Review (CDR), and Integrated Baseline Review (IBR).						
FY 2012 OCO Plans:						
Title: Other AMC Inititatives		1.500	0.500	0.500	-	0.500
Description: Other AMC approved inititatives						
FY 2010 Accomplishments: Prop dolly redesign						
FY 2011 Plans: Other AMC initiatives						
FY 2012 Base Plans: Other AMC initiatives						
FY 2012 OCO Plans:						
Title: IPO Program Management Administration (PMA)		0.186	0.100	0.100	_	0.100

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Exhibit R-2A, RDT&E Project Justification: PB 2012 Air Force **DATE:** February 2011

APPROPRIATION/BUDGET ACTIVITY **R-1 ITEM NOMENCLATURE**

3600: Research, Development, Test & Evaluation, Air Force PE 0401132F: C-130J PROGRAM

BA 7: Operational Systems Development

675061: C-130J

PROJECT

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total
Description: International Program Office (IPO) Support. Funds for Travel, Supplies and DFAS/DCMA Support					
FY 2010 Accomplishments: Travel, Supplies and DFAS/DCMA Support					
FY 2011 Plans: Travel, Supplies and DFAS/DCMA Support					
FY 2012 Base Plans: Travel, Supplies and DFAS/DCMA Support					
FY 2012 OCO Plans:					
Accomplishments/Planned Programs Subtotals	29.072	26.770	39.537	-	39.537

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

			FY 2012	FY 2012	FY 2012					Cost To	
<u>Line Item</u>	FY 2010	FY 2011	Base	<u>000</u>	<u>Total</u>	FY 2013	FY 2014	FY 2015	FY 2016	Complete	Total Cost
• PE 0401132F: <i>C-130J APAF BA</i>	0.000	0.000	18.060	0.000	18.060	34.710	39.700	61.330	37.120	Continuing	Continuing
05 Block 7										_	
• PE 0401132F (1): <i>C-130J APAF</i>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	25.140	Continuing	Continuing
BA 05 Block 8											

D. Acquisition Strategy

The C-130J aircraft will be modified using a "block upgrade" strategy. The full CNS/ATM, nav safety requirement will be met in three block upgrades. Block 6.0 development was funded from FY03-07. Block 7.0 started in FY07 and Block 8.1 which began in FY10, should complete the known CNS/ATM and nav safety requirements. The proportion of CNS/ATM and nav safety requirements allocated to Blocks 6.0 through 8.1 was determine 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 (PA) by the United States (USAF, USMC, USCG), the United Kingdom, Italy, Australia, Denmark, Canada, and Norway. An international program office (IPO), with USAF lead (Wright Patterson AFB, OH), manages the block upgrades development effort. Embodiment of a Block on the aircraft is the responsibility of each nation.

E. Performance Metrics

Please refer to the Performance Base Budget Overview Book for information on how Air Force resources are applied and how those resources are contributing to Air Force performance goals and most importantly, how they contribute to our mission.

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2012 Air Force

APPROPRIATION/BUDGET ACTIVITY

3600: Research, Development, Test & Evaluation, Air Force

BA 7: Operational Systems Development

R-1 ITEM NOMENCLATURE

PE 0401132F: C-130J PROGRAM

DATE: February 2011

PROJECT

675061: C-130J

Product Development (\$ in Millio	ns)		FY 2011			2012 ise	FY 2012 OCO		FY 2012 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
Block 7.0 , Aeronautical Systems Center (AFMC), WPAFB, OH	SS/CPAF	Lockheed Martin Aeronautics:Marietta, GA	99.067	20.247	Jan 2011	7.200	Dec 2011	-		7.200	0.000	126.514	0.000
Block 8.1, Aeronautical Systems Center (AFMC), WPAFB, OH	SS/CPAF	Lockheed Martin Information Sytems:Marietta, GA	0.076	5.999	Apr 2011	31.237	Feb 2012	-		31.237	0.000	37.312	0.000
AMC-I, Aeronautical Systems Center (AFMC), WPAFB, OH	SS/CPAF	TBD:TBD,	1.500	0.003	May 2011	0.500	Feb 2012	-		0.500	0.000	2.003	0.000
		Subtotal	100.643	26.249		38.937		-		38.937	0.000	165.829	0.000

Support (\$ in Millions)				FY 2	2011	FY 2 Ba		FY 2	2012 CO	FY 2012 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
IPO Support	TBD	TBD:TBD,	0.341	0.100	Nov 2010	0.100	Nov 2011	-		0.100	0.000	0.541	0.000
		Subtotal	0.341	0.100		0.100		-		0.100	0.000	0.541	0.000

Remarks

Travel, Supplies - all vary on support needed

Test and Evaluation (\$ i	n Millions	3)		FY 2	2011	FY 2 Ba	2012 se		2012 CO	FY 2012 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
TBD	TBD	TBD:TBD,	-	-		-		-		-	0.000	0.000	0.000
		Subtotal	-	-		-		-		-	0.000	0.000	0.000

Exhibit R-3, RDT&E Project Cost Analysis: PB 2012 Air Force

APPROPRIATION/BUDGET ACTIVITY

3600: Research, Development, Test & Evaluation, Air Force

BA 7: Operational Systems Development

R-1 ITEM NOMENCLATURE

PE 0401132F: *C-130J PROGRAM*

PROJECT

DATE: February 2011

675061: C-130J

Management Services	Management Services (\$ in Millions)				FY 2011		012 se	FY 2012 OCO		FY 2012 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
COSSURM	TBD	TBD:TBD,	0.008	0.421		0.500		-		0.500	0.000	0.929	0.000
International Savings	TBD	TBD:TBD	-	-		-		-		-	0.000	0.000	0.000
Congressional Rescissions	TBD	TBD:TBD,	-	-		-		-		-	0.000	0.000	0.000
Reprogrammings	TBD	TBD:TBD,	-	-		-		-		-	0.000	0.000	0.000
Withhold	TBD	TBD:TBD,	0.096	-		-		-		-	0.000	0.096	0.000
		Subtotal	0.104	0.421		0.500		-		0.500	0.000	1.025	0.000
			Total Prior			EV 2	040	FV.	2042	EV 2012	Cost To		Target

	Total Prior Years Cost	FY:	2011	FY 2 Ba	FY 2	2012 CO	FY 2012 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	101.088	26.770		39.537	-		39.537	0.000	167.395	0.000

Remarks

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Exhibit R-4, RDT&E Schedule Profile: PB 2012 Air Force	DATE: February 2011				
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE PE 0401132F: C-130J PROGRAM	PROJECT 675061: <i>C-130J</i>			
3600: Research, Development, Test & Evaluation, Air Force BA 7: Operational Systems Development	PE 0401132F. C-1303 PROGRAM	675061. C-7303			

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Exhibit R-4A, RDT&E Schedule Details: PB 2012 Air Force

DATE: February 2011

APPROPRIATION/BUDGET ACTIVITY R-1 ITEM NOMENCLATURE PROJECT

3600: Research, Development, Test & Evaluation, Air Force PE 0401132F: C-130J PROGRAM 675061: C-130J

BA 7: Operational Systems Development

Schedule Details

	St	art	End		
Events	Quarter	Year	Quarter	Year	
Block 7.0 Common Core Development Development	1	2010	3	2012	
Block 7.0 Test	2	2011	2	2012	
Block 7.0 Functional Configuration Audit (FCA) and Physical Configuration audit (PCA)	2	2012	3	2012	
USAF Block 7.0 Trial Kit Installs	2	2012	4	2013	
Block 8.1 Phase 0	1	2010	3	2011	
Block 8.1 Common Core Development	2	2012	2	2015	
Block 8.1 Test	4	2013	4	2014	
Block 8.1 FCA/PCA	1	2015	2	2015	
Block 8.1 TKIs	3	2015	2	2016	