

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification: PB 2011 Air Force **DATE:** February 2010

APPROPRIATION/BUDGET ACTIVITY 3600: <i>Research, Development, Test & Evaluation, Air Force</i> BA 5: <i>Development & Demonstration (SDD)</i>	R-1 ITEM NOMENCLATURE PE 0401138F: <i>Joint Cargo Aircraft</i>
--	--

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	16.271	9.353	26.407	0.000	26.407	18.920	6.501	0.000	0.000	Continuing	Continuing
655259: <i>Joint Cargo Aircraft (JCA)</i>	16.271	9.353	26.407	0.000	26.407	18.920	6.501	0.000	0.000	0.000	111.901

A. Mission Description and Budget Item Justification

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 (L3Com) in June 2007.

In FY10, the Air Force assumed full responsibility for the 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.

FY11 Budget Justification:

Provides for technical studies and analyses to investigate and recommend solutions for: 1) aircraft deficiencies identified during initial Product Qualification Testing (PQT), Live Fire Test & Evaluation (LFT&E), and Multi-Service Operational Test & Evaluation (MOT&E); 2) operational capability requirements identified by Air Mobility Command (AMC); 3) new technologies that could enhance C-27J operational effectiveness, survivability, and sustainability

Provides for follow-on qualification testing and operational evaluation of aircraft design/configuration changes installed on C-27J aircraft

Provides for updates to, and maintenance of C-27J aircraft airworthiness certifications

Provides for the development 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 program management office support of test and evaluation activities

Funding for the C-27J acquisition program is contained in Budget Activity 05, as the C-27J is a new weapon system that has not been fully fielded.

UNCLASSIFIED

R-1 Line Item #94

Page 1 of 10

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification: PB 2011 Air Force	DATE: February 2010
--	----------------------------

APPROPRIATION/BUDGET ACTIVITY 3600: <i>Research, Development, Test & Evaluation, Air Force</i> BA 5: <i>Development & Demonstration (SDD)</i>	R-1 ITEM NOMENCLATURE PE 0401138F: <i>Joint Cargo Aircraft</i>
--	--

B. Program Change Summary (\$ in Millions)

	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011 Base</u>	<u>FY 2011 OCO</u>	<u>FY 2011 Total</u>
Previous President's Budget	16.271	9.353	0.000	0.000	0.000
Current President's Budget	16.271	9.353	26.407	0.000	26.407
Total Adjustments	0.000	0.000	26.407	0.000	26.407
• Congressional General Reductions		0.000			
• Congressional Directed Reductions		0.000			
• Congressional Rescissions	0.000	0.000			
• Congressional Adds		0.000			
• Congressional Directed Transfers		0.000			
• Reprogrammings	0.000	0.000			
• SBIR/STTR Transfer	0.000	0.000			
• Other Adjustments	0.000	0.000	26.407	0.000	26.407

UNCLASSIFIED

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2011 Air Force **DATE:** February 2010

APPROPRIATION/BUDGET ACTIVITY 3600: <i>Research, Development, Test & Evaluation, Air Force</i> BA 5: <i>Development & Demonstration (SDD)</i>	R-1 ITEM NOMENCLATURE PE 0401138F: <i>Joint Cargo Aircraft</i>	PROJECT 655259: <i>Joint Cargo Aircraft (JCA)</i>
--	--	---

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
655259: <i>Joint Cargo Aircraft (JCA)</i>	16.271	9.353	26.407	0.000	26.407	18.920	6.501	0.000	0.000	0.000	111.901
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

A. Mission Description and Budget Item Justification

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 (L3Com) in June 2007.

In FY10, the Air Force assumed full responsibility for the 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.

FY11 Budget Justification:

Provides for technical studies and analyses to investigate and recommend solutions for: 1) aircraft deficiencies identified during initial Product Qualification Testing (PQT), Live Fire Test & Evaluation (LFT&E), and Multi-Service Operational Test & Evaluation (MOT&E); 2) operational capability requirements identified by Air Mobility Command (AMC); 3) new technologies that could enhance C-27J operational effectiveness, survivability, and sustainability

Provides for follow-on qualification testing and operational evaluation of aircraft design/configuration changes installed on C-27J aircraft

Provides for updates to, and maintenance of C-27J aircraft airworthiness certifications

Provides for the development 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 program management office support of test and evaluation activities

Funding for the C-27J acquisition program is contained in Budget Activity 05, as the C-27J is a new weapon system that has not been fully fielded.

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

UNCLASSIFIED

R-1 Line Item #94

Page 3 of 10

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2011 Air Force		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 3600: <i>Research, Development, Test & Evaluation, Air Force</i> BA 5: <i>Development & Demonstration (SDD)</i>	R-1 ITEM NOMENCLATURE PE 0401138F: <i>Joint Cargo Aircraft</i>	PROJECT 655259: <i>Joint Cargo Aircraft (JCA)</i>

B. Accomplishments/Planned Program (\$ in Millions)	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
<p>MAJOR THRUST: Complete C-27J test and evaluation activities and develop aircrew and maintenance training systems/devices.</p> <p><i>FY 2009 Accomplishments:</i> In FY 2009: Conducted Live Fire Test and Evaluation (LFT&E) and initial Product Qualification Test (PQT) events on the C-27J weapon system. Conducted business case analyses (BCA) to assess long-term training and sustainment options for the C-27J. Funded various program management activities and mission support requirements, including initial airworthiness certification activities.</p> <p><i>FY 2010 Plans:</i> In FY 2010: Completed LFT&E, initial PQT, and Multi-Service Operational Test and Evaluation (MOT&E) on the C-27J weapon system. Completed BCA and initial airworthiness certification activities.</p> <p><i>FY 2011 Base Plans:</i> In FY 2011: Initiate development of aircrew and maintenance training systems/devices, including a cockpit procedures trainer, an avionics system management trainer, a loadmaster part-task trainer, and computer-based interactive multimedia instruction systems for C-27J maintenance personnel.</p> <p><i>FY 2011 OCO Plans:</i> In FY 2011 OCO: N/A</p>	16.271	9.353	26.407	0.000	26.407
Accomplishments/Planned Programs Subtotals	16.271	9.353	26.407	0.000	26.407

C. Other Program Funding Summary (\$ in Millions)											
Line Item	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total	FY 2012	FY 2013	FY 2014	FY 2015	Cost To Complete	Total Cost
• PE 0401138F: <i>Aircraft Procurement, Air Force</i>	0.000	318.032	351.200	0.000	351.200	574.729	19.045	21.942	29.395	0.000	0.000
	2.923	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

UNCLASSIFIED

R-1 Line Item #94

Page 4 of 10

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2011 Air Force **DATE:** February 2010

APPROPRIATION/BUDGET ACTIVITY 3600: <i>Research, Development, Test & Evaluation, Air Force</i> BA 5: <i>Development & Demonstration (SDD)</i>	R-1 ITEM NOMENCLATURE PE 0401138F: <i>Joint Cargo Aircraft</i>	PROJECT 655259: <i>Joint Cargo Aircraft (JCA)</i>
--	--	---

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

<u>Line Item</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u> <u>Base</u>	<u>FY 2011</u> <u>OCO</u>	<u>FY 2011</u> <u>Total</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>Cost To</u> <u>Complete</u>	<u>Total Cost</u>
• PE 0203744A: <i>Aircraft Modifications, Army</i>											
• PE A11000: <i>Aircraft Procurement, Army</i>	263.381	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

D. Acquisition Strategy

Technical Studies & Analyses: Exercise FFP contract line item number (CLIN) for L3Com engineering support services (ESS). Analysis requirements will be determined by the government and may include evaluation of: product quality deficiency reports (PQDR), Federal Aviation Administration (FAA) airworthiness directives/service bulletins, AMC operational capability requirements, communication-navigation-surveillance and air traffic management (CNS/ATM) requirements, component obsolescence/technology refresh requirements, and business case analysis results/recommendations.

Test & Evaluation: Provide funding to Air Force qualification and operational test organizations, other government agencies, and the prime contractor (L3Com) as necessary to verify and evaluate aircraft design/configuration changes against contract and operational requirements, and FAA airworthiness standards.

Airworthiness Certification: Provide funding to the Air Force Aeronautical Systems Center (ASC), Air Force test agencies, other government agencies (e.g., FAA), and the prime contractor (L3Com) as necessary to update and maintain C-27J airworthiness certifications following the installation and verification of aircraft design/configuration changes.

Training System Development: Negotiate contract modifications for the development and delivery of the following C-27J training devices: one cockpit procedures trainer (CPT), one avionics system management trainer (ASMT), one loadmaster part-task trainer (LMPTT), and computer-based interactive multimedia instruction (IMI) maintenance training systems. These training systems will be developed and incrementally funded over a two-year timeframe (FY11-12), with the delivery of each device occurring in FY12.

Program Office/Mission Support: Fund task orders on existing program office advisory and assistance services contracts for support of program test and evaluation activities. Provide funding to other government agencies as necessary to support program office operations.

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.

UNCLASSIFIED

R-1 Line Item #94

Page 5 of 10

UNCLASSIFIED

Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Air Force										DATE: February 2010			
APPROPRIATION/BUDGET ACTIVITY 3600: <i>Research, Development, Test & Evaluation, Air Force</i> BA 5: <i>Development & Demonstration (SDD)</i>				R-1 ITEM NOMENCLATURE PE 0401138F: <i>Joint Cargo Aircraft</i>				PROJECT 655259: <i>Joint Cargo Aircraft (JCA)</i>					

Product Development (\$ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total	Cost To Complete	Total Cost	Target Value of Contract
				Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Training System/Device Development	C/FFP	L3Com Waco, TX	0.000	0.000		22.645	Jan 2011	0.000		22.645	21.204	43.849	43.849
Mission Planning System Development	C/FFP	L3Com Waco, TX	1.745	0.000		0.000		0.000		0.000	0.000	1.745	0.000
Subtotal			1.745	0.000		22.645		0.000		22.645	21.204	45.594	43.849

Remarks

FY11 funds initiate development of the CPT, ASMT, LMPTT, and IMIs; effort continues/completes in FY12

Support (\$ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total	Cost To Complete	Total Cost	Target Value of Contract
				Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Engineering Support Services	C/FFP	L3Com Waco, TX	11.496	1.577		1.937		0.000		1.937	0.522	15.532	0.000
Business Case Analyses	C/FFP	Belzon Huntsville, AL	4.086	0.510		0.000		0.000		0.000	0.000	4.596	0.000
Airworthiness Certification	MIPR	Various Various	2.150	0.130		0.100		0.000		0.100	0.230	2.610	0.000
Subtotal			17.732	2.217		2.037		0.000		2.037	0.752	22.738	0.000

Remarks

UNCLASSIFIED

R-1 Line Item #94

Page 6 of 10

UNCLASSIFIED

Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Air Force **DATE:** February 2010

APPROPRIATION/BUDGET ACTIVITY 3600: <i>Research, Development, Test & Evaluation, Air Force</i> BA 5: <i>Development & Demonstration (SDD)</i>	R-1 ITEM NOMENCLATURE PE 0401138F: <i>Joint Cargo Aircraft</i>	PROJECT 655259: <i>Joint Cargo Aircraft (JCA)</i>
--	--	---

Test and Evaluation (\$ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total	Cost To Complete	Total Cost	Target Value of Contract
				Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Qualification and Operational Test & Evaluation	MIPR	Various Various	14.010	6.796		1.500		0.000		1.500	3.000	25.306	0.000
Subtotal			14.010	6.796		1.500		0.000		1.500	3.000	25.306	0.000

Remarks

Management Services (\$ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total	Cost To Complete	Total Cost	Target Value of Contract
				Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Program Office/Mission Support	Various/ Various	Various Various	8.248	0.340		0.225		0.000		0.225	0.465	9.278	0.000
Air Force Reprogramming Action	TBD/TBD	TBD TBD	4.000	0.000		0.000		0.000		0.000	0.000	4.000	0.000
Subtotal			12.248	0.340		0.225		0.000		0.225	0.465	13.278	0.000

Remarks

UNCLASSIFIED

UNCLASSIFIED

Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Air Force		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 3600: <i>Research, Development, Test & Evaluation, Air Force</i> BA 5: <i>Development & Demonstration (SDD)</i>	R-1 ITEM NOMENCLATURE PE 0401138F: <i>Joint Cargo Aircraft</i>	PROJECT 655259: <i>Joint Cargo Aircraft (JCA)</i>

	Total Prior Years Cost	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	45.735	9.353	26.407	0.000	26.407	25.421	106.916	43.849

Remarks

Total Prior Years Cost may include only FY 2009 data.

UNCLASSIFIED

UNCLASSIFIED

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

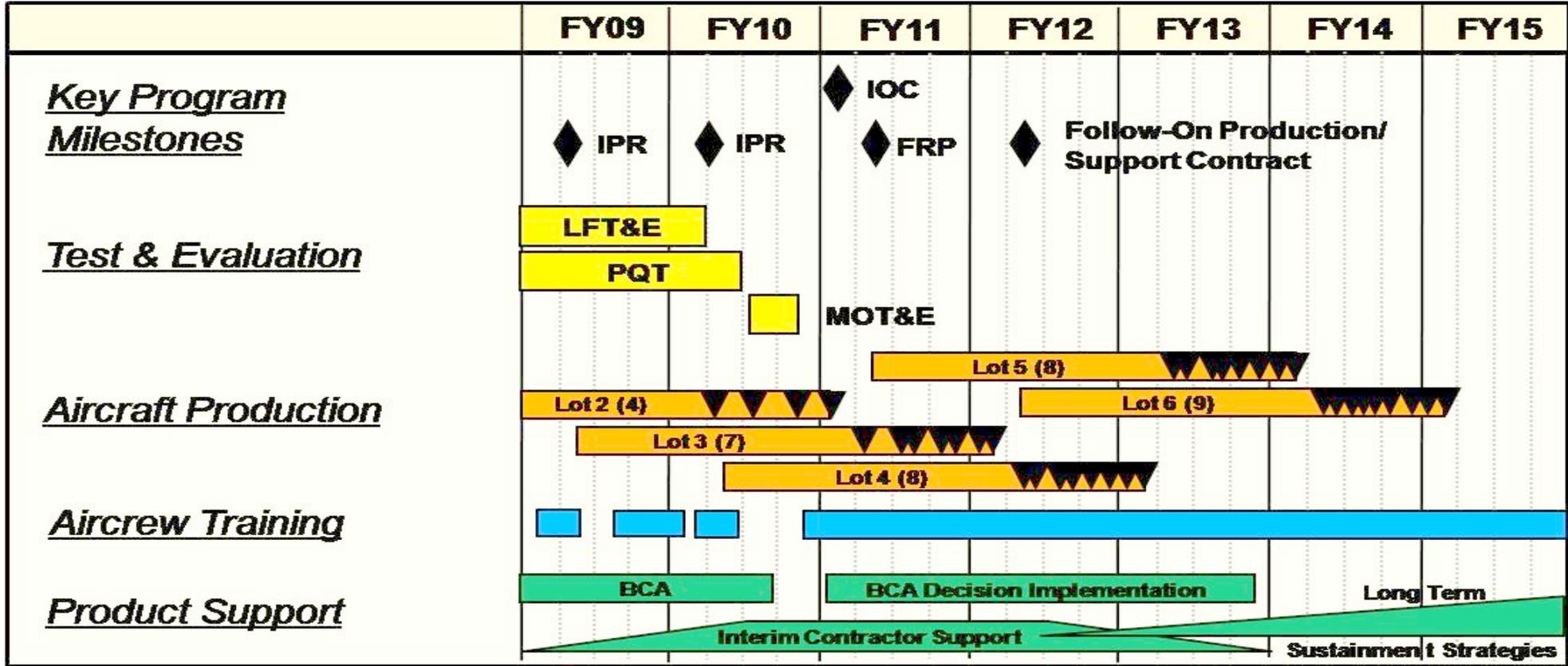
DATE: February 2010

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: Joint Cargo Aircraft (JCA)

C-27J Program Schedule



UNCLASSIFIED

UNCLASSIFIED

Exhibit R-4A, RDT&E Schedule Details: PB 2011 Air Force		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 3600: <i>Research, Development, Test & Evaluation, Air Force</i> BA 5: <i>Development & Demonstration (SDD)</i>	R-1 ITEM NOMENCLATURE PE 0401138F: <i>Joint Cargo Aircraft</i>	PROJECT 655259: <i>Joint Cargo Aircraft (JCA)</i>

Schedule Details

Event	Start		End	
	Quarter	Year	Quarter	Year
OSD Interim Program Review (IPR)	2	2009	2	2010
Initial Operational Capability (IOC)	1	2011	1	2011
Full-Rate Production (FRP) Decision Review	2	2011	2	2011
Live Fire Test & Evaluation (LFT&E)	1	2009	1	2010
Product Qualification Test (PQT)	1	2009	2	2010
Multi-Service Operational Test & Evaluation (MOT&E)	3	2010	4	2010
Business Case Analyses (BCA)	1	2009	3	2010

UNCLASSIFIED