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

DATE

June 2001

BUDGET ACTIVITY

07 - Operational System Development

PE NUMBER AND TITLE

0207136F Manned Destructive Suppression

PROJECT

4595

COST (\$ in Thousands)	FY 2000 Actual	FY 2001 Estimate	FY 2002 Estimate	FY 2003 Estimate	FY 2004 Estimate	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	Cost to Complete	Total Cost
4595 F-16 HARM Targeting System (HTS)	3,188	14,535	22,239	23,947	14,669	9,680	7,876	0	Continuing	TBD
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0	0

Note: FY03-FY07 budget numbers do not reflect DoD's strategic review results.

(U) **A. Mission Description**

The overall Manned Destructive Suppression (MDS) program funds the development, procurement, and sustainment of the Air Force's lethal Suppression of Enemy Air Defenses (SEAD) capability. The program provides F-16 Block 50/52 aircraft with the ability to employ the AN/ASQ-213 HARM Targeting System (HTS). F-16 HTS is the only currently programmed reactive SEAD capability and enables targeting the HARM missile in the most lethal 'range known' mode. This RDT&E effort continues HTS preplanned product improvement (P3I). In FY00 the HTS P3I program began development of the HTS Revision 7 (R7) upgrade. In FY01 work has started to develop HTS engineering changes needed to permit the F-16 to carry both an HTS pod and an advanced targeting pod (TGP). These HTS improvements represent the Air Force's near-term solution (until replaced by JSF or some alternate undefined system) for Destruction of Enemy Air Defenses (DEAD) mission. R7/alternate/dual carriage will allow targeting of the Joint Standoff Weapon (JSOW) and potentially targeting of other precision guided munitions (PGMs) needed to destroy fixed and mobile enemy air defense system elements. R7 derived coordinates of threat emitters will be available to all Joint Forces via Link-16.

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

(U) \$3,060 Initiate HTS R7 Geolocation Upgrade Program Definition study & Risk Reduction (PDRR)
 (U) \$128 Continue Mission Support
 (U) \$3,188 Total

(U) **FY 2001 (\$ in Thousands)**

(U) \$1,534 Complete HTS R7 Geolocation Upgrade Program Definition study & Risk Reduction (PDRR)
 (U) \$12,010 Continue R7 Geolocation Upgrade Development (Includes HTS/TGP Dual Carriage)
 (U) \$30 Initiate R7 Upgrade Test and Evaluation Support
 (U) \$961 Continue Mission Support
 (U) \$14,535 Total

The following net transactions are not reflected in the FY01 program total: BTR= -380K and SBIR= -469K. These transactions are not reflected in other sections of the RDocs where an FY01 total is shown.

Project 4595

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Exhibit R-2 (PE 0207136F)

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RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)		DATE June 2001																																																																
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<p>(U) <u>A. Mission Description Continued</u></p> <p>(U) <u>FY 2002 (\$ in Thousands)</u></p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 15%;">(U) \$20,628</td> <td>Continue R7 Geolocation Upgrade Development</td> </tr> <tr> <td>(U) \$100</td> <td>Continue R7 Upgrade Test and Evaluation Support</td> </tr> <tr> <td>(U) \$1,511</td> <td>Continue Mission Support</td> </tr> <tr> <td>(U) \$22,239</td> <td>Total</td> </tr> </table> <p>(U) <u>B. Budget Activity Justification</u></p> <p>This PE is in Budget Activity 7 - Operational System Development because it supports preplanned product improvements and upgrade development of F-16 HTS, a fielded system.</p> <p>(U) <u>C. Program Change Summary (\$ in Thousands)</u></p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 55%;"></th> <th style="width: 10%; text-align: center;"><u>FY 2000</u></th> <th style="width: 10%; text-align: center;"><u>FY 2001</u></th> <th style="width: 10%; text-align: center;"><u>FY 2002</u></th> <th style="width: 15%; text-align: center;"><u>Total Cost</u></th> </tr> </thead> <tbody> <tr> <td>(U) Previous President's Budget (FY 2001 PBR)</td> <td style="text-align: center;">3,363</td> <td style="text-align: center;">14,670</td> <td style="text-align: center;">22,113</td> <td style="text-align: center;">TBD</td> </tr> <tr> <td>(U) Appropriated Value</td> <td style="text-align: center;">3,402</td> <td style="text-align: center;">14,670</td> <td></td> <td></td> </tr> <tr> <td>(U) Adjustments to Appropriated Value</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td> a. Congressional/General Reductions</td> <td style="text-align: center;">-21</td> <td style="text-align: center;">-103</td> <td></td> <td></td> </tr> <tr> <td> b. Small Business Innovative Research</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td> c. Omnibus or Other Above Threshold Reprogram</td> <td style="text-align: center;">-180</td> <td></td> <td></td> <td></td> </tr> <tr> <td> d. Below Threshold Reprogram</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td> e. Rescissions</td> <td style="text-align: center;">-13</td> <td style="text-align: center;">-32</td> <td></td> <td></td> </tr> <tr> <td>(U) Adjustments to Budget Years Since FY 2001 PBR</td> <td></td> <td></td> <td style="text-align: center;">126</td> <td></td> </tr> <tr> <td>(U) Current Budget Submit/FY 2002 PBR</td> <td style="text-align: center;">3,188</td> <td style="text-align: center;">14,535</td> <td style="text-align: center;">22,239</td> <td style="text-align: center;">TBD</td> </tr> </tbody> </table> <p>(U) <u>Significant Program Changes:</u></p> <p>No significant program changes from the FY 2001 PBR to the FY 2002 PBR.</p>				(U) \$20,628	Continue R7 Geolocation Upgrade Development	(U) \$100	Continue R7 Upgrade Test and Evaluation Support	(U) \$1,511	Continue Mission Support	(U) \$22,239	Total		<u>FY 2000</u>	<u>FY 2001</u>	<u>FY 2002</u>	<u>Total Cost</u>	(U) Previous President's Budget (FY 2001 PBR)	3,363	14,670	22,113	TBD	(U) Appropriated Value	3,402	14,670			(U) Adjustments to Appropriated Value					a. Congressional/General Reductions	-21	-103			b. Small Business Innovative Research					c. Omnibus or Other Above Threshold Reprogram	-180				d. Below Threshold Reprogram					e. Rescissions	-13	-32			(U) Adjustments to Budget Years Since FY 2001 PBR			126		(U) Current Budget Submit/FY 2002 PBR	3,188	14,535	22,239	TBD
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<div style="display: flex; justify-content: space-between;"> Project 4595 Page 2 of 5 Pages Exhibit R-2 (PE 0207136F) </div>																																																																		

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RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)							DATE June 2001			
BUDGET ACTIVITY 07 - Operational System Development				PE NUMBER AND TITLE 0207136F Manned Destructive Suppression			PROJECT 4595			
(U) D. Other Program Funding Summary (\$ in Thousands)										
	<u>FY 2000</u>	<u>FY 2001</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>Cost to</u>	<u>Total Cost</u>
	<u>Actual</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Complete</u>	
(U) AF RDT&E										
(U) Other APPN										
(U) HTS Aircraft Procurement (BP11)AF PE 0207136F					10,537	9,971	8,488	971	Continuing	
(U) HTS Aircraft Procurement (BP19)AF PE 0207136F		13,528				20,289			Continuing	
(U) E. Acquisition Strategy										
The HTS program objective is to develop precision geolocation capability that significantly improves speed and accuracy of emitter targeting solutions on F-16 Block 50/52 aircraft. Precision geolocation capability will permit targeting of PGMs such as JSOW, in addition to the HARM missile, against mobile and fixed sites. The objective will be accomplished through study, risk reduction, and a System Development and Demonstration (SDD) effort leading to significant upgrades and increases in the F-16's and Joint Forces' real-time Destruction of Enemy Air Defenses (DEAD) capabilities.										
(U) F. Schedule Profile										
		<u>FY 2000</u>				<u>FY 2001</u>			<u>FY 2002</u>	
	1	2	3	4	1	2	3	4	1	2
(U) R6 Upgrade Development Complete			*							
(U) R7 PDRR Contract Award		*								
(U) R6 Initial Fielding**			*							
(U) R6 Fielding Complete									X	
(U) R6 Lot 2 Pod Deliveries Complete (16 Pods)										X
(U) R6 Lot 3 Pod Deliveries Complete (13 Pods)										X
(U) R6 Lot 4 Contract Award						*				
(U) R7 SDD Contract Award						*				
(U) R6 Lot 4 Pod Deliveries (31 Pods)										X
* = Completed Event X = Planned Event										
** Start of R6 Fielding slipped from FY99 into FY00. This slip also cause delay in R6 Pod Production deliveries for new buy Lots 2 and 3.										

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Exhibit R-2 (PE 0207136F)

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RDT&E PROGRAM ELEMENT/PROJECT COST BREAKDOWN (R-3)							DATE June 2001			
BUDGET ACTIVITY					PE NUMBER AND TITLE				PROJECT	
07 - Operational System Development					0207136F Manned Destructive Suppression				4595	
(U) A. Project Cost Breakdown (\$ in Thousands)										
					FY 2000		FY 2001		FY 2002	
(U) HTS R7 Program Definition study and Risk Reduction (PDRR)					3,060		1,534			
(U) R7 Geolocation Dev (Includes HTS/TGP Dual Carriage)							12,010		20,628	
(U) Test & Evaluation Support							30		100	
(U) Mission Support					128		961		1,511	
(U) Total					3,188		14,535		22,239	
(U) B. Budget Acquisition History and Planning Information (\$ in Thousands)										
(U) Performing Organizations:										
<u>Contractor or</u>		<u>Contract</u>								
<u>Government</u>	<u>Method/Type</u>	<u>Award or</u>	<u>Performing</u>	<u>Project</u>						
<u>Performing</u>	<u>or Funding</u>	<u>Obligation</u>	<u>Activity</u>	<u>Office</u>	<u>Total Prior</u>	<u>Budget</u>	<u>Budget</u>	<u>Budget</u>	<u>Budget to</u>	<u>Total</u>
<u>Activity</u>	<u>Vehicle</u>	<u>Date</u>	<u>EAC</u>	<u>EAC</u>	<u>to FY 2000</u>	<u>FY 2000</u>	<u>FY 2001</u>	<u>FY 2002</u>	<u>Complete</u>	<u>Program</u>
<u>Product Development Organizations</u>										
Raytheon Systems Co.	SS/Various	Various	63,404	63,404	6,808	3,060	13,544	20,628	Continuing	TBD
Raytheon Systems Co.	SS/CPAF	Feb 96	31,331	31,331	31,331					31,331
AFMSS	SS/CPIF	Various	1,885	1,885	1,885					1,885
Lockheed/Ft Worth	SS/FFP	Various	2,400	2,400	2,400					2,400
<u>Support and Management Organizations</u>										
Prog. Mgt. and Mission Support	Various	Various			3,983	128	961	1,511	Continuing	TBD
<u>Test and Evaluation Organizations</u>										
Eglin	PO	Various			2,175					2,175
Edwards	PO	Various			4,394		30	100	Continuing	TBD
Light Defender		Various			922					922

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Exhibit R-3 (PE 0207136F)

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RDT&E PROGRAM ELEMENT/PROJECT COST BREAKDOWN (R-3)							DATE		
							June 2001		
BUDGET ACTIVITY				PE NUMBER AND TITLE			PROJECT		
07 - Operational System Development				0207136F Manned Destructive Suppression			4595		
(U) <u>Government Furnished Property:</u>									
	<u>Contract</u>								
	<u>Method/Type</u>	<u>Award or</u>							
<u>Item</u>	<u>or Funding</u>	<u>Obligation</u>	<u>Delivery</u>	<u>Total Prior</u>	<u>Budget</u>	<u>Budget</u>	<u>Budget</u>	<u>Budget to</u>	<u>Total</u>
<u>Description</u>	<u>Vehicle</u>	<u>Date</u>	<u>Date</u>	<u>to FY 2000</u>	<u>FY 2000</u>	<u>FY 2001</u>	<u>FY 2002</u>	<u>Complete</u>	<u>Program</u>
<u>Product Development Property</u>									
Not Applicable									
<u>Support and Management Property</u>									
Not Applicable									
<u>Test and Evaluation Property</u>									
Not Applicable									
				<u>Total Prior</u>	<u>Budget</u>	<u>Budget</u>	<u>Budget</u>	<u>Budget to</u>	<u>Total</u>
<u>Subtotals</u>				<u>to FY 2000</u>	<u>FY 2000</u>	<u>FY 2001</u>	<u>FY 2002</u>	<u>Complete</u>	<u>Program</u>
Subtotal Product Development				42,424	3,060	13,544	20,628	TBD	TBD
Subtotal Support and Management				3,983	128	961	1,511	TBD	TBD
Subtotal Test and Evaluation				7,491		30	100	TBD	TBD
Total Project				53,898	3,188	14,535	22,239	TBD	TBD

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