

# ARMY RDT&E BUDGET ITEM JUSTIFICATION (R2 Exhibit)

**May 2009**

**BUDGET ACTIVITY**  
**5 - System Development and Demonstration**

**PE NUMBER AND TITLE**  
**0604220A - Armed, Deployable OH-58D**

COST (In Thousands)	FY 2008 Actual	FY 2009 Estimate	FY 2010 Estimate	Cost to Complete	Total Cost
Total Program Element (PE) Cost	176132	135205	65515	Continuing	Continuing
538 KIOWA WARRIOR	11004		61236	Continuing	Continuing
53H ARMED RECONNAISSANCE HELICOPTER (ARH)	165128	135205			
53Z Kiowa Warrior Replacement			4279	Continuing	Continuing

**A. Mission Description and Budget Item Justification:** An Acquisition Decision Memorandum (ADM) was signed by the Defense Acquisition Executive (DAE) on October 17, 2008 authorizing termination of the existing ARH program. Continuance of effort will be required to fully execute termination of the System Development and Demonstration (SDD) contract

Kiowa Warrior Replacement funding will be reprogrammed when the new project and program element, along with the program change, are established.

Kiowa Warrior funding develops, integrates and tests modifications which will allow the OH-58D to continue to safely serve as the Army's armed reconnaissance aviation capability until replaced/retired.

# ARMY RDT&E BUDGET ITEM JUSTIFICATION (R2 Exhibit)

May 2009

BUDGET ACTIVITY  
**5 - System Development and Demonstration**

PE NUMBER AND TITLE  
**0604220A - Armed, Deployable OH-58D**

<u><b>B. Program Change Summary</b></u>	FY 2008	FY 2009	FY 2010
Previous President's Budget (FY 2009)	181145	135652	99390
Current BES/President's Budget (FY 2010)	176132	135205	65515
Total Adjustments	-5013	-447	-33875
Congressional Program Reductions		-447	
Congressional Rescissions			
Congressional Increases			
Reprogrammings	55		
SBIR/STTR Transfer	-5068		
Adjustments to Budget Years			-33875

Change Summary Explanation: Funding - FY 2010: Funds realigned to higher priority Army programs.

# ARMY RDT&E BUDGET ITEM JUSTIFICATION (R2a Exhibit)

**May 2009**

<b>BUDGET ACTIVITY</b> <b>5 - System Development and Demonstration</b>		<b>PE NUMBER AND TITLE</b> <b>0604220A - Armed, Deployable OH-58D</b>			<b>PROJECT</b> <b>538</b>
COST (In Thousands)	FY 2008 Actual	FY 2009 Estimate	FY 2010 Estimate	Cost to Complete	Total Cost
538 KIOWA WARRIOR	11004		61236	Continuing	Continuing

**A. Mission Description and Budget Item Justification:** The OH-58D Kiowa Warrior is a two-seat, single-engine, observation, scout/attack helicopter with four main rotor blades. It utilizes a thermal-imaging system and a laser rangefinder/designator in a mast-mounted sight situated above the main rotor system. The aircraft is equipped with a variety of weapon systems including: HELLFIRE, 2.75-inch rockets, and a .50-caliber machine gun. The aircraft operates autonomously at standoff ranges providing armed reconnaissance, command and control, and target acquisition/designation for Apache helicopters and other airborne weapons platforms in day, night, and adverse-weather conditions. The Active Army and the National Guard fly Kiowa Warriors.

Funding develops, integrates and qualifies modifications to support Kiowa Warrior missions until a replacement is fielded. Upgrades to the Kiowa Warrior will extend the useful life of the aircraft and allow it to continue to safely serve as the Army's armed reconnaissance, aviation platform until replaced/retired. The modifications planned will address issues with interoperability, survivability, and sustainability to enhance mission capability

<u><b>Accomplishments/Planned Program:</b></u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>
Development and Integration	7725		44465
Test and Evaluation	2488		8433
Program Management	440		1101
Engineering Support Activities	351		7237
<b>Total</b>	<b>11004</b>		<b>61236</b>

<u><b>B. Other Program Funding Summary</b></u>	FY 2008	FY 2009	FY 2010	To Compl	Total Cost
AZ22000 - Kiowa Warrior	88843	117050	235103	Continuing	Continuing

Comment: \$35.350 Million has been received to date in FY09; \$2.4 Million for Vehicle Health and Usage Management System (VHUMS) and \$32.950 Million from ARH for Kiowa Warrior Life Support 2020 Development and Integration, Engineering Support Activities, Test and Evaluation and Program Management.

FY 2010 Core funding will develop, integrate, test and provide program management and engineering support for Kiowa Warrior Life Support 2020 initiatives.

**C. Acquisition Strategy** The Government will serve as the lead Systems Integrator managing multiple contracts.

**ARMY RDT&E BUDGET ITEM JUSTIFICATION (R2a Exhibit)**

**May 2009**

BUDGET ACTIVITY

**5 - System Development and Demonstration**

PE NUMBER AND TITLE

**0604220A - Armed, Deployable OH-58D**

PROJECT

**538**

Empty justification text area.

# ARMY RDT&E COST ANALYSIS (R3)

May 2009

BUDGET ACTIVITY <b>5 - System Development and Demonstration</b>			PE NUMBER AND TITLE <b>0604220A - Armed, Deployable OH-58D</b>							PROJECT <b>538</b>		
I. Product Development	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2008 Cost	FY 2008 Award Date	FY 2009 Cost	FY 2009 Award Date	FY 2010 Cost	FY 2010 Award Date	Cost To Complete	Total Cost	Target Value of Contract
Development and Integration (Core Funding)	Cost Plus Incentive Fee	Various Activities		7725	4Q			44465	1-4Q		52190	
Subtotal:				7725				44465			52190	

Remarks: FY 2010 Core funding will provide both contractor and in-house development and integration efforts for Life Support 2020.

II. Support Costs	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2008 Cost	FY 2008 Award Date	FY 2009 Cost	FY 2009 Award Date	FY 2010 Cost	FY 2010 Award Date	Cost To Complete	Total Cost	Target Value of Contract
Program Management (Core Funding)	Various	Various Activities		440	4Q			1101	1-4Q		1541	
Subtotal:				440				1101			1541	

Remarks: FY 2010 Core funding will fund Program Management and contractor support for Life Support 2020.

III. Test And Evaluation	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2008 Cost	FY 2008 Award Date	FY 2009 Cost	FY 2009 Award Date	FY 2010 Cost	FY 2010 Award Date	Cost To Complete	Total Cost	Target Value of Contract
Test and Evaluation (Core Funding)	MIPR	Various Activities		2488	4Q			8433	1-4Q		10921	
Subtotal:				2488				8433			10921	

Remarks: FY 2010 Core funding will provide Life Support 2020 test and evaluation.

IV. Management Services	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2008 Cost	FY 2008 Award Date	FY 2009 Cost	FY 2009 Award Date	FY 2010 Cost	FY 2010 Award Date	Cost To Complete	Total Cost	Target Value of Contract
Engineering Support Activities (Core Funding)	Various	Various Activities		351	4Q			7237	1-4Q		7588	
Subtotal:				351				7237			7588	

# ARMY RDT&E COST ANALYSIS (R3)

May 2009

BUDGET ACTIVITY

**5 - System Development and Demonstration**

PE NUMBER AND TITLE

**0604220A - Armed, Deployable OH-58D**

PROJECT

**538**

Remarks: FY 2010 Core funding will fund engineering support activities for Life Support 2020 development, integration and test activities.

**Project Total Cost:**

**11004**

**61236**

**72240**

# Schedule Profile (R4 Exhibit)

May 2009

BUDGET ACTIVITY  
**5 - System Development and Demonstration**

PE NUMBER AND TITLE  
**0604220A - Armed, Deployable OH-58D**

PROJECT  
**538**

Event Name	FY 08				FY 09				FY 10				FY 11				FY 12				FY 13				FY 14				FY 15			
	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	1	2	3	4
Development/Integration Contracts (Core Funding)																																
					DEV																											
Test and Evaluation (Core Funding)																																
									QUAL																							

**Schedule Detail (R4a Exhibit)**

**May 2009**

BUDGET ACTIVITY <b>5 - System Development and Demonstration</b>		PE NUMBER AND TITLE <b>0604220A - Armed, Deployable OH-58D</b>					PROJECT <b>538</b>	
<u>Schedule Detail</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>FY 2014</u>	<u>FY 2015</u>
Development/Integration Contracts (Core Funding)	4Q	1Q - 4Q	1Q - 4Q	1Q - 4Q				
Test and Evaluation (Core Funding)		4Q	1Q - 4Q	1Q - 4Q				

# ARMY RDT&E BUDGET ITEM JUSTIFICATION (R2a Exhibit)

**May 2009**

<b>BUDGET ACTIVITY</b> <b>5 - System Development and Demonstration</b>		<b>PE NUMBER AND TITLE</b> <b>0604220A - Armed, Deployable OH-58D</b>			<b>PROJECT</b> <b>53H</b>
COST (In Thousands)	FY 2008 Actual	FY 2009 Estimate	FY 2010 Estimate	Cost to Complete	Total Cost
53H ARMED RECONNAISSANCE HELICOPTER (ARH)	165128	135205			

**A. Mission Description and Budget Item Justification:** An Acquisition Decision Memorandum (ADM) was signed by the Defense Acquisition Executive (DAE) on October 17, 2008 authorizing termination of the existing Armed Reconnaissance Helicopter (ARH) program. Continuance of effort will be required to fully execute the termination of the System Development and Demonstration (SDD) contract.

Post ARH termination, \$32.950M was reprogrammed in FY09 from the ARH program to the OH-58D Kiowa Warrior program.

<u>Accomplishments/Planned Program:</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>
Aircraft System Development and Demonstration (SDD)	126616	81418	
SDD Termination		15000	
Kiowa Replacement Development		28000	
Engineering Support Activities	17691	1000	
Test and Evaluation	10323		
Program Management	10498	6000	
Small Business Innovative Research/Small Business Technology Transfer Programs		3787	
<b>Total</b>	<b>165128</b>	<b>135205</b>	

<u>B. Other Program Funding Summary</u>	FY 2008	FY 2009	FY 2010	To Compl	Total Cost
A04203 ARMED RECONNAISSANCE HELICOPTER	75	240939		3286255	3527269

**Comment:** An Acquisition Decision Memorandum (ADM) was signed by the Defense Acquisition Executive (DAE) on October 17, 2008 authorizing termination of the existing Armed Reconnaissance Helicopter (ARH) program.

FY09 funding was reprogrammed to procure OH-58D Life Support 2020 modifications and AH-64D ARNG aircraft.

Kiowa Warrior Replacement funding will be reprogrammed when the new project and program element, along with the program change, are established.

# ARMY RDT&E BUDGET ITEM JUSTIFICATION (R2a Exhibit)

May 2009

BUDGET ACTIVITY

**5 - System Development and Demonstration**

PE NUMBER AND TITLE

**0604220A - Armed, Deployable OH-58D**

PROJECT

**53H**

C. Acquisition Strategy Not applicable for this item.

# ARMY RDT&E COST ANALYSIS (R3)

May 2009

BUDGET ACTIVITY			PE NUMBER AND TITLE							PROJECT		
<b>5 - System Development and Demonstration</b>			<b>0604220A - Armed, Deployable OH-58D</b>							<b>53H</b>		
I. Product Development	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2008 Cost	FY 2008 Award Date	FY 2009 Cost	FY 2009 Award Date	FY 2010 Cost	FY 2010 Award Date	Cost To Complete	Total Cost	Target Value of Contract
System Development and Demonstration	CPIF	Various	303089	126616		88992					518697	
SDD Termination		Various				15000	1-3Q				15000	
Kiowa Replacement Development						28000	1-4Q				28000	
Subtotal:			303089	126616		131992					561697	
II. Support Costs	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2008 Cost	FY 2008 Award Date	FY 2009 Cost	FY 2009 Award Date	FY 2010 Cost	FY 2010 Award Date	Cost To Complete	Total Cost	Target Value of Contract
Engineering Support Activities	Various	Various	18582	17691	1-3Q	1000	1-3Q		1-3Q		37273	
Subtotal:			18582	17691		1000					37273	
III. Test And Evaluation	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2008 Cost	FY 2008 Award Date	FY 2009 Cost	FY 2009 Award Date	FY 2010 Cost	FY 2010 Award Date	Cost To Complete	Total Cost	Target Value of Contract
Test and Evaluation	MIPR	Various Activities	15572	10323	1-3Q						25895	
Subtotal:			15572	10323							25895	
IV. Management Services	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2008 Cost	FY 2008 Award Date	FY 2009 Cost	FY 2009 Award Date	FY 2010 Cost	FY 2010 Award Date	Cost To Complete	Total Cost	Target Value of Contract
Program Management	Various	ARH Internal Operating Budget, Matrix Support and Support Contracts	18343	10498	1-4Q	2213	1-4Q				31054	

# ARMY RDT&E COST ANALYSIS (R3)

May 2009

BUDGET ACTIVITY	PE NUMBER AND TITLE							PROJECT
<b>5 - System Development and Demonstration</b>	<b>0604220A - Armed, Deployable OH-58D</b>							<b>53H</b>
Subtotal:	18343	10498		2213			31054	
<b>Project Total Cost:</b>	<b>355586</b>	<b>165128</b>		<b>135205</b>			<b>655919</b>	

Termination Liability Funding For Major Defense Acquisition Programs, RDT&E Funding (R5)		May 2009	
BUDGET ACTIVITY	PE NUMBER AND TITLE	PROJECT	
<b>5 - System Development and Demonstration</b>	<b>0604220A - Armed, Deployable OH-58D</b>	<b>53H</b>	
Funding in \$000			
Program	FY 2008	FY 2009	FY 2010
Armed Reconnaissance Helicopter (ARH)	127310		
<b>Total Termination Liability Funding:</b>	127310		

# ARMY RDT&E BUDGET ITEM JUSTIFICATION (R2a Exhibit)

**May 2009**

<b>BUDGET ACTIVITY</b> <b>5 - System Development and Demonstration</b>		<b>PE NUMBER AND TITLE</b> <b>0604220A - Armed, Deployable OH-58D</b>			<b>PROJECT</b> <b>53Z</b>	
COST (In Thousands)	FY 2008 Actual	FY 2009 Estimate	FY 2010 Estimate	Cost to Complete	Total Cost	
53Z Kiowa Warrior Replacement			4279	Continuing	Continuing	

**A. Mission Description and Budget Item Justification:** The mission of the Kiowa Warrior Replacement aircraft is to provide a robust reconnaissance and security capability for the Joint Combined arms air-ground maneuver team. It will be a direct replacement for the aging OH58D Kiowa Warrior fleet.

The aircraft will provide a highly deployable, reconnaissance and security capability that will employ immediately upon arrival into theater. The platform will address the capability gaps of interoperability, survivability, versatility, agility, lethality, and sustainability to ensure interoperability over extended ranges, enhance mission effectiveness throughout the operational environment, and focus on system survivability against threats operating in the contemporary operational environment, while reducing the logistical burden on the tactical unit. The fundamental purpose is to perform reconnaissance and to provide security in combat operations. In doing so, it improves the commander's ability to maneuver and concentrate superior combat power against the enemy at the decisive time and place.

<b><u>Accomplishments/Planned Program:</u></b>	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>
Pre Milestone A support			4279
Total			4279

<b><u>B. Other Program Funding Summary</u></b>	FY 2008	FY 2009	FY 2010	To Compl	Total Cost
A04203 Armed Reconnaissance Helicopter				3286255	3286255

Comment: Kiowa Warrior Replacement funding supports Analysis of Alternatives (AoA) and program support for milestone documents/reviews.

**C. Acquisition Strategy** Not applicable for this item.

# ARMY RDT&E COST ANALYSIS (R3)

May 2009

BUDGET ACTIVITY			PE NUMBER AND TITLE							PROJECT		
<b>5 - System Development and Demonstration</b>			<b>0604220A - Armed, Deployable OH-58D</b>							<b>53Z</b>		
I. Product Development	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2008 Cost	FY 2008 Award Date	FY 2009 Cost	FY 2009 Award Date	FY 2010 Cost	FY 2010 Award Date	Cost To Complete	Total Cost	Target Value of Contract
Pre-Milestone A support	Various	Various						4279	1-4Q	Cont.	Cont.	
Subtotal:								4279		Cont.	Cont.	
II. Support Costs	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2008 Cost	FY 2008 Award Date	FY 2009 Cost	FY 2009 Award Date	FY 2010 Cost	FY 2010 Award Date	Cost To Complete	Total Cost	Target Value of Contract
Subtotal:												
III. Test And Evaluation	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2008 Cost	FY 2008 Award Date	FY 2009 Cost	FY 2009 Award Date	FY 2010 Cost	FY 2010 Award Date	Cost To Complete	Total Cost	Target Value of Contract
Subtotal:												
IV. Management Services	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2008 Cost	FY 2008 Award Date	FY 2009 Cost	FY 2009 Award Date	FY 2010 Cost	FY 2010 Award Date	Cost To Complete	Total Cost	Target Value of Contract
Subtotal:												
<b>Project Total Cost:</b>								<b>4279</b>		<b>Cont.</b>	<b>Cont.</b>	

# Schedule Profile (R4 Exhibit)

May 2009

BUDGET ACTIVITY  
**5 - System Development and Demonstration**

PE NUMBER AND TITLE  
**0604220A - Armed, Deployable OH-58D**

PROJECT  
**53Z**

Event Name	FY 08				FY 09				FY 10				FY 11				FY 12				FY 13				FY 14				FY 15			
	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	1	2	3	4
(1) Materiel Development Decision (MDD)					 <b>MDD</b>																											

**Schedule Detail (R4a Exhibit)**

**May 2009**

BUDGET ACTIVITY <b>5 - System Development and Demonstration</b>		PE NUMBER AND TITLE <b>0604220A - Armed, Deployable OH-58D</b>					PROJECT <b>53Z</b>	
<u>Schedule Detail</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>FY 2014</u>	<u>FY 2015</u>
Materiel Development Decision (MDD)		3Q						

--	--	--	--	--	--	--	--	--