

# UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification: PB 2013 Air Force									DATE: February 2012		
APPROPRIATION/BUDGET ACTIVITY 3600: Research, Development, Test & Evaluation, Air Force BA 7: Operational Systems Development				R-1 ITEM NOMENCLATURE PE 0207136F: Manned Destructive Suppression							
COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
Total Program Element	12.496	13.253	13.683	-	13.683	14.037	14.565	15.011	15.378	Continuing	Continuing
674595: F-16 HARM Targeting System	12.496	13.253	13.683	-	13.683	14.037	14.565	15.011	15.378	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

## **A. Mission Description and Budget Item Justification**

The Manned Destructive Suppression (MDS) program element 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 and Block 40/42 aircraft with the ability to employ the AN/ASQ-213 Pod. With the introduction of HTS Revision 7 (HTS R7) in 2007, the AN/ASQ-213 Pod now has a precision geo-location capability to target Precision Guided Munitions (PGMs) to destroy fixed and mobile enemy air defense elements. Additionally, by relocating the AN/ASQ-213 HTS R7 Pod to the aircraft's left inlet hard point, the F-16 can simultaneously carry the HTS R7 Pod and an Advanced Targeting Pod (ATP). HTS R7 fielding is complete and represents 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 derived precision targeting data can be provided to all Joint Forces via Link-16. This effort continues preplanned product improvements (P3I) for the HTS and applies technologies similar to those demonstrated in the Advanced Tactical Targeting Technologies (AT3) program and HTS R7 development.

This program is in Budget Activity 7, Operational System Development because this budget activity includes development efforts to upgrade systems that have been fielded or have received approval for full rate production and anticipate production funding in the current or subsequent fiscal year.

<b><u>B. Program Change Summary (\$ in Millions)</u></b>	<b><u>FY 2011</u></b>	<b><u>FY 2012</u></b>	<b><u>FY 2013 Base</u></b>	<b><u>FY 2013 OCO</u></b>	<b><u>FY 2013 Total</u></b>
Previous President's Budget	12.937	13.253	13.803	-	13.803
Current President's Budget	12.496	13.253	13.683	-	13.683
Total Adjustments	-0.441	-	-0.120	-	-0.120
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-0.375	-			
• Other Adjustments	-0.066	-	-0.120	-	-0.120

**UNCLASSIFIED**

Exhibit R-2, RDT&E Budget Item Justification: PB 2013 Air Force		DATE: February 2012		
APPROPRIATION/BUDGET ACTIVITY 3600: Research, Development, Test & Evaluation, Air Force BA 7: Operational Systems Development		R-1 ITEM NOMENCLATURE PE 0207136F: Manned Destructive Suppression		
<u>Change Summary Explanation</u> No Significant Changes				
C. Accomplishments/Planned Programs (\$ in Millions)		FY 2011	FY 2012	FY 2013
Title: P3I R7 Software Upgrade (SWUP)  Description: P3I R7 Software Upgrade (SWUP)  FY 2011 Accomplishments: HTS R7.7 SWUP flight testing support and additional software releases for flight testing continued. Studies continued on risk reduction efforts for future P3I phase(s). HTS R7.7 SWUP flight testing continued to include completing all data baseline activities, initial formal developmental flight testing and all associated data analysis, and release of upgraded software for subsequent flight testing. Studies included candidate selection process activities and risk reduction efforts for follow-on upgrades. Mission support, i.e., program management for administrative and technical support activities continued. The major thrusts of this year were preparation and support of continued flight testing activities and risk reduction candidate selection activities for the follow-on P3I effort. This P3I R7 study effort for future phase(s) was a continuation of the HTS P3I effort.  FY 2012 Plans: HTS R7.7 SWUP flight testing support and additional software releases for flight testing continues, culminating in the release of R7.7 SWUP software. Studies continue on risk reduction efforts for future P3I phase(s). HTS R7.7 SWUP formal developmental flight testing and all associated data analysis and release of upgraded software will be completed. Risk reduction activities and candidate selection study efforts for follow-on upgrades continue. Also, final steps will be completed to potentially award the R7.8 SWUP development. The major pushes of this year will be releasing R7.7 SWUP software to the field, continued risk reduction candidate selection activities for follow-on P3I efforts, and planned award of the R7.8 SWUP development.  FY 2013 Plans: HTS R7.8 SWUP development continues from risk reduction and program definition to software development and preparation for flight testing. Studies continue on risk reduction efforts for future P3I phase(s). Mission support, i.e., program management for administrative and technical support activities continue. The major thrusts of this year are R7.8 SWUP design and code activities and planning for subsequent flight testing.		10.198	9.490	10.895
Title: Flight Test  Description: Flight Test  FY 2011 Accomplishments: Government flight test operations continued to include test planning and execution activities for HTS R7.7 SWUP CT&E and DT&E efforts, scheduling support for all needed resources and required configurations for each flight test mission. Ground testing		1.838	2.969	1.900

**UNCLASSIFIED**

<b>Exhibit R-2, RDT&amp;E Budget Item Justification:</b> PB 2013 Air Force		<b>DATE:</b> February 2012		
<b>APPROPRIATION/BUDGET ACTIVITY</b> 3600: <i>Research, Development, Test &amp; Evaluation, Air Force</i> BA 7: <i>Operational Systems Development</i>		<b>R-1 ITEM NOMENCLATURE</b> PE 0207136F: <i>Manned Destructive Suppression</i>		
<b>C. Accomplishments/Planned Programs (\$ in Millions)</b>		<b>FY 2011</b>	<b>FY 2012</b>	<b>FY 2013</b>
continued via anechoic chamber testing, as needed. The test organization continued to conduct each mission to include F-16 test aircraft operations, threat ranges and associated support, air re-fueling, and range control support. Post-mission flight test support for each mission also continued. Initial flight test planning for HTS R7.8 SWUP began.  <b>FY 2012 Plans:</b> Government flight test operations continue to include test planning and execution activities for final HTS R7.7 SWUP DT&E efforts, scheduling support for all needed resources and required configurations for each flight test mission. Ground testing continues via anechoic chamber testing, as needed. The test organization continues to conduct each mission to include F-16 test aircraft operations, threat ranges and associated support, air re-fueling, and range control support. Post-mission flight test support for each mission also continues. Initial test planning for HTS R7.8 SWUP continues.  <b>FY 2013 Plans:</b> Government flight test operations continue to include test planning, and risk mitigation plans to address scarcity of resources; i.e., aircraft and ranges. This funding also includes test data analysis support and baselining of requirements from actual test data results during HTS SWUP R7.7 flight tests.				
<b>Title:</b> Mission Planning  <b>Description:</b> Joint Mission Planning System (JMPS) (Formerly Air Force Mission Support System (AFMSS))  <b>FY 2011 Accomplishments:</b> Continued mission planning software upgrade effort to include correcting deficiencies, additional engineering software releases and preparations for formal fielding with HTS R7.7 SWUP.  <b>FY 2012 Plans:</b> Continue mission planning software upgrade effort to include correcting deficiencies, additional engineering software releases and formal fielding in conjunction with HTS R7.7 SWUP software release.  <b>FY 2013 Plans:</b> Continue mission planning in conjunction with HTS R7.8 software upgrade. This effort will begin planning this year to address deficiencies, additional engineering software releases and forward fielding.		0.460	0.794	0.888
<b>Accomplishments/Planned Programs Subtotals</b>		12.496	13.253	13.683

**UNCLASSIFIED**

<b>Exhibit R-2, RDT&amp;E Budget Item Justification:</b> PB 2013 Air Force	<b>DATE:</b> February 2012
--	----------------------------

<b>APPROPRIATION/BUDGET ACTIVITY</b> 3600: <i>Research, Development, Test &amp; Evaluation, Air Force</i> BA 7: <i>Operational Systems Development</i>	<b>R-1 ITEM NOMENCLATURE</b> PE 0207136F: <i>Manned Destructive Suppression</i>
--	--

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

<u>Line Item</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u> <u>Base</u>	<u>FY 2013</u> <u>OCO</u>	<u>FY 2013</u> <u>Total</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Cost To</u> <u>Complete</u>	<u>Total Cost</u>
• No other investment funding: <i>N/A</i>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing

**E. Acquisition Strategy**

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

**F. Performance Metrics**

Please refer to the Performance Base Budget Overview Book for information on how Air Force resources are applied and how those resources are contributing to Air Force performance goals and most importantly, how they contribute to our mission.

**UNCLASSIFIED**

<b>Exhibit R-4, RDT&amp;E Schedule Profile:</b> PB 2013 Air Force		<b>DATE:</b> February 2012
<b>APPROPRIATION/BUDGET ACTIVITY</b> 3600: <i>Research, Development, Test &amp; Evaluation, Air Force</i> BA 7: <i>Operational Systems Development</i>	<b>R-1 ITEM NOMENCLATURE</b> PE 0207136F: <i>Manned Destructive Suppression</i>	<b>PROJECT</b> 674595: <i>F-16 HARM Targeting System</i>

**UNCLASSIFIED**

<b>Exhibit R-4A, RDT&amp;E Schedule Details:</b> PB 2013 Air Force			<b>DATE:</b> February 2012
<b>APPROPRIATION/BUDGET ACTIVITY</b> 3600: <i>Research, Development, Test &amp; Evaluation, Air Force</i> BA 7: <i>Operational Systems Development</i>	<b>R-1 ITEM NOMENCLATURE</b> PE 0207136F: <i>Manned Destructive Suppression</i>	<b>PROJECT</b> 674595: <i>F-16 HARM Targeting System</i>	

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
R7.7 SWUP Flight Test (DT&E)	1	2011	2	2012
HTS P3I Risk Reduction for Next Phase Contract	3	2011	3	2013
R7.8 SWUP Contract	3	2013	2	2016
R7.8SWUP Flight test (CT&E/DT&E)	3	2014	4	2015