

UNCLASSIFIED

PE NUMBER: 0604762F

PE TITLE: Common Low Observable Verification Sys

Exhibit R-2, RDT&E Budget Item Justification	DATE February 2007
---	------------------------------

BUDGET ACTIVITY 05 System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0604762F Common Low Observable Verification Sys
--	--

Cost (\$ in Millions)	FY 2006 Actual	FY 2007 Estimate	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	12.737	4.483	0.000	0.000	0.000	0.000	0.000	0.000	0.000	61.641
4683 Common Low Observable Verification System	12.737	4.483	0.000	0.000	0.000	0.000	0.000	0.000	0.000	61.641

(U) A. Mission Description and Budget Item Justification

The Common Low Observable Verification System (CLOVerS) is a deployable flight line maintenance inspection tool capable of evaluating radar cross-section (RCS) defects on low observable aircraft. The system performs zone and whole body aircraft measurements to detect, locate, and assess RCS defects and potential defects. Following repair of the defect, CLOVerS measures the area surrounding the defect to verify that the maintenance action corrected the defect. CLOVerS can provide a common RCS assessment system to support operations and maintenance of F-117, B-2 and F-22 aircraft. CLOVerS will provide RCS assessment support at both main operating base and forward operating locations. Key capabilities required include the ability to detect and locate RCS defects, reduced measurement time (compared to existing verification methods), operation under less restrictive security measures, and a small deployment footprint.

The CLOVerS program began experiencing delays in system development during FY05 when contractor testing revealed issues in the design of the motion control software and the vertical/ horizontal mast structure. In FY06, the Air Force decided the increased costs to complete development and produce the required number of units were prohibitive. As a result, the program office re scoped the current RDT&E effort to capture the hardware and software developed under the CLOVerS program that are transferable to other LO diagnostic tools.

This program is in budget activity 5 - System Development and Demonstration (SDD) because this program develops the Common Low Observable Verification System (CLOVerS).

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

	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>
(U) Previous President's Budget	8.568			
(U) Current PBR/President's Budget	12.737	4.483		
(U) Total Adjustments	4.169			
(U) Congressional Program Reductions				
Congressional Rescissions				
Congressional Increases				
Reprogrammings	4.400			
SBIR/STTR Transfer	-0.231			

(U) Significant Program Changes:

The Air Force has terminated production funding in the FY08 POM. The RDTE program will complete current development efforts and transfer technologies to other low

Exhibit R-2, RDT&E Budget Item Justification

DATE

February 2007

BUDGET ACTIVITY

05 System Development and Demonstration (SDD)

PE NUMBER AND TITLE

0604762F Common Low Observable Verification Sys

observable platforms.

Exhibit R-2a, RDT&E Project Justification

DATE
February 2007

BUDGET ACTIVITY 05 System Development and Demonstration (SDD)					PE NUMBER AND TITLE 0604762F Common Low Observable Verification Sys			PROJECT NUMBER AND TITLE 4683 Common Low Observable Verification System		
Cost (\$ in Millions)	FY 2006 Actual	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	FY 2012 Estimate	FY 2013 Estimate	Cost to Complete	Total
4683 Common Low Observable Verification System	12.737	4.483	0.000	0.000	0.000	0.000	0.000	0.000	0.000	61.641
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0		

(U) A. Mission Description and Budget Item Justification

The Common Low Observable Verification System (CLOVerS) is a deployable flight line maintenance inspection tool capable of evaluating radar cross-section (RCS) defects on low observable aircraft. The system performs zone and whole body aircraft measurements to detect, locate, and assess RCS defects and potential defects. Following repair of the defect, CLOVerS measures the area surrounding the defect to verify that the maintenance action corrected the defect. CLOVerS can provide a common RCS assessment system to support operations and maintenance of F-117, B-2 and F-22 aircraft. CLOVerS will provide RCS assessment support at both main operating base and forward operating locations. Key capabilities required include the ability to detect and locate RCS defects, reduced measurement time (compared to existing verification methods), operation under less restrictive security measures, and a small deployment footprint.

The CLOVerS program began experiencing delays in system development during FY05 when contractor testing revealed issues in the design of the motion control software and the vertical/ horizontal mast structure. In FY06, the Air Force decided the increased costs to complete development and produce the required number of units were prohibitive. As a result, the program office re scoped the current RDT&E effort to capture the hardware and software developed under the CLOVerS program that are transferable to other LO diagnostic tools.

This program is in budget activity 5 - System Development and Demonstration (SDD) because this program develops the Common Low Observable Verification System (CLOVerS).

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

	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>
(U) Complete Cart 4/5 development and continue ancillary equipment development.	8.698	4.383		
(U) Field Testing	3.415			
(U) Program Office Support	0.624	0.100		
(U) Total Cost	12.737	4.483	0.000	0.000

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

	<u>FY 2006</u>	<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>Complete</u>							
(U) BP12 - PE207145F:Appn: Aircraft Procurement, AF (APAF) Budget Activity: Aircraft (A/C)	0.000	20.228	0.000	0.000	0.000	0.000	0.000	0.000	0.000	20.228

Exhibit R-2a, RDT&E Project Justification

DATE

February 2007

BUDGET ACTIVITY

05 System Development and Demonstration (SDD)

PE NUMBER AND TITLE

0604762F Common Low Observable Verification Sys

PROJECT NUMBER AND TITLE

4683 Common Low Observable Verification System

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

Procurement/Common Support Equipment, Program
 Title: Common Low Observable Verification System (CLOVerS)

(U) BP16 - PE207145F: Appn:

Spares for Common Low Observable Verification System (CLOVerS)	0.000	0.978	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.978
--	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------

(U) Operational & Support

Funding (3400) for Common Low Observable Verification System (CLOVerS)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
--	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------

(U) **D. Acquisition Strategy**

The contract was awarded May 99 using full and open competition as a Cost Plus Award Fee. Contract was modified in Jul 02 to convert to Cost Plus Fixed Fee and to stretch the period of performance.

UNCLASSIFIED

Exhibit R-3, RDT&E Project Cost Analysis

DATE
February 2007

BUDGET ACTIVITY				PE NUMBER AND TITLE						PROJECT NUMBER AND TITLE				
05 System Development and Demonstration (SDD)				0604762F Common Low Observable Verification Sys						4683 Common Low Observable Verification System				
(U) Cost Categories (Tailor to WBS, or System/Item Requirements) (\$ in Millions)	<u>Contract Method & Type</u>	<u>Performing Activity & Location</u>	<u>Total Prior to FY 2006 Cost</u>	<u>FY 2006 Cost</u>	<u>FY 2006 Award Date</u>	<u>FY 2007 Cost</u>	<u>FY 2007 Award Date</u>	<u>FY 2008 Cost</u>	<u>FY 2008 Award Date</u>	<u>FY 2009 Cost</u>	<u>FY 2009 Award Date</u>	<u>Cost to Complete</u>	<u>Total Cost</u>	<u>Target Value of Contract</u>
(U) <u>Product Development</u>														
Develop CLOVerS EMD Unit	CPFF	Boeing Co., St Louis		11.770	Oct-05	4.383						0.000	16.153	53.301
Subtotal Product Development			0.000	11.770		4.383		0.000		0.000		0.000	16.153	53.301
Remarks:														
(U) <u>Support</u>														
Electromagnetic Licensing and Misc Support	Various	Joint Spectrum Center, 88 CG, AFRL		0.147	Jan-06								0.147	3.636
Independant Logistics Assessment	Fixed	LOGTEC, Fairborn, OH		0.099	Nov-05								0.099	0.171
Subtotal Support			0.000	0.246		0.000		0.000		0.000		0.000	0.246	3.807
Remarks:														
(U) <u>Program Office Support</u>														
PMA	Various	Various		0.721	Oct-05	0.100							0.821	2.653
Subtotal Program Office Support			0.000	0.721		0.100		0.000		0.000		0.000	0.821	2.653
Remarks:														
(U) Total Cost			0.000	12.737		4.483		0.000		0.000		0.000	17.220	59.761

Exhibit R-4, RDT&E Schedule Profile

DATE
February 2007

BUDGET ACTIVITY
05 System Development and Demonstration (SDD)

PE NUMBER AND TITLE
0604762F Common Low Observable
Verification Sys

PROJECT NUMBER AND TITLE
4683 Common Low Observable
Verification System



CLOVerS Schedule

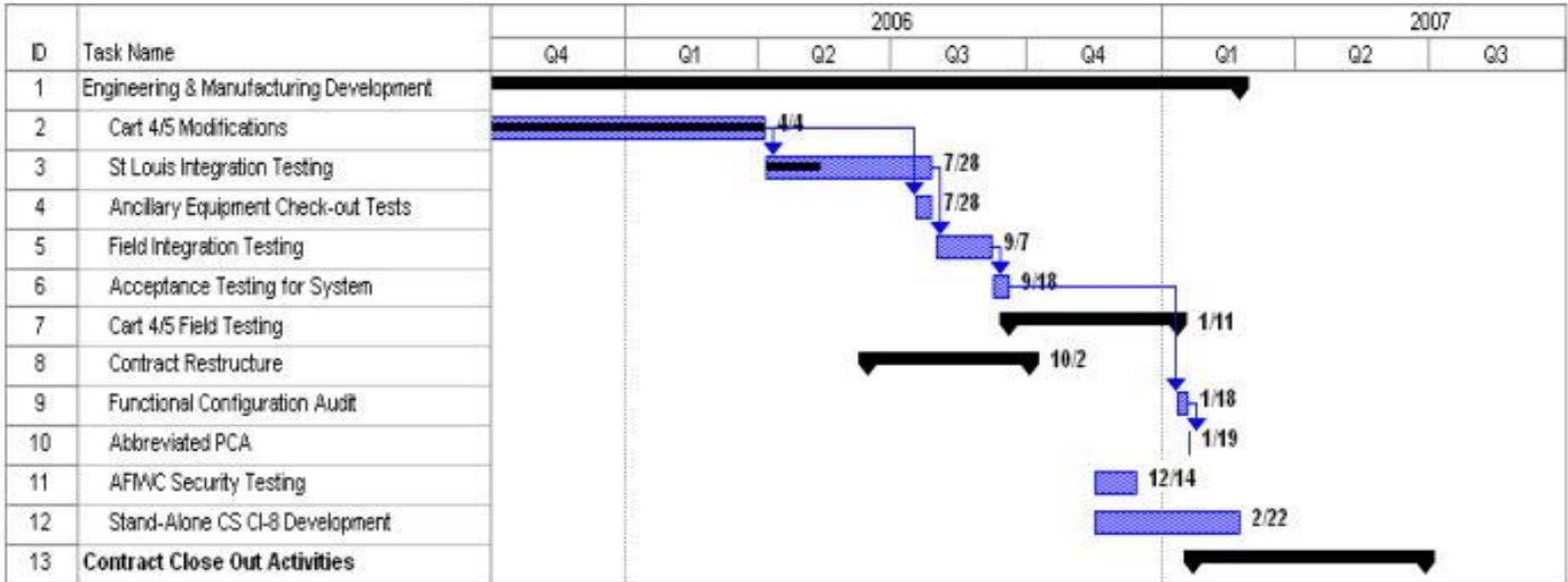


Exhibit R-4a, RDT&E Schedule Detail	DATE February 2007
--	------------------------------

BUDGET ACTIVITY 05 System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0604762F Common Low Observable Verification Sys	PROJECT NUMBER AND TITLE 4683 Common Low Observable Verification System
---	---	---

	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>
(U) <u>Schedule Profile</u>				
(U) Cart 4/5 Engineering & Manufacturing Development	1-4Q			
(U) Cart 4/5 Field Testing	4Q			
(U) Contract Close-out		3Q		