

UNCLASSIFIED

PE NUMBER: 0604012F

PE TITLE: Joint Helmet Mounted Cueing System (JHMCS)

Exhibit R-2, RDT&E Budget Item Justification

DATE

February 2006

BUDGET ACTIVITY

05 System Development and Demonstration (SDD)

PE NUMBER AND TITLE

0604012F Joint Helmet Mounted Cueing System (JHMCS)

| Cost (\$ in Millions) | FY 2005 Actual | 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 | 2.245 | 2.870 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 4789 Joint Helmet Mounted Cueing System (JHMCS) | 2.245 | 2.870 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |

Funds transferred from PE 0604012F to PE 0207170F for FY07 and beyond.

(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.

Milestone III was successfully approved in Jan 04, and correspondingly, the first Full Rate Production (FRP) contract was awarded May 04, followed by FRP-2 in Jun 05. Continued activities include Electronic Unit obsolescence redesign; a systems engineering approach for implementing alternate displays, such as night vision; software updates; integration; improvements to Reliability and Maintainability (R&M); system upgrade studies/analysis; other obsolescence upgrades; improved magnetic mapping processes to reduce maintenance manhours and life cycle costs; and efforts to support the transition to Performance Based Logistics Partnership (PBL/P) and depot activation.

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

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

| | <u>FY 2005</u> | <u>FY 2006</u> | <u>FY 2007</u> |
|--------------------------------------|----------------|----------------|----------------|
| (U) Previous President's Budget | 2.841 | 2.912 | 0.000 |
| (U) Current PBR/President's Budget | 2.245 | 2.870 | 0.000 |
| (U) Total Adjustments | -0.596 | -0.042 | |
| (U) Congressional Program Reductions | | | |
| Congressional Rescissions | -0.002 | -0.042 | |
| Congressional Increases | | | |
| Reprogrammings | -0.541 | | |
| SBIR/STTR Transfer | -0.053 | | |

(U) **Significant Program Changes:**

A ZBT was accomplished to move funds from FY07 and beyond to PE 0207170F.

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Exhibit R-2a, RDT&E Project Justification

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PROJECT NUMBER AND TITLE

4789 Joint Helmet Mounted Cueing System (JHMCS)

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|---|-------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|-------|
| 4789 Joint Helmet Mounted Cueing System (JHMCS) | 2.245 | 2.870 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| Quantity of RDT&E Articles | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |

JHMCS PE change request approved for FY07 BES: Funding from FY07 and beyond moved to PE 0207170F.

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

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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 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 | 1.970 | 2.581 | 0.000 |
| (U) Continue program management support | 0.275 | 0.289 | 0.000 |
| (U) Total Cost | 2.245 | 2.870 | 0.000 |

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

| | <u>FY 2005</u> <u>Actual</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> |
|--|---------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-------------------|
| (U) RDT&E, BA 5, PE 0604201F, Integrated Avionics Planning and Development Note: Prior to FY01 JHMCS was funded as part of PE 0604201F. | | | | | | | | | 45.151 |

(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

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| Exhibit R-2a, RDT&E Project Justification | | DATE February 2006 |
|--|---|--|
| 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>contract 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 2006

BUDGET ACTIVITY

05 System Development and Demonstration (SDD)

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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) | Contract Method & Type | Performing Activity & Location | Total Prior to FY 2005 Cost | FY 2005 Cost | FY 2005 Award Date | FY 2006 Cost | FY 2006 Award Date | FY 2007 Cost | FY 2007 Award Date | Cost to Complete | Total Cost | Target Value of Contract |
|---|------------------------------|--------------------------------------|--------------------------------------|-----------------|--------------------------|-----------------|--------------------------|-----------------|--------------------------|---------------------|------------|-----------------------------|
| (U) <u>Product Development</u> | | | | | | | | | | | | |
| Development and Integration, Reliability Improvements, P3I, Obsolescence Upgrades, Analysis/Studies, and Night Vision Integration | SS, CPFF | Boeing Co, St Louis, MO | 0.710 | 1.870 | | 2.581 | | 0.000 | | | 5.161 | |
| Subtotal Product Development | | | 0.710 | 1.870 | | 2.581 | | 0.000 | | 0.000 | 5.161 | 0.000 |
| Remarks: | | | | | | | | | | | | |
| (U) <u>Support</u> | | | | | | | | | | | | |
| Cost Reduction Analysis | C, T&M | Various | | 0.100 | | 0.000 | | 0.000 | | | 0.100 | |
| Subtotal Support | | | 0.000 | 0.100 | | 0.000 | | 0.000 | | 0.000 | 0.100 | 0.000 |
| Remarks: | | | | | | | | | | | | |
| (U) <u>Test & Evaluation</u> | | | | | | | | | | | | |
| Various | Various | Various | | | | 0.000 | | 0.000 | | | 0.000 | |
| Subtotal Test & Evaluation | | | 0.000 | 0.000 | | 0.000 | | 0.000 | | 0.000 | 0.000 | 0.000 |
| Remarks: | | | | | | | | | | | | |
| (U) <u>Management</u> | | | | | | | | | | | | |
| Program Management and Administration | C, T&M | Various | 0.086 | 0.275 | | 0.289 | | 0.000 | | | 0.650 | |
| Subtotal Management | | | 0.086 | 0.275 | | 0.289 | | 0.000 | | 0.000 | 0.650 | 0.000 |
| Remarks: | | | | | | | | | | | | |
| (U) Total Cost | | | 0.796 | 2.245 | | 2.870 | | 0.000 | | 0.000 | 5.911 | 0.000 |

Exhibit R-4, RDT&E Schedule Profile

DATE

February 2006

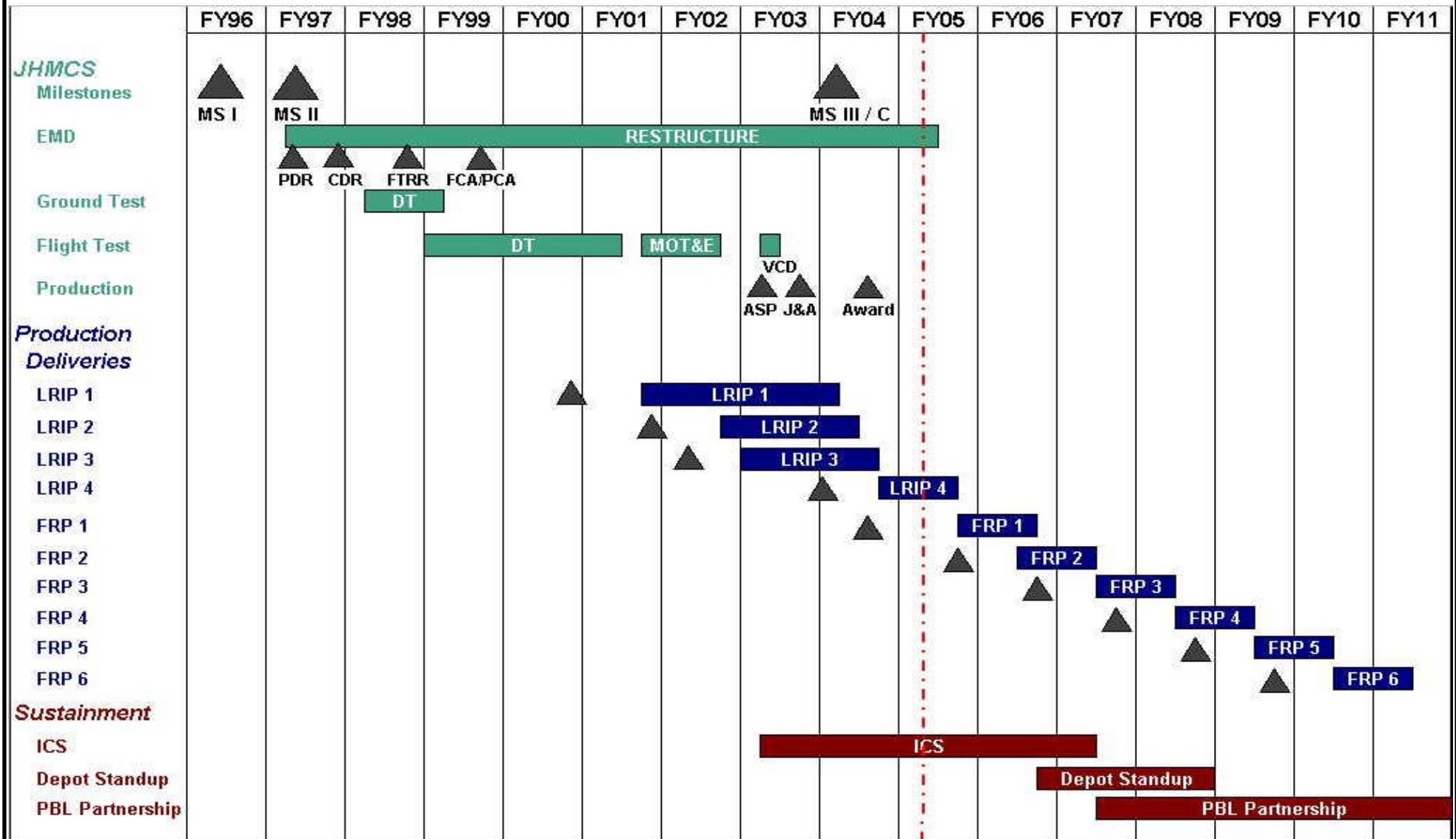
BUDGET ACTIVITY

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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

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4789 Joint Helmet Mounted Cueing
System (JHMCS)(U) Schedule ProfileFY 2005FY 2006FY 2007

(U) Continue R&M Fixes/Software Updates/P3I

2-4Q

2-4Q

(U) FRP-2 Contract Award

3Q

(U) Class I ECP's

2-4Q

2-4Q

(U) FRP-3 Contract Award

2Q

(U) Alternate Displays Contract Award

1Q

Note: Schedule profile milestones for FY07 are located in PE 0207170F.