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<b>Exhibit R-2, RDT&amp;E Budget Item Justification:</b> PB 2012 Air Force	<b>DATE:</b> February 2011
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<b>APPROPRIATION/BUDGET ACTIVITY</b> 3600: <i>Research, Development, Test &amp; Evaluation, Air Force</i> BA 5: <i>Development &amp; Demonstration (SDD)</i>	<b>R-1 ITEM NOMENCLATURE</b> PE 0401138F: <i>Joint Cargo Aircraft</i>
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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	9.031	26.407	27.089	-	27.089	6.472	-	-	-	Continuing	Continuing
655259: C-27J	9.031	26.407	27.089	-	27.089	6.472	-	-	-	Continuing	Continuing

**Note**

Prior Years funding estimate is \$40.128M. The To Complete funding estimate is \$0.000.

**A. Mission Description and Budget Item Justification**

Totals include funding for Program Resources Collection Process (PRCP) Program Number 183, Joint Cargo Aircraft

The C-27J is a medium-size airlift aircraft that will provide flexible and responsive delivery of time sensitive and mission critical (TS/MC) equipment, supplies, and personnel to austere operating locations during contingency operations abroad, and in support of domestic homeland security and disaster response operations.

The C-27J acquisition program began in FY07 as an Army-led joint program to acquire a commercial derivative aircraft capable of providing direct support airlift of TS/MC cargo to Army ground forces. A joint Army-Air Force source selection team chose the C-27J to provide this capability, and the Army awarded a firm fixed price (FFP) aircraft production and support contract to L3 Communications (L3 Com) in June 2007.

In FY10, the Air Force assumed full responsibility for the TS/MC direct support airlift mission and sole responsibility for managing the C-27J acquisition program. Thirteen C-27J aircraft procured by the Army in FY07-09 will be transferred to the Air Force as part of the transition from a joint program to an Air Force-only program.

FY12 Budget Justification:

Provides for the development and testing of aircrew and maintenance training devices necessary to support C-27J pilot and loadmaster mission qualification training, and to support training of C-27J maintenance personnel.

Provides for follow-on qualification and operational testing of the C-27J weapon system.

Provides for technical studies and analyses to investigate and develop solutions for: 1) weapon system deficiencies identified during initial qualification test and evaluation (QT&E), live fire test & evaluation (LFT&E), and operational test & evaluation (OT&E); 2) operational capability requirements identified by Air Mobility Command (AMC) and/or the Air National Guard (ANG); 3) technologies and equipment to enhance C-27J operational effectiveness, survivability, and sustainability; 4) maintaining aircraft airworthiness certifications.

Provides for updates to C-27J aircraft airworthiness certifications.

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This program is in Budget Activity 5, System Development and Demonstration (SDD) because it has passed Milestone B approval and is conducting engineering and manufacturing development tasks aimed at meeting validated requirements prior to full-rate production.

<b>B. Program Change Summary (\$ in Millions)</b>	<b><u>FY 2010</u></b>	<b><u>FY 2011</u></b>	<b><u>FY 2012 Base</u></b>	<b><u>FY 2012 OCO</u></b>	<b><u>FY 2012 Total</u></b>
Previous President's Budget	9.353	26.407	18.920	-	18.920
Current President's Budget	9.031	26.407	27.089	-	27.089
Total Adjustments	-0.322	-	8.169	-	8.169
• Congressional General Reductions		-			
• Congressional Directed Reductions		-			
• Congressional Rescissions	-	-			
• Congressional Adds		-			
• Congressional Directed Transfers		-			
• Reprogrammings	-0.069	-			
• SBIR/STTR Transfer	-0.253	-			
• Other Adjustments	-	-	8.169	-	8.169

**Change Summary Explanation**

Funding was increased in FY12 to support the development, testing, and delivery of several aircrew and maintenance training devices, and to support follow-on test and evaluation of the C-27J weapon system.

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Exhibit R-2A, RDT&E Project Justification: PB 2012 Air Force								DATE: February 2011			
APPROPRIATION/BUDGET ACTIVITY 3600: Research, Development, Test & Evaluation, Air Force BA 5: Development & Demonstration (SDD)				R-1 ITEM NOMENCLATURE PE 0401138F: Joint Cargo Aircraft				PROJECT 655259: C-27J			
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
655259: C-27J	9.031	26.407	27.089	-	27.089	6.472	-	-	-	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

**A. Mission Description and Budget Item Justification**

Totals include funding for Program Resources Collection Process (PRCP) Program Number 183, Joint Cargo Aircraft

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Provides for the development and testing of aircrew and maintenance training devices necessary to support C-27J pilot and loadmaster mission qualification training, and to support training of C-27J maintenance personnel.

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Provides for technical studies and analyses to investigate and develop solutions for: 1) weapon system deficiencies identified during initial qualification test and evaluation (QT&E), live fire test & evaluation (LFT&E), and operational test & evaluation (OT&E); 2) operational capability requirements identified by Air Mobility Command (AMC) and/or the Air National Guard (ANG); 3) technologies and equipment to enhance C-27J operational effectiveness, survivability, and sustainability; 4) maintaining aircraft airworthiness certifications.

Provides for updates to C-27J aircraft airworthiness certifications.

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APPROPRIATION/BUDGET ACTIVITY 3600: Research, Development, Test & Evaluation, Air Force BA 5: Development & Demonstration (SDD)	R-1 ITEM NOMENCLATURE PE 0401138F: Joint Cargo Aircraft	PROJECT 655259: C-27J				
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total
<b>Title:</b> Training System Development <b>Description:</b> Develop, test, and field first-article C-27J aircrew and maintenance training devices. <b>FY 2010 Accomplishments:</b> Developed system requirements documents for C-27J training devices. <b>FY 2011 Plans:</b> Initiate the development of C-27J aircrew and maintenance training devices, including a virtual cockpit trainer (VCT), a loadmaster crew resource management trainer (LMCRMT), a cockpit procedures trainer (CPT), and virtual aircraft maintenance training (VAMT) devices. <b>FY 2012 Base Plans:</b> Complete the development of, and validate/verify the performance of the VCT, LMCRMT, CPT, and VAMT devices. <b>FY 2012 OCO Plans:</b>		-	17.092	18.594	-	18.594
<b>Title:</b> Test & Evaluation <b>Description:</b> Conduct initial and follow-on QT&E and OT&E of the C-27J weapon system. <b>FY 2010 Accomplishments:</b> Completed initial QT&E, LFT&E, and OT&E on the C-27J weapon system. <b>FY 2011 Plans:</b> Conduct QT&E of aircraft mission computer software changes. Conduct follow-on test and evaluation of C-27J deficiencies and enhancements identified during initial QT&E and OT&E. <b>FY 2012 Base Plans:</b> Conduct follow-on test and evaluation of C-27J deficiencies and enhancements identified in initial QT&E and OT&E. Conduct follow-on OT&E of organic flightline maintenance capability. <b>FY 2012 OCO Plans:</b>		6.535	3.128	3.367	-	3.367
<b>Title:</b> Studies & Analyses <b>Description:</b> Conduct studies and analyses of C-27J deficiencies and emerging operational capability requirements. Maintain aircraft type and airworthiness certifications.		2.496	6.187	5.128	-	5.128

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<b>B. Accomplishments/Planned Programs (\$ in Millions)</b>	<b>FY 2010</b>	<b>FY 2011</b>	<b>FY 2012 Base</b>	<b>FY 2012 OCO</b>	<b>FY 2012 Total</b>
<b><i>FY 2010 Accomplishments:</i></b> Investigated cargo compartment pallet locking rail deficiencies identified in initial OT&E. Developed and tested C-27J aircraft/weapons/electronics interface modules for Air Force mission planning systems. Completed commercial aircraft type certification.					
<b><i>FY 2011 Plans:</i></b> Develop and evaluate a solution for the cargo compartment pallet locking rail deficiency. Investigate and develop recommendations to correct weapon system deficiencies identified in initial QT&E/OT&E. Complete military aircraft type certification.					
<b><i>FY 2012 Base Plans:</i></b> Investigate and develop recommendations to correct weapon system deficiencies identified in initial QT&E/OT&E. Investigate requirements and develop recommendations to address Federal Aviation Administration (FAA) mandated communication, navigation, identification and air traffic management requirements.					
<b><i>FY 2012 OCO Plans:</i></b>					
<b>Accomplishments/Planned Programs Subtotals</b>	9.031	26.407	27.089	-	27.089

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

<u>Line Item</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012 Base</u>	<u>FY 2012 OCO</u>	<u>FY 2012 Total</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>Cost To Complete</u>	<u>Total Cost</u>
• PE 0401138F: <i>APAF, AF</i>	318.066	351.200	571.582	0.000	571.582	189.841	105.733	47.814	20.957	Continuing	Continuing

**D. Acquisition Strategy**

Training System Development: In FY11, negotiate a firm fixed price (FFP) contract/contract modification for the development, testing, and delivery of a VCT, LMCRT, CPT, and VAMTs for C-27J aircrew and maintenance personnel. These training systems will be incrementally funded over a two-year timeframe (FY11-12), and are expected to be fielded in the 3Q/FY14 timeframe.

Test and Evaluation: Provide funding to government test and evaluation organizations via military interdepartmental purchase requests.

Technical Studies & Analyses: Exercise a FFP contract line item number (CLIN) for L3 Com engineering support services (ESS), and/or modify the contract via engineering change proposals. Analysis requirements will be determined by the government and may include evaluation of: product quality deficiency reports (PQDR), FAA airworthiness directives, vendor service bulletins, AMC/ANG operational capability requirements, FAA mandated Communication-Navigation-Surveillance and Air Traffic Management (CNS/ATM) requirements, component obsolescence and diminishing manufacturing source issues, technology refresh requirements, aircrew

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2012 Air Force		<b>DATE:</b> February 2011
<b>APPROPRIATION/BUDGET ACTIVITY</b> 3600: <i>Research, Development, Test &amp; Evaluation, Air Force</i> BA 5: <i>Development &amp; Demonstration (SDD)</i>	<b>R-1 ITEM NOMENCLATURE</b> PE 0401138F: <i>Joint Cargo Aircraft</i>	<b>PROJECT</b> 655259: <i>C-27J</i>
<p>and maintenance training requirements and tasks, and the transition of product support responsibilities from interim contractor support (ICS) to approved long-term sustainment strategies.</p> <p>System/Airworthiness Certification: Provide funding to ASC/EN for maintenance of C-27J aircraft type and airworthiness certifications.</p> <p><b><u>E. Performance Metrics</u></b></p> <p>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.</p>		

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2012 Air Force											DATE: February 2011			
APPROPRIATION/BUDGET ACTIVITY 3600: Research, Development, Test & Evaluation, Air Force BA 5: Development & Demonstration (SDD)				R-1 ITEM NOMENCLATURE PE 0401138F: Joint Cargo Aircraft				PROJECT 655259: C-27J						
Product Development (\$ in Millions)				FY 2011		FY 2012 Base		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	
Training System Development	C/FFP	TBD:,	-	17.092	Jun 2011	18.594		-		18.594	0.000	35.686	35.686	
Mission Planning System Development	Various	Various:,	2.863	-		-		-		-	0.000	2.863	0.000	
Aircraft Type & Airworthiness Certification	Various	Various:,	2.772	0.100		0.050		-		0.050	0.050	2.972	0.000	
Subtotal			5.635	17.192		18.644		-		18.644	0.050	41.521	35.686	
Support (\$ in Millions)				FY 2011		FY 2012 Base		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	
Contractor Engineering Support Services/Data	C/FFP	L3 Com:Waco, TX	10.186	6.087	Mar 2011	5.078	Jan 2012	-		5.078	3.548	24.899	0.000	
Business Case Analysis	C/FFP	Belzon:Huntsville, AL	4.549	-		-		-		-	0.000	4.549	0.000	
Government Studies & Analyses	Various	Various:,	1.914	-		-		-		-	0.000	1.914	0.000	
Subtotal			16.649	6.087		5.078		-		5.078	3.548	31.362	0.000	
Test and Evaluation (\$ in Millions)				FY 2011		FY 2012 Base		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	
Qualification and Operational Test & Evaluation	MIPR	Various:,	20.175	2.758		3.000		-		3.000	2.500	28.433	0.000	
Subtotal			20.175	2.758		3.000		-		3.000	2.500	28.433	0.000	

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<b>Exhibit R-3, RDT&amp;E Project Cost Analysis:</b> PB 2012 Air Force											<b>DATE:</b> February 2011		
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<b>Management Services (\$ in Millions)</b>				<b>FY 2011</b>		<b>FY 2012 Base</b>		<b>FY 2012 OCO</b>		<b>FY 2012 Total</b>			
<b>Cost Category Item</b>	<b>Contract Method &amp; Type</b>	<b>Performing Activity &amp; Location</b>	<b>Total Prior Years Cost</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
Program Office/Mission Support	Various	Various:,	6.700	0.370		0.367		-		0.367	0.374	7.811	0.000
<b>Subtotal</b>			6.700	0.370		0.367		-		0.367	0.374	7.811	0.000

  

	<b>Total Prior Years Cost</b>	<b>FY 2011</b>		<b>FY 2012 Base</b>		<b>FY 2012 OCO</b>		<b>FY 2012 Total</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
<b>Project Cost Totals</b>	49.159	26.407		27.089		-		27.089	6.472	109.127	35.686

  

**Remarks**



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Exhibit R-4, RDT&E Schedule Profile: PB 2012 Air Force		DATE: February 2011
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<b>Exhibit R-4A, RDT&amp;E Schedule Details:</b> PB 2012 Air Force			<b>DATE:</b> February 2011
<b>APPROPRIATION/BUDGET ACTIVITY</b> 3600: <i>Research, Development, Test &amp; Evaluation, Air Force</i> BA 5: <i>Development &amp; Demonstration (SDD)</i>	<b>R-1 ITEM NOMENCLATURE</b> PE 0401138F: <i>Joint Cargo Aircraft</i>	<b>PROJECT</b> 655259: <i>C-27J</i>	

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
OSD Interim Program Review (IPR)	1	2010	1	2010
Initial Operational Capability (IOC)	3	2011	3	2011
Full-Rate Production (FRP) Decision Review	3	2011	3	2011
Follow-On Production/Support Contract	3	2012	3	2012
Live Fire Test & Evaluation (LFT&E)	1	2010	1	2010
Product Qualification Test (PQT)	1	2010	3	2010
Multi-Service Operational Test & Evaluation (MOT&E)	3	2010	4	2010
Training Systems Development	3	2011	1	2014
Training Systems Validation/Verification	2	2014	2	2014
Small Group Trial	3	2014	3	2014
Training Systems Ready For Training Certification	3	2014	3	2014
FAA Commercial Aircraft Type Certificate	1	2011	1	2011
Air Force Supplemental Military Aircraft Type Certificate	4	2011	4	2011

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