

RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)	DATE FEBRUARY 2008
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APPROPRIATION / BUDGET ACTIVITY RDT&E, DEFENSE-WIDE / 7	R-1 ITEM NOMENCLATURE / PROJECT NO. PE 1160482BB SOF Rotary Wing Aviation/D615
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COST (Dollars in Millions)	FY07	FY08	FY09	FY10	FY11	FY12	FY13	Cost to Complete	Total Cost
PE1160482BB			3.822	15.294	12.428	3.493		Cont.	Cont.
D615, SOF Rotary Wing Aviation			3.822	15.294	12.428	3.493		Cont.	Cont.

A new program element (PE)(1160482BB) was established beginning in FY 2009 for SOF Rotary Wing Aviation. FY 2009-2013 resources were moved from PE 1160404BB Special Operations Tactical Systems Development.

A. Mission Description and Budget Item Justification: This program element develops/upgrades SOF rotary wing aircraft systems that operate in increasingly hostile environments. Rotary wing aircraft supported by this project include: MH-60L/K/M, MH-47D/E/G, and A/MH-6M. These aircraft provide aviation support to Special Operations Forces (SOF) in worldwide contingency operations and low-intensity conflicts, and they must be capable of rapid deployment; undetected penetration of hostile areas; and operating at extended ranges under adverse weather conditions to infiltrate, provide logistics for, reinforce, and extract SOF. The threat is characterized by an extensive and sophisticated ground based air defense system and an upgraded air-to-air capability targeted against helicopters.

B. Program Change Summary:

	<u>FY07</u>	<u>FY08</u>	<u>FY09</u>
Previous President's Budget			
Current President's Budget			3.822
Total Adjustments			3.822
Congressional Program Reductions			
Congressional Increases			
Reprogrammings			
Other Program Adjustments			3.822
SBIR Transfer			

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<p>Funding:</p> <p>FY09: A new PE (1160483BB) was established beginning in FY 2009 for SOF Rotary Wing Aviation. FY 2009-2013 resources were moved from PE 1160404BB, Special Operations Tactical Systems Development.</p> <p>Schedule: None.</p> <p>Technical: None.</p>		

Exhibit R2-a, RDT&E Project Justification

Date: FEBRUARY 2008

Appropriation/Budget Activity RDT&E.A BA # 7	Special Operations Forces (SOF) Aviation /Project D615
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Cost (\$ in millions)	FY07	FY08	FY09	FY10	FY11	FY12	FY13
SOF Aviation	2.959*	5.230*	3.822	15.294	12.428	3.493	
RDT&E Articles Quantity							

*** A new program element 1160482BB, SOF Rotary Wing Aviation was established for this project beginning in FY 2009. FY 2009-2013 resources were moved from program element 1160404BB, Special Operations Tactical Systems Development.**

A. Mission Description and Budget Item Justification: This project develops/upgrades SOF rotary wing aircraft systems that operate in increasingly hostile environments. Rotary wing aircraft supported by this project include: MH-60L/K/M, MH-47D/E/G, and A/MH-6M. These aircraft provide aviation support to Special Operations Forces (SOF) in worldwide contingency operations and low-intensity conflicts, and they must be capable of rapid deployment; undetected penetration of hostile areas; and operating at extended ranges under adverse weather conditions to infiltrate, provide logistics for, reinforce, and extract SOF. The threat is characterized by an extensive and sophisticated ground based air defense system and an upgraded air-to-air capability targeted against helicopters. Efforts include:

- MH-47/MH-60/A/MH-6M Aircraft. (1) Develops a follow-on weapon system to the currently fielded M-134 Mini Gun. The modernized weapon system will provide a lighter and more reliable/maintainable system with improved suppressive fire capability. (2) Develops an infrared (IR) exhaust suppressor for A/MH-6M aircraft to provide a passive countermeasure capability that is compatible with A/MH-6M's higher performance engine.
- MH-47/MH-60 Avionics/Sensors. Develops the Aircraft Occupant Ballistic Protection System (AOBPS) to reduce weight to permit additional critical payloads on mission aircraft while maintaining or improving armor effectiveness.

B. Accomplishments/Planned Program

	FY07	FY08	FY09
MH-47/MH-60/A/MH-6M - Aircraft	2.959	4.320	2.175
RDT&E Articles Quantity			

FY07 Completed the development qualification and testing of the weapons modernization program.

FY08 Begin development of the infrared exhaust suppressor for the A/MH-6M.

FY09 Completes the qualification and testing of the infrared exhaust suppressor for the A/MH-6M.

Exhibit R2-a, RDT&E Project Justification

Date: FEBRUARY 2008

Appropriation/Budget Activity RDT&E.A BA # 7	Special Operations Forces (SOF) Aviation /Project D615
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	FY07	FY08	FY09
MH-47/MH-60 – Passive Rotary Wing Survivability		0.910	1.647
RDT&E Articles Quantity			

FY08 Begin development of improved lightweight armor for the AOBPS.
 FY09 Continues development of the AOBPS.

C. Other Program Funding Summary:

	<u>FY07</u>	<u>FY08</u>	<u>FY09</u>	<u>FY10</u>	<u>FY11</u>	<u>FY12</u>	<u>FY13</u>	<u>To Complete</u>	<u>Total Cost</u>
Rotary Wing Upgs & Sust PROC	104.057	72.996	51.629	65.781	55.143	74.287	77.978	Cont.	Cont.

D. Acquisition Strategy:

- A/MH-6M - This effort provides necessary drive train analyses, a passive IR countermeasure capability, component development and testing, and test support/data analysis efforts required to improve operational safety margins of the A/MH-6M aircraft. A competitive source selection process will be conducted for the weapons system replacement to the extent possible. Proprietary considerations may direct some efforts to the original equipment manufacturer.
- MH-47/MH-60 Aircraft - This effort develops and qualifies a replacement for the M-134 machine gun, a potential light weight battery, and components of the weapons system. A competitive source selection process will be conducted for the weapons system replacement to the extent possible. Proprietary considerations may direct some efforts to the original equipment manufacturer.
- MH-47/MH-60 Avionics/Sensors - Develops next-generation improvements, enhancements, and upgrades to avionics and sensors. Active and passive survivability systems will be conducted using competitive processes to the maximum extent practicable. Proprietary considerations may direct some efforts to the original equipment manufacturer.

Exhibit R-3 RDT&E Project Cost Analysis

DATE: FEBRUARY 2008

APPROPRIATION / BUDGET ACTIVITY			SOF Rotary Wing Aviation/PE1160482BB								SOF Aviation/D615	
RDT&E DEFENSE-WIDE / 7												
Actual or Budget Value (\$ in millions)												
Cost Categories (Tailor to WBS, or System/Item Requirements)	Contract Method & Type	Performing Activity & Location	Total PYs Cost	Budget Cost FY07	Award Date FY07	Budget Cost FY08	Award Date FY08	Budget Cost FY09	Award Date FY09	To Complete	Total Program	
Primary Hardware Development												
MH-47/60 Weapons Modernization	Various	PM TAPO/Ft Eustis, VA	16.918	2.959	Various						19.877	
MH-47/60 Passive RW Survivability Aircraft Occupant Ballistic Protection System	Various	PM TAPO/Ft Eustis, VA	60.200			0.910	Various	1.647	Various	5.033	67.790	
A/MH-6M	Various	PM MELB, Ft. Eustis, VA	11.611			4.320	Various	2.175	Various		18.106	
Subtotal Product Development			88.729	2.959		5.230		3.822		5.033	105.773	
Remarks:												
Management											0.000	
Subtotal Spt											0.000	
Remarks:												
Developmental Test & Eval												
Remarks:												
Subtotal Management												
Remarks:												
Total Cost			88.729	2.959		5.230		3.822		5.033	105.773	
Remarks:												

Exhibit R-4, RDT&E Program Schedule Profile														Date: FEBRUARY 2008																	
Appropriation/Budget Activity				Program Element and Name										Project Number and Name																	
RDT&E/7				PE1160482BB/Special Operations Forces (SOF) Rotary Wing Aviation										Project D615/SOF Aviation																	
Fiscal Year	2007				2008				2009				2010				2011				2012				2013						
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4			
Next Generation Forward Looking Infrared Development/Qualification Testing																															
Machine Gun Replacement Development/Qualification Testing				▲	—	▲																									
A/MH-6M Infrared Exhaust Suppressor Development/Qualification Testing								▲	—	▲																					
Aircraft Occupant Ballistic Protection System Development/Qualification/Test								▲	—	▲																					
Secure Real Time Video Development/Qualification/Test																															
Reduced Optical Signature Emissions Solution Development/Qualification/Test																															

