

UNCLASSIFIED

PE NUMBER: 0604012F

PE TITLE: Joint Helmet Mounted Cueing System (JHMCS)

Exhibit R-2, RDT&E Budget Item Justification									DATE February 2005																																																								
BUDGET ACTIVITY 05 System Development and Demonstration (SDD)					PE NUMBER AND TITLE 0604012F Joint Helmet Mounted Cueing System (JHMCS)																																																												
Cost (\$ in Millions)	FY 2004 Actual	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	Cost to Complete	Total																																																							
Total Program Element (PE) Cost	0.796	2.841	2.912	2.261	3.839	3.096	2.492	2.500	Continuing	TBD																																																							
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<p>(U) A. Mission Description and Budget Item Justification</p> <p>This joint Air Force/Navy program (Air Force is the lead service) develops a helmet display system capable of depicting aircraft heading data, pilot's viewing perspective, target indication tracking/cueing, and other information on the aircrew visor to enhance pilot situational awareness. This display allows the pilot to quickly align platform sensors and weapons on targets, and engage threats using high off-boresight (HOBS) weapons such as the AIM-9X.</p> <p>Milestone III was successfully approved in Jan 04, and correspondingly, the first Full Rate Production (FRP) contract was awarded May 04. A cost reduction analysis team was formed in FY04 and outbriefed potential cost savings to the PEO's in May 04, which are being pursued for the upcoming FRP 2 award. Continued activities include Electronic Unit Software update, resolution of deficiencies identified during Operational Testing (OT), a night display and tracking/cueing implementation and integration, improvements to Reliability and Maintainability (R&M), system upgrade studies/analysis, obsolescence upgrades, improved magnetic mapping processes to reduce maintenance manhours and life cycle costs, and alpha contracting efforts in support of FRP 2/3/4 contracts.</p> <p>This program is in budget activity 5 - System Design and Development (SDD).</p>																																																																	
<p>(U) B. Program Change Summary (\$ in Millions)</p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 55%;"></th> <th style="width: 10%; text-align: center;"><u>FY 2004</u></th> <th style="width: 10%; text-align: center;"><u>FY 2005</u></th> <th style="width: 10%; text-align: center;"><u>FY 2006</u></th> <th style="width: 10%; text-align: center;"><u>FY 2007</u></th> </tr> </thead> <tbody> <tr> <td>(U) Previous President's Budget</td> <td style="text-align: center;">0.836</td> <td style="text-align: center;">2.867</td> <td style="text-align: center;">2.896</td> <td style="text-align: center;">2.939</td> </tr> <tr> <td>(U) Current PBR/President's Budget</td> <td style="text-align: center;">0.796</td> <td style="text-align: center;">2.841</td> <td style="text-align: center;">2.912</td> <td style="text-align: center;">2.261</td> </tr> <tr> <td>(U) Total Adjustments</td> <td style="text-align: center;">-0.040</td> <td style="text-align: center;">-0.026</td> <td></td> <td></td> </tr> <tr> <td>(U) Congressional Program Reductions</td> <td></td> <td style="text-align: center;">-0.026</td> <td></td> <td></td> </tr> <tr> <td> Congressional Rescissions</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td> Congressional Increases</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td> Reprogrammings</td> <td style="text-align: center;">-0.015</td> <td></td> <td></td> <td></td> </tr> <tr> <td> SBIR/STTR Transfer</td> <td style="text-align: center;">-0.025</td> <td></td> <td></td> <td></td> </tr> <tr> <td>(U) <u>Significant Program Changes:</u></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td> None.</td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>												<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	(U) Previous President's Budget	0.836	2.867	2.896	2.939	(U) Current PBR/President's Budget	0.796	2.841	2.912	2.261	(U) Total Adjustments	-0.040	-0.026			(U) Congressional Program Reductions		-0.026			Congressional Rescissions					Congressional Increases					Reprogrammings	-0.015				SBIR/STTR Transfer	-0.025				(U) <u>Significant Program Changes:</u>					None.				
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Exhibit R-2a, RDT&E Project Justification

DATE

February 2005

BUDGET ACTIVITY

05 System Development and Demonstration (SDD)

PE NUMBER AND TITLE

0604012F Joint Helmet Mounted Cueing System (JHMCS)

PROJECT NUMBER AND TITLE

4789 Joint Helmet Mounted Cueing System (JHMCS)

Cost (\$ in Millions)	FY 2004 Actual	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	Cost to Complete	Total
4789 Joint Helmet Mounted Cueing System (JHMCS)	0.796	2.841	2.912	2.261	3.839	3.096	2.492	2.500	Continuing	TBD
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0		

JHMCS PE change request approved for FY07 BES: 27170F

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

This joint Air Force/Navy program (Air Force is the lead service) develops a helmet display system capable of depicting aircraft heading data, pilot's viewing perspective, target indication tracking/cueing, and other information on the aircrew visor to enhance pilot situational awareness. This display allows the pilot to quickly align platform sensors and weapons on targets, and engage threats using high off-boresight (HOBS) weapons such as the AIM-9X.

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This program is in budget activity 5 - System Design and Development (SDD).

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

	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>
(U) Continue deficiencies resolution, reliability improvements, P3I activities, obsolescence upgrades, analysis/studies, and night vision integration	0.710	2.566	2.623	1.958
(U) Continue program management support	0.086	0.275	0.289	0.303
(U) Total Cost	0.796	2.841	2.912	2.261

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

	<u>FY 2004</u> <u>Actual</u>	<u>FY 2005</u> <u>Estimate</u>	<u>FY 2006</u> <u>Estimate</u>	<u>FY 2007</u> <u>Estimate</u>	<u>FY 2008</u> <u>Estimate</u>	<u>FY 2009</u> <u>Estimate</u>	<u>FY 2010</u> <u>Estimate</u>	<u>FY 2011</u> <u>Estimate</u>	<u>Cost to</u> <u>Complete</u>	<u>Total Cost</u>
RDT&E, BA 5, PE 0604201F,										
(U) Integrated Avionics Planning and Development										45.151

Note: Prior to FY01 JHMCS was funded as part of PE 0604201F.

(U) **D. Acquisition Strategy**

JHMCS is an ACAT III joint USAF/USN program (USAF - executive service). The development contract structure is a Cost Plus Award Fee (CPAF). The CPAF contract

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Exhibit R-2a, RDT&E Project Justification		DATE February 2005
BUDGET ACTIVITY 05 System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0604012F Joint Helmet Mounted Cueing System (JHMCS)	PROJECT NUMBER AND TITLE 4789 Joint Helmet Mounted Cueing System (JHMCS)
<p>is through Boeing - St. Louis for development and integration into the F-15 and F/A-18 aircraft. All other aircraft integration will be handled by the respective platform prime contractors. All major contracts awarded after full and open competition.</p>		
<p>Project 4789</p>		

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Exhibit R-3, RDT&E Project Cost Analysis												DATE February 2005		
BUDGET ACTIVITY 05 System Development and Demonstration (SDD)						PE NUMBER AND TITLE 0604012F Joint Helmet Mounted Cueing System (JHMCS)						PROJECT NUMBER AND TITLE 4789 Joint Helmet Mounted Cueing System (JHMCS)		
(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 2004 Cost</u>	<u>FY 2004 Cost</u>	<u>FY 2004 Award Date</u>	<u>FY 2005 Cost</u>	<u>FY 2005 Award Date</u>	<u>FY 2006 Cost</u>	<u>FY 2006 Award Date</u>	<u>FY 2007 Cost</u>	<u>FY 2007 Award Date</u>	<u>Cost to Complete</u>	<u>Total Cost</u>	<u>Target Value of Contract</u>
(U) <u>Product Development</u> Development and Integration, Reliability Improvements, P3I, Obsolescence Upgrades, Analysis/Studies, and Night Vision Integration Subtotal Product Development Remarks:	SS, CPFF	Boeing Co, St Louis, MO		0.710		2.466		2.513		1.958			7.647	
			0.000	0.710		2.466		2.513		1.958		0.000	7.647	0.000
(U) <u>Support</u> Cost Reduction Analysis Subtotal Support Remarks:	C, T&M	Various		0.000		0.100		0.110		0.000			0.210	
			0.000	0.000		0.100		0.110		0.000		0.000	0.210	0.000
(U) <u>Test & Evaluation</u> Various Subtotal Test & Evaluation Remarks:	Various	Various		0.000		0.000		0.000		0.000			0.000	
			0.000	0.000		0.000		0.000		0.000		0.000	0.000	0.000
(U) <u>Management</u> Program Management and Administration Subtotal Management Remarks:	C, T&M	Various		0.086		0.275		0.289		0.303			0.953	
			0.000	0.086		0.275		0.289		0.303		0.000	0.953	0.000
(U) Total Cost			0.000	0.796		2.841		2.912		2.261		0.000	8.810	0.000

Exhibit R-4, RDT&E Schedule Profile

DATE

February 2005

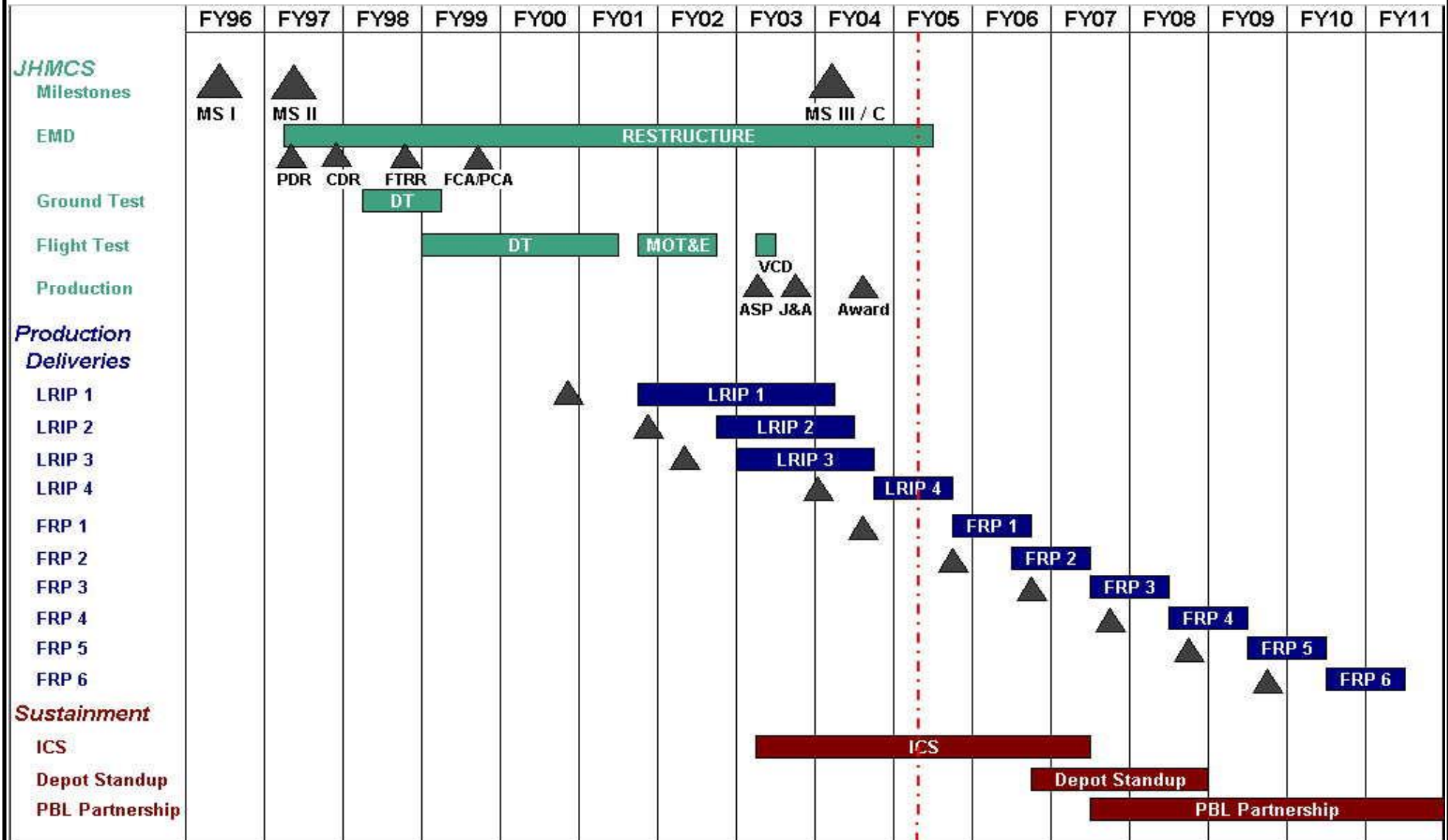
BUDGET ACTIVITY

05 System Development and Demonstration (SDD)

PE NUMBER AND TITLE

0604012F Joint Helmet Mounted
Cueing System (JHMCS)

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System (JHMCS)

Project 4789

R-1 Shopping List - Item No. 65-6 of 65-7

Exhibit R-4 (PE 0604012F)

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Exhibit R-4a, RDT&E Schedule Detail			DATE	
			February 2005	
BUDGET ACTIVITY	PE NUMBER AND TITLE	PROJECT NUMBER AND TITLE		
05 System Development and Demonstration (SDD)	0604012F Joint Helmet Mounted Cueing System (JHMCS)	4789 Joint Helmet Mounted Cueing System (JHMCS)		
(U) <u>Schedule Profile</u>	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>
(U) Full Rate Production (FRP) decision (MS C)	2Q			
(U) LRIP 4 Contract Award	2Q			
(U) Continue R&M Fixes/Software Updates/P3I	2-4Q	2-4Q	2-4Q	2-4Q
(U) Completion of Cost Reduction Analysis	2Q			
(U) FRP-1 Contract Award	3Q			
(U) Injection Molded Optics Contract Award		1Q		
(U) FRP-2 Contract Award		3Q		
(U) Class I ECP's		2-4Q	2-4Q	
(U) FRP-3 Contract Award			3Q	
(U) FRP-4 Contract Award				3Q