

RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)	DATE February 1999
--	------------------------------

BUDGET ACTIVITY 5 - Engineering and Manufacturing Development	PE NUMBER AND TITLE 0604012F Joint Helmet Mounted Cueing System (JHMCS)	PROJECT 4789
--	--	-------------------------------

<i>COST (\$ In Thousands)</i>	FY 1998 Actual	FY 1999 Estimate	FY 2000 Estimate	FY 2001 Estimate	FY 2002 Estimate	FY 2003 Estimate	FY 2004 Estimate	FY 2005 Estimate	Cost to Complete	Total Cost
4789 Joint Helmet Mounted Cueing System (JHMCS)	0	0	2,970	1,325	2,950	2,971	3,033	3,096	0	16,345*
Quantity of RDT&E Articles	0	0	22	0	0	0	0	0	0	22

Note: This new PE was realigned from PE 0604201F Project 2050. Total costs for this PE through FY 1999 are shown in PE 0604201F and costs for FY 2000 and later are shown in PE 0604012F.

* Total Air Force cost.

PE 0604201F: 46,178 (Total JHMCS. FY 1999 amount is 9,930)

PE 0604012F: 16,345

(U) A. Mission Description

This Joint program with the United States Navy (USN) will develop a helmet display system, capable of depicting aircraft heading data, pilot's viewing perspective, target indication graphics and digital information. Consolidating this information on the pilot's visor allows the pilot to quickly align sensors and weapons on targets and engage threats using high off-boresight angle weapons such as the AIM-9X. The JHMCS includes a helmet with a mounted visor display capability, a helmet-vehicle interface cable, and several other components.

(U) FY 1998 (\$ in Thousands):

– (U) \$0 Total

(U) FY 1999 (\$ in Thousands):

– (U) \$0 Total

(U) FY 2000 (\$ in Thousands):

– (U) \$2,270 Continue JHMCS Engineering and Manufacturing Development (EMD) Contract

– (U) \$278 Continue Air Force Flight Test Center (AFFTC) Test Support

– (U) \$422 Continue Program Management Support

– (U) \$2,970 Total

UNCLASSIFIED

RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)				DATE February 1999																																																												
BUDGET ACTIVITY 5 - Engineering and Manufacturing Development	PE NUMBER AND TITLE 0604012F Joint Helmet Mounted Cueing System (JHMCS)		PROJECT 4789																																																													
<p>(U) <u>FY 2001 (\$ in Thousands):</u></p> <ul style="list-style-type: none"> - (U) \$932 Initiate Pre-Planned Product Improvement Air to Ground Enhancements - (U) \$393 Continue Program Management Support - (U) \$1,325 Total <p>(U) B. Budget Activity Justification This program is in budget activity 5 - EMD, Phase II, Research Category 6.4 because of the development nature of this program.</p> <p>(U) C. Program Change Summary (\$ in Thousands)</p> <table style="width:100%; border-collapse: collapse;"> <thead> <tr> <th style="width:60%;"></th> <th style="text-align: center;"><u>FY 1998</u></th> <th style="text-align: center;"><u>FY 1999</u></th> <th style="text-align: center;"><u>FY 2000</u></th> <th style="text-align: center;"><u>FY 2001</u></th> <th style="text-align: center;"><u>Total Cost</u></th> </tr> </thead> <tbody> <tr> <td>(U) Previous President's Budget (FY 1999 PB)</td> <td style="text-align: center;">0</td> </tr> <tr> <td>(U) Appropriated Value</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>(U) Adjustments to Appropriated Value</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td style="padding-left: 20px;">a. Congressional/General Reductions</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td style="padding-left: 20px;">b. SBIR</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td style="padding-left: 20px;">c. Omnibus or Other Above Threshold Reprogramming</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td style="padding-left: 20px;">d. Below Threshold Reprogramming</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>(U) Adjustments to Budget Years Since FY 1999 PB</td> <td></td> <td></td> <td style="text-align: center;">2,970</td> <td style="text-align: center;">1,325</td> <td></td> </tr> <tr> <td>(U) Current Budget Submit/FY 2000 PB</td> <td style="text-align: center;">*0</td> <td style="text-align: center;">*0</td> <td style="text-align: center;">2,970</td> <td style="text-align: center;">1,325</td> <td style="text-align: center;">16,345</td> </tr> </tbody> </table> <p>(U) Significant Program Changes: * FY 1998 and FY 1999 program funding are described in PE 0604201F Integrated Avionics Planning and Development. FY 2000: Increase includes a \$3.024M Zero Baseline Transfer (ZBT) from PE 0604201F to establish new JHMCS PE 0604012F and a \$.054M decrease for an economic adjustment. FY 2001: Increase includes a \$1.350M ZBT from PE 0604201F to establish new JHMCS PE 0604012F and a \$.025M decrease for an economic adjustment.</p>						<u>FY 1998</u>	<u>FY 1999</u>	<u>FY 2000</u>	<u>FY 2001</u>	<u>Total Cost</u>	(U) Previous President's Budget (FY 1999 PB)	0	0	0	0	0	(U) Appropriated Value						(U) Adjustments to Appropriated Value						a. Congressional/General Reductions						b. SBIR						c. Omnibus or Other Above Threshold Reprogramming						d. Below Threshold Reprogramming						(U) Adjustments to Budget Years Since FY 1999 PB			2,970	1,325		(U) Current Budget Submit/FY 2000 PB	*0	*0	2,970	1,325	16,345
	<u>FY 1998</u>	<u>FY 1999</u>	<u>FY 2000</u>	<u>FY 2001</u>	<u>Total Cost</u>																																																											
(U) Previous President's Budget (FY 1999 PB)	0	0	0	0	0																																																											
(U) Appropriated Value																																																																
(U) Adjustments to Appropriated Value																																																																
a. Congressional/General Reductions																																																																
b. SBIR																																																																
c. Omnibus or Other Above Threshold Reprogramming																																																																
d. Below Threshold Reprogramming																																																																
(U) Adjustments to Budget Years Since FY 1999 PB			2,970	1,325																																																												
(U) Current Budget Submit/FY 2000 PB	*0	*0	2,970	1,325	16,345																																																											
Project 4789	Page 2 of 5 Pages		Exhibit R-2 (PE 0604012F)																																																													

UNCLASSIFIED

RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)							DATE February 1999				
BUDGET ACTIVITY 5 - Engineering and Manufacturing Development				PE NUMBER AND TITLE 0604012F Joint Helmet Mounted Cueing System (JHMCS)			PROJECT 4789				
(U) D. <u>Other Program Funding Summary (\$ in Thousands)</u>											
		<u>FY 1998</u>	<u>FY 1999</u>	<u>FY 2000</u>	<u>FY 2001</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>	To <u>Compl</u>	Total <u>Cost</u>
(U) RDT&E, BA 5, PE 0604201F, Integrated Avionics Planning and Development		13,640	9,930	0	0	0	0	0	0		46,178
(U) E. <u>Acquisition Strategy</u>											
JHMCS is an ACAT III joint USAF/USN program (USAF - executive service). The contract structure is a Cost Plus Award Fee (CPAF) contract awarded in a competitive source selection environment. The CPAF contract is through Boeing - St. Louis for integration into the F-15 and F/A-18. Lockheed Martin will integrate JHMCS into the F-16 and F-22. Boeing has subcontracted to Vision Systems International (VSI) to provide JHMCS subsystems hardware/software. VSI is a partnership between Elbit (an Israeli company based in Ft Worth, TX) and Kaiser Electronics. The Joint Program Office is using a unique approach of developing common hardware as Contractor Furnished Equipment (CFE) to minimize platform integration risk. Milestone III Production Decision is scheduled for Mar 00.											
(U) F. <u>Schedule Profile</u>											
		<u>FY 1998</u>		<u>FY 1999</u>		<u>FY 2000</u>		<u>FY 2001</u>			
	1	2 3	4	1 2 3	4	1 2 3	4	1 2 3	4		
(U) Production Decision						X					
(U) Pre-Planned Product Improvement								X	X	X	X
X - Planned event											
Note - Efforts in FY 1999 and earlier are described in PE 0604201F											
Project 4789			Page 3 of 5 Pages			Exhibit R-2 (PE 0604012F)					

UNCLASSIFIED

RDT&E PROGRAM ELEMENT/PROJECT COST BREAKDOWN (R-3)										DATE February 1999	
BUDGET ACTIVITY 5 - Engineering and Manufacturing Development						PE NUMBER AND TITLE 0604012F Joint Helmet Mounted Cueing System (JHMCS)				PROJECT 4789	
(U) A. <u>Project Cost Breakdown (\$ in Thousands)</u>											
					<u>FY 1998</u>	<u>FY 1999</u>	<u>FY 2000</u>	<u>FY 2001</u>			
(U)	EMD Effort						2,270	0			
(U)	Pre-Planned Product Improvement						0	932			
(U)	Test Support (AFFTC)						278	0			
(U)	Program Management Support						422	393			
(U)	Total				0*	0*	2,970	1,325			
* These costs are described in PE 0604201F											
(U) B. <u>Budget Acquisition History and Planning Information (\$ in Thousands)</u>											
Performing Organizations:											
Contractor or Government Performing Activity	Contract Method/Type or Funding Vehicle	Award or Obligation Date	Performing Activity EAC	Project Office EAC	Total Prior to FY 1998	<u>FY 1998</u>	<u>FY 1999</u>	<u>Budget FY 2000</u>	<u>FY 2001</u>	<u>Budget to Complete</u>	<u>Total Program</u>
<u>Product Development Organizations</u>											
MDA/LMTAS	CPAF	2/97	14,416	14,416	0	0	0	2,270	932	11,214	14,416
<u>Support and Management Organizations</u>											
Various	Various	2/97	1,651	1,651	0	0	0	422	393	836	1,651
<u>Test and Evaluation Organizations</u>											
Various	Various	2/97	278	278	0	0	0	278	0	0	278
Government Furnished Property: Not Applicable											
Project 4789				Page 4 of 5 Pages				Exhibit R-3 (PE 0604012F)			

UNCLASSIFIED

RDT&E PROGRAM ELEMENT/PROJECT COST BREAKDOWN (R-3)								DATE February 1999		
BUDGET ACTIVITY 5 - Engineering and Manufacturing Development				PE NUMBER AND TITLE 0604012F Joint Helmet Mounted Cueing System (JHMCS)				PROJECT 4789		
<u>Description</u>	<u>Contract Method/Type or Funding Vehicle</u>	<u>Award or Obligation Date</u>	<u>Delivery Date</u>	<u>Total Prior to FY 1998</u>	<u>FY 1998</u>	<u>Budget FY 1999</u>	<u>Budget FY 2000</u>	<u>FY 2001</u>	<u>Budget to Complete</u>	<u>Total Program</u>
Subtotal Product Development				0	0	0	2,270	932	11,214	14,416
Subtotal Support and Management				0	0	0	422	393	836	1,651
Subtotal Test and Evaluation				0	0	0	278	0	0	278
Subtotal Government Furnished Property										
Total Project				0	0	0	2,970	1,325	12,050	16,345
Note: Program funding for FY 99 and earlier is described in PE 0604012F										