

**UNCLASSIFIED**

PE NUMBER: 0207136F  
 PE TITLE: Manned Destructive Suppression

<b>Exhibit R-2, RDT&amp;E Budget Item Justification</b>	DATE <b>February 2008</b>
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<b>BUDGET ACTIVITY</b> <b>07 Operational System Development</b>	<b>PE NUMBER AND TITLE</b> <b>0207136F Manned Destructive Suppression</b>
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Cost (\$ in Millions)	FY 2007 Actual	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	0.499	0.000	5.585	0.000	0.000	0.000	0.000	0.000	162.368
4595 F-16 HARM Targeting System	0.499	0.000	5.585	0.000	0.000	0.000	0.000	0.000	162.368

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

The overall Manned Destructive Suppression (MDS) program funds the development, procurement, and sustainment of the Air Force's Suppression of Enemy Air Defenses (SEAD) and Destruction of Enemy Air Defenses (DEAD) capabilities. The F-16 HARM Targeting System (HTS) is currently the only programmed reactive SEAD capability and enables targeting the HARM missile in its most lethal 'range known' mode. The program provides F-16 Block 50/52 aircraft with the ability to employ the AN/ASQ-213 Pod. With the introduction of HTS Revision 7 (HTS R7), the AN/ASQ-213 Pod has a precision geolocation capability to target Precision Guided Munitions (PGMs) to destroy fixed and mobile enemy air defense elements, and enables the F-16 to carry both an AN/ASQ-213 HTS R7 Pod and an Advanced Targeting Pod (ATP), by relocating HTS R7 pod to the aircraft's left inlet hard point. HTS R7 completed System Development and Demonstration (SDD) in FY07 following operational testing certification and fielding on the first F-16 Block 50/52 squadron in May 07. These improvements represent the Air Force's near-term solution for reactive time critical targeting for DEAD until this mission can be transferred to F-35 or a yet to be defined system. HTS R7 precision targeting coordinates will be available to all Joint Forces via Link-16. This RDT&E effort continues preplanned product improvements (P3I) and applies technologies similar to those demonstrated in the Advanced Tactical Targeting Technologies (AT3) program and HTS R7 development. HTS Revision 7 (HTS R7) software upgrade (SWUP) will address known deficiencies and capability upgrades to system performance. An on-going HTS R7 follow-on study is conducting investigations, studies, risk reduction and pre-planning activities for P3I and also is addressing near-term deficiencies deferred from HTS R7 development. Although RDT&E funding is not programmed in FY08, prior year funding is sufficient to provide pre-R7 SWUP planning and bridge needed technical expertise to begin HTS R7 SWUP in FY09.

This PE is in Budget Activity 7 - Operational System Development because it supports preplanned product improvements and upgrade development of F-16 HTS (R7), a fielded system, to the HTS R7 SWUP configuration.

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

	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>
(U) Previous President's Budget	0.513	0.000	0.000
(U) Current PBR/President's Budget	0.499	0.000	5.585
(U) Total Adjustments	-0.014		
(U) Congressional Program Reductions			
Congressional Rescissions			
Congressional Increases			
Reprogrammings			
SBIR/STTR Transfer	-0.014		
(U) <u>Significant Program Changes:</u>			

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FY 2009 funding was added to provide continued capability upgrades for HTS needed to address evolving threats, address performance shortfalls, additional operational requirements and aircraft operational flight programs changes or issues.

**Exhibit R-2a, RDT&E Project Justification**

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<b>BUDGET ACTIVITY</b> 07 Operational System Development				<b>PE NUMBER AND TITLE</b> 0207136F Manned Destructive Suppression			<b>PROJECT NUMBER AND TITLE</b> 4595 F-16 HARM Targeting System			
Cost (\$ in Millions)		FY 2007 Actual	FY 2008 Estimate	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	FY 2012 Estimate	FY 2013 Estimate	Cost to Complete	Total
4595	F-16 HARM Targeting System	0.499	0.000	5.585	0.000	0.000	0.000	0.000	0.000	162.368
	Quantity of RDT&E Articles	0	0	0	0	0	0	0		

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

The overall Manned Destructive Suppression (MDS) program funds the development, procurement, and sustainment of the Air Force's Suppression of Enemy Air Defenses (SEAD) and Destruction of Enemy Air Defenses (DEAD) capabilities. The F-16 HARM Targeting System (HTS) is currently the only programmed reactive SEAD capability and enables targeting the HARM missile in its most lethal 'range known' mode. The program provides F-16 Block 50/52 aircraft with the ability to employ the AN/ASQ-213 Pod. With the introduction of HTS Revision 7 (HTS R7), the AN/ASQ-213 Pod has a precision geolocation capability to target Precision Guided Munitions (PGMs) to destroy fixed and mobile enemy air defense elements, and enables the F-16 to carry both an AN/ASQ-213 HTS R7 Pod and an Advanced Targeting Pod (ATP), by relocating HTS R7 pod to the aircraft's left inlet hard point. HTS R7 completed System Development and Demonstration (SDD) in FY07 following operational testing certification and fielding on the first F-16 Block 50/52 squadron in May 07. These improvements represent the Air Force's near-term solution for reactive time critical targeting for DEAD until this mission can be transferred to F-35 or a yet to be defined system. HTS R7 precision targeting coordinates will be available to all Joint Forces via Link-16. This RDT&E effort continues preplanned product improvements (P3I) and applies technologies similar to those demonstrated in the Advanced Tactical Targeting Technologies (AT3) program and HTS R7 development. HTS Revision 7 (HTS R7) software upgrade (SWUP) will address known deficiencies and capability upgrades to system performance. An on-going HTS R7 follow-on study is conducting investigations, studies, risk reduction and pre-planning activities for P3I and also is addressing near-term deficiencies deferred from HTS R7 development. Although RDT&E funding is not programmed in FY08, prior year funding is sufficient to provide pre-R7 SWUP planning and bridge needed technical expertise to begin HTS R7 SWUP in FY09.

This PE is in Budget Activity 7 - Operational System Development because it supports preplanned product improvements and upgrade development of F-16 HTS (R7), a fielded system, to the HTS R7 SWUP configuration.

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

	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>
(U) R7 Follow-On Study Contract	0.100		
(U) P3I R7 SWUP Contract			4.711
(U) Air Force Mission Support System (AFMSS) Update Effort			0.438
(U) Continue Mission Support	0.399	0.000	0.436
(U) Total Cost	0.499	0.000	5.585

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

	<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>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Complete</u>	
(U) AF RDT&E									
(U) Other APPN									

Exhibit R-2a, RDT&E Project Justification

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BUDGET ACTIVITY <b>07 Operational System Development</b>	PE NUMBER AND TITLE <b>0207136F Manned Destructive Suppression</b>	PROJECT NUMBER AND TITLE <b>4595 F-16 HARM Targeting System</b>
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(U) **C. Other Program Funding Summary (\$ in Millions)**

(U) HTS Aircraft Procurement (BP11) APAF PE 0207136F	7.042	0.000	0.000	7.042
(U) HTS Aircraft Procurement (BP19) APAF PE 0207136F	8.631	10.061	10.116	28.808
(U) HTS Aircraft Procurement (BP19) APAF PE 0207136F GWOT Supplemental - The \$25M FY2008 GWOT requirement is still pending Congressional consideration.	0.000	25.000	0.000	25.000

(U) **D. Acquisition Strategy**

The HTS R7 included accomplishment of risk reduction studies and selection of appropriate contracting strategies for P3I and upgrade of HTS inventory.

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**Exhibit R-3, RDT&E Project Cost Analysis**

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BUDGET ACTIVITY				PE NUMBER AND TITLE				PROJECT NUMBER AND TITLE				
<b>07 Operational System Development</b>				<b>0207136F Manned Destructive Suppression</b>				<b>4595 F-16 HARM Targeting System</b>				
(U) <u>Cost Categories</u> (Tailor to WBS, or System/Item Requirements) (\$ in Millions)	<u>Contract Method &amp; Type</u>	<u>Performing Activity &amp; Location</u>	<u>Total Prior to FY 2007 Cost</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>												
Raytheon Systems Co.	SS/Various		93.075					4.711			97.786	
Raytheon Systems Co.	SS/CPAF		31.331	0.100							31.431	
AFMSS	SS/CPIF		2.674					0.438			3.112	
Lockheed/Ft Worth	SS/FFP		2.400								2.400	
Subtotal Product Development			129.480	0.100		0.000		5.149		0.000	134.729	0.000
Remarks:	HTS R7 SDD Contract awarded FY01 (on-going through FY07). FY09 R8 SDD Contract continues upgrade effort.											
(U) <u>Support</u>												
Mission Support	Various		9.438	0.399				0.436			10.273	
Subtotal Support			9.438	0.399		0.000		0.436		0.000	10.273	0.000
Remarks:												
(U) <u>Test &amp; Evaluation</u>												
Eglin	PO		2.175								2.175	
Edwards	PO		14.269								14.269	
Light Defender			0.922								0.922	
Subtotal Test & Evaluation			17.366	0.000		0.000		0.000		0.000	17.366	0.000
Remarks:	Light Defender was a foreign system that was evaluated for possible SEAD role in 1995-96; but was not procured.											
(U) <u>Management</u>												
Subtotal Management			0.000	0.000		0.000		0.000		0.000	0.000	0.000
Remarks:												
(U) Total Cost			156.284	0.499		0.000		5.585		0.000	162.368	0.000

Exhibit R-4, RDT&E Schedule Profile

DATE

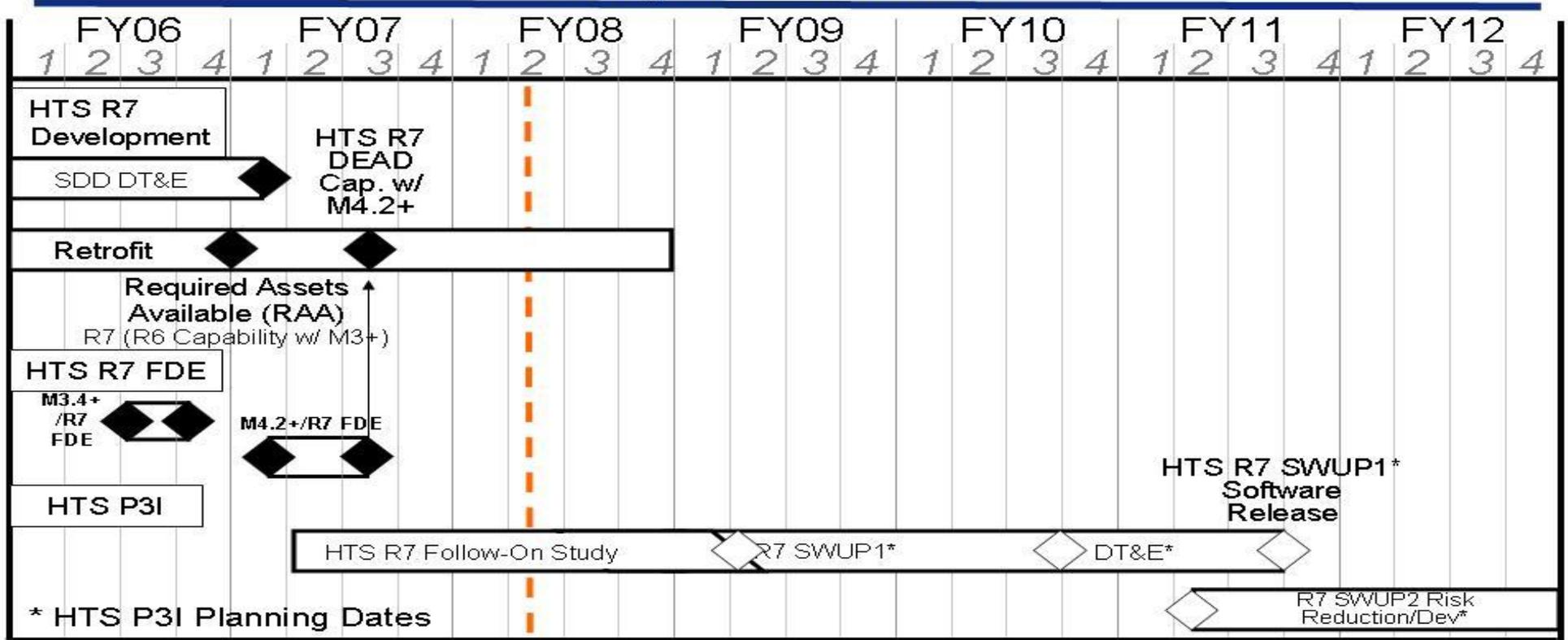
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PROJECT NUMBER AND TITLE  
4595 F-16 HARM Targeting System

# HTS Development Program Schedule



As of 7 Jan 08

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**Exhibit R-4a, RDT&E Schedule Detail**

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PROJECT NUMBER AND TITLE

**4595 F-16 HARM Targeting System**

**(U) Schedule Profile**

- (U) Retrofit Kit Installation (117 Kits) -- Contract Awarded
- (U) P3I Study - R7 Follow-on Study -- Contract Award
- (U) R7 Precision Targeting Capability (w/F-16 OFP M4+)
- (U) R7 Follow-on Study Complete (SWUP Risk Reduction)
- (U) R7 SWUP Contract Award

FY 2007

FY 2008

FY 2009

1Q

2Q

3Q

1Q

2Q