

**UNCLASSIFIED**

PE NUMBER: 0207136F  
 PE TITLE: Manned Destructive Suppression

<b>Exhibit R-2, RDT&amp;E Budget Item Justification</b>	DATE <b>February 2006</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 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	16.143	9.260	0.515	0.000	0.000	0.000	0.000	0.000	158.830
4595 F-16 Smart Targeting and Identification via Networked Geolocation (STING)	16.143	9.260	0.515	0.000	0.000	0.000	0.000	0.000	158.830

The FY03 National Defense Authorization Act (NDAA) language directed T&E centers to charge only direct costs beginning in FY06; this resulted in a zero-balance transfer (ZBT) of funding over the FYDP from the customer accounts (for indirect test costs) to T&E support, PE 0605807F.

F-16 Smart Targeting and Identification via Networked Geolocation (STING) is the unofficial name for the HARM Targeting System Release 7 (R7). Because future HTS improvements (Releases R8 and R9) are in planning, use of the STING acronym is being discontinued to avoid confusion.

**(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. This RDT&E effort continues preplanned product improvements (P3I) and applies technologies similar to those demonstrated in the Advanced Tactical Targeting Technologies (AT3) program. In FY00, P3I development of HTS Revision 7 (HTS R7) began to address evolving threats and to incorporate a precision geolocation capability to target Precision Guided Munitions (PGMs) into the AN/ASQ 213 Pod. In FY01, the R7 P3I Program Definition and Risk Reduction (PDRR) was completed and the contract was awarded for System Development and Demonstration (SDD). HTS R7 developed changes will also enable 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. These improvements represent the Air Force's near-term solution (capability can be transferred to F-35, Unmanned Combat Air Vehicle (UCAV), or a yet defined system) for reactive time critical targeting for the DEAD mission. HTS R7 will target HARM and other PGMs to destroy fixed and mobile enemy air defense elements. HTS R7 precision coordinates will be available to all Joint Forces via Link-16. FY06 continues flight test activities and conducts investigation, studies, and preliminary design activities for future P3I. The HTS R7 development effort and P3I related activities continue through FY07.

This PE is in Budget Activity 7 - Operational System Development because it supports preplanned product improvements and upgrade development of F-16 HTS (R6), a fielded system, to the HTS R7 configuration.

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

	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>
(U) Previous President's Budget	16.827	9.394	0.509
(U) Current PBR/President's Budget	16.143	9.260	0.515
(U) Total Adjustments	-0.684	-0.134	
(U) Congressional Program Reductions			
Congressional Rescissions	-0.013	-0.134	
Congressional Increases			
Reprogrammings	-0.307		
SBIR/STTR Transfer	-0.364		
(U) <u>Significant Program Changes:</u>			

## Exhibit R-2a, RDT&amp;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 Smart Targeting and Identification via Networked Geolocation (STING)</b>		
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
4595 F-16 Smart Targeting and Identification via Networked Geolocation (STING)	16.143	9.260	0.515	0.000	0.000	0.000	0.000	0.000	158.830
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. This RDT&E effort continues preplanned product improvements (P3I) and applies technologies similar to those demonstrated in the Advanced Tactical Targeting Technologies (AT3) program. In FY00, P3I development of HTS Revision 7 (HTS R7) began to address evolving threats and to incorporate a precision geolocation capability to target Precision Guided Munitions (PGMs) into the AN/ASQ 213 Pod. In FY01, the R7 P3I Program Definition and Risk Reduction (PDRR) was completed and the contract was awarded for System Development and Demonstration (SDD). HTS R7 developed changes will also enable 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. These improvements represent the Air Force's near-term solution (capability can be transferred to F-35, Unmanned Combat Air Vehicle (UCAV), or a yet defined system) for reactive time critical targeting for the DEAD mission. HTS R7 will target HARM and other PGMs to destroy fixed and mobile enemy air defense elements. HTS R7 precision coordinates will be available to all Joint Forces via Link-16. FY06 continues flight test activities and conducts investigation, studies, and preliminary design activities for future P3I. The HTS R7 development effort and P3I related activities continue through FY07.

This PE is in Budget Activity 7 - Operational System Development because it supports preplanned product improvements and upgrade development of F-16 HTS (R6), a fielded system, to the HTS R7 configuration.

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

	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>
(U) Continue HTS R7 Geolocation Upgrade Development/P3I related activities	11.751	8.451	
(U) Continue HTS R7 Upgrade Test and Evaluation Support	3.519	0.000	
(U) Continue Mission Support	0.873	0.809	0.515
(U) Total Cost	16.143	9.260	0.515

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4595 F-16 Smart Targeting and  
Identification via Networked  
Geolocation (STING)(U) **C. Other Program Funding Summary (\$ in Millions)**

	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</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									
(U) HTS Aircraft Procurement (BP11)AF PE 0207136F	13.425	20.713	7.289	0.000	0.000				41.427
(U) HTS Aircraft Procurement (BP19)AF PE 0207136F	2.860	16.917	9.374	9.991	10.103				49.245

(U) **D. Acquisition Strategy**

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

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

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**4595 F-16 Smart Targeting and  
Identification via Networked  
Geolocation (STING)**

(U) <u>Cost Categories</u> (Tailor to WBS, or System/Item Requirements) (\$ in Millions)	<u>Contract</u> <u>Method &amp;</u> <u>Type</u>	<u>Performing</u> <u>Activity &amp;</u> <u>Location</u>	<u>Total</u> <u>Prior to FY</u> <u>2005</u> <u>Cost</u>	<u>FY 2005</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2007</u>	<u>Cost to</u> <u>Complete</u>	<u>Total Cost</u>	<u>Target Value</u> <u>of Contract</u>
				<u>Cost</u>	<u>Award</u> <u>Date</u>	<u>Cost</u>	<u>Award</u> <u>Date</u>	<u>Cost</u>	<u>Award</u> <u>Date</u>			
(U) <u>Product Development</u>												
Raytheon Systems Co.	SS/Various		75.310	11.751		8.451					95.512	
Raytheon Systems Co.	SS/CPAF		31.331								31.331	
AFMSS	SS/CPIF		2.674								2.674	
Lockheed/Ft Worth	SS/FFP		2.400								2.400	
Subtotal Product Development			111.715	11.751		8.451		0.000		0.000	131.917	0.000
Remarks:	HTS R7 SDD Contract awarded FY01 (on-going through FY07)											
(U) <u>Support</u>												
Mission Support	Various		7.880	0.873		0.809		0.515			10.077	
Subtotal Support			7.880	0.873		0.809		0.515		0.000	10.077	0.000
Remarks:												
(U) <u>Test &amp; Evaluation</u>												
Eglin	PO		2.175								2.175	
Edwards	PO		10.220	3.519							13.739	
Light Defender			0.922								0.922	
Subtotal Test & Evaluation			13.317	3.519		0.000		0.000		0.000	16.836	0.000
Remarks:												
(U) <u>Management</u>												
Subtotal Management			0.000	0.000		0.000		0.000		0.000	0.000	0.000
Remarks:												
(U) Total Cost			132.912	16.143		9.260		0.515		0.000	158.830	0.000

Exhibit R-4, RDT&E Schedule Profile

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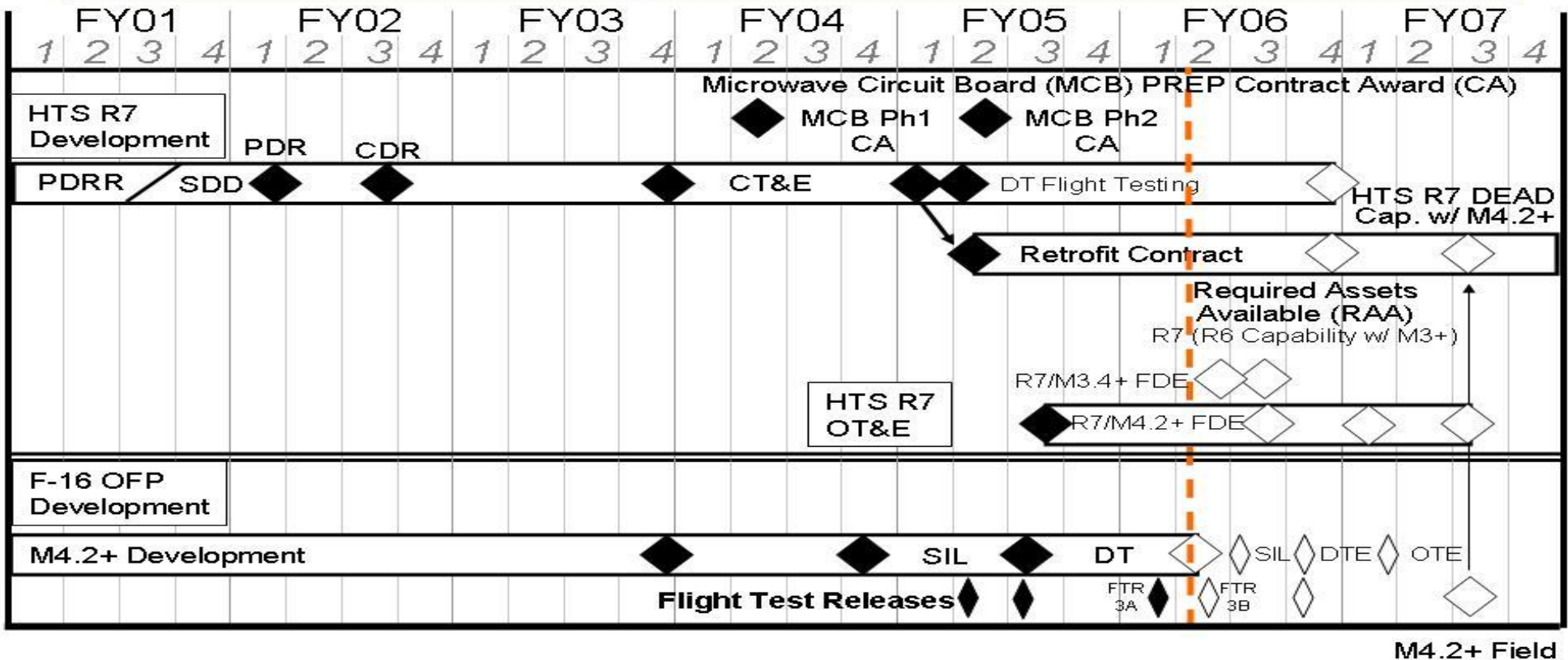
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4595 F-16 Smart Targeting and  
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Geolocation (STING)



# HTS R7 Development Program Schedule



As of 1 Dec 05

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<b>Exhibit R-4a, RDT&amp;E Schedule Detail</b>	DATE <b>February 2006</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>	<b>PROJECT NUMBER AND TITLE</b> <b>4595 F-16 Smart Targeting and Identification via Networked Geolocation (STING)</b>
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<b>(U) <u>Schedule Profile</u></b>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>
(U) MCB PREP Contract Award -- Ph 2	3Q		
(U) R7 Retrofit Decision	2Q		
(U) Retrofit Kits -- Contract Award (83 Kits)	2Q		
(U) Retrofit Kit Installation (83 Kits) -- Contract Award		1Q	
(U) Retrofit Kits -- Contract Award (117 Kits)		2Q	
(U) P3I Study -- Contract Award		4Q	
(U) R7 RAA (R6 Capability w/ F-16 OFP M3+)		4Q	
(U) Retrofit Kit Installation (117 Kits) -- Contract Award			1Q
(U) R7 Precision Targeting Capability (w/ F-16 OFP M4+)			3Q