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Exhibit R-2, RDT&E Budget Item Justification: PB 2011 Army									DATE: February 2010		
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 7: Operational Systems Development				R-1 ITEM NOMENCLATURE PE 0203744A: Aircraft Modifications/Product Improvement Programs							
COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
Total Program Element	298.640	212.992	134.999	0.000	134.999	154.611	124.093	115.692	103.473	Continuing	Continuing
028: Aerial Common Sensor (ACS) (MIP)	20.828	0.074	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing
430: IMPR CARGO HELICOPTER	13.584	10.743	21.039	0.000	21.039	50.740	50.685	52.577	53.477	Continuing	Continuing
504: BLACK HAWK RECAPITALIZATION/ MODERNIZATION	34.196	38.953	20.640	0.000	20.640	22.231	22.192	22.783	22.853	Continuing	Continuing
D12: LONGBOW APACHE OPERATIONAL SYSTEMS DEVELOP	34.940	13.214	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing
D17: APACHE BLOCK III	192.169	149.029	93.320	0.000	93.320	81.640	51.216	40.332	27.143	Continuing	Continuing
D18: UTILITY FW CARGO AIRCRAFT	2.923	0.979	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing
A. Mission Description and Budget Item Justification FY 2011 budget request funds aviation development of modifications and improvements for the Guardrail Common Sensor/Aerial Common Sensor, the Improved Cargo Helicopter (ICH), the UH-60A/L Black Hawk Recapitalization/ Modernization.											

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APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 7: Operational Systems Development		R-1 ITEM NOMENCLATURE PE 0203744A: Aircraft Modifications/Product Improvement Programs			
B. Program Change Summary (\$ in Millions)					
	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Previous President's Budget	459.424	209.401	124.567	0.000	124.567
Current President's Budget	298.640	212.992	134.999	0.000	134.999
Total Adjustments	-160.784	3.591	10.432	0.000	10.432
• Congressional General Reductions		-2.099			
• Congressional Directed Reductions		0.000			
• Congressional Rescissions	-157.710	0.000			
• Congressional Adds		5.690			
• Congressional Directed Transfers		0.000			
• Reprogrammings	5.004	0.000			
• SBIR/STTR Transfer	-8.078	0.000			
• Adjustments to Budget Years	0.000	0.000	10.432	0.000	10.432
Change Summary Explanation					
Change Summary Explanation: Funding - FY 2009: \$157.71 million rescinded from Aerial Common Sensor.					

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2011 Army								<b>DATE:</b> February 2010			
<b>APPROPRIATION/BUDGET ACTIVITY</b> 2040: <i>Research, Development, Test &amp; Evaluation, Army</i> BA 7: <i>Operational Systems Development</i>				<b>R-1 ITEM NOMENCLATURE</b> PE 0203744A: <i>Aircraft Modifications/Product Improvement Programs</i>				<b>PROJECT</b> 028: <i>Aerial Common Sensor (ACS) (MIP)</i>			
<b>COST (\$ in Millions)</b>	<b>FY 2009 Actual</b>	<b>FY 2010 Estimate</b>	<b>FY 2011 Base Estimate</b>	<b>FY 2011 OCO Estimate</b>	<b>FY 2011 Total Estimate</b>	<b>FY 2012 Estimate</b>	<b>FY 2013 Estimate</b>	<b>FY 2014 Estimate</b>	<b>FY 2015 Estimate</b>	<b>Cost To Complete</b>	<b>Total Cost</b>
028: <i>Aerial Common Sensor (ACS) (MIP)</i>	20.828	0.074	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing
Quantity of RDT&E Articles											
<b>A. Mission Description and Budget Item Justification</b> (U) Aerial Common Sensor (ACS) is an Airborne Reconnaissance, Surveillance and Target Acquisition (RSTA)/Intelligence, Surveillance, and Reconnaissance (ISR) capability directly supporting Battlespace Awareness for tactical commanders in irregular warfare scenarios. Specifically, ACS will provide real-time, persistent, precision, networked, wide-area, high-capacity, multi-sensor intelligence collection capability throughout the joint battlespace. ACS will quickly produce actionable intelligence that provides commanders and soldiers critical shared situational understanding delivered with the speed, accuracy, and timeliness necessary to conduct successful and when necessary, lethal joint operations. ACS will support focused Intelligence Preparation of the Battlespace (IPB), Indications and Warnings (I&W), precision targeting, battle damage assessment (BDA), Situational Development, battle command, and Force Protection. Each of these will be synchronized with operations in order to develop and maintain situational awareness and reduce clutter in the maneuver environment. ACS will be a manned, fixed-wing aircraft capable of worldwide deployment carrying multiple sensor payloads and intelligence processing, appropriate air/ground/satellite data links, and air crew (i.e., pilots and intelligence systems operations). The RSTA/ISR payload will consist of a suite of modular, scaleable Signals Intelligence (SIGINT), Imagery Intelligence (IMINT), Ground Moving Target Indicator (GMTI) and Measurement and Signature Intelligence (MASINT) sensors and processors that can operate alone or simultaneously in combination with each other (e.g., automated cross-cueing). The intelligence processing suite onboard ACS and in the ground station, provided by the Distributed Common Ground System-Army (DCGS-A), will integrate the products from all ACS Sensor payloads as well as the sensor feeds from other joint force sensors, including manned/unmanned (MUM) teaming with Army Unmanned Aircraft Systems (UAS), to provide a correlated near-real-time picture of the tactical operational environment with the greatest degree of granularity possible. Onboard communications will consist of a robust set of line-of-sight (LOS) and satellite communications (SATCOM) datalinks that will enable direct linkage to Brigade Combat Teams, Manned-Unmanned teaming with Army UAS, wideband/worldwide connectivity to DCGS and the Global Information Grid, and interoperability with other Army, Joint and National RSTA/ISR assets. ACS will be a critical and integral component of the future force. The Department of Defense (DoD) has redefined the Aerial Common Sensor Program as the Enhanced Medium Altitude Reconnaissance and Surveillance System (EMARSS). The 2010 Appropriations conference report acknowledged that the Army is no longer pursuing ACS as a single multi-Intelligence platform. The EMARSS program will be funded through PE 0307207A - Aerial Common Sensor Project 024 and 655626 - Aerial Common Sensor Project AC5.											
<b>B. Accomplishments/Planned Program (\$ in Millions)</b>											

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Army				DATE: February 2010		
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 7: Operational Systems Development		R-1 ITEM NOMENCLATURE PE 0203744A: Aircraft Modifications/Product Improvement Programs		PROJECT 028: Aerial Common Sensor (ACS) (MIP)		
B. Accomplishments/Planned Program (\$ in Millions)						
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Program #1		20.828	0.000	0.000	0.000	0.000
Datalink Risk Reduction efforts, Advance Quicklook Settlement						
FY 2009 Accomplishments:						
FY 2009						
FY 2010 Plans:						
FY 2010						
FY 2011 Base Plans:						
FY 2011 Base						
FY 2011 OCO Plans:						
FY 2011 OCO						
Program #2		0.000	0.074	0.000	0.000	0.000
Program Office Management						
FY 2009 Accomplishments:						
FY 2009						
FY 2010 Plans:						
FY 2010						
FY 2011 Base Plans:						
FY 2011 Base						
FY 2011 OCO Plans:						
FY 2011 OCO						

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2011 Army							<b>DATE:</b> February 2010				
<b>APPROPRIATION/BUDGET ACTIVITY</b> 2040: <i>Research, Development, Test &amp; Evaluation, Army</i> BA 7: <i>Operational Systems Development</i>			<b>R-1 ITEM NOMENCLATURE</b> PE 0203744A: <i>Aircraft Modifications/Product Improvement Programs</i>			<b>PROJECT</b> 028: <i>Aerial Common Sensor (ACS) (MIP)</i>					
<b><u>B. Accomplishments/Planned Program (\$ in Millions)</u></b>											
						<b>FY 2009</b>	<b>FY 2010</b>	<b>FY 2011 Base</b>	<b>FY 2011 OCO</b>	<b>FY 2011 Total</b>	
Accomplishments/Planned Programs Subtotals						20.828	0.074	0.000	0.000	0.000	
<b><u>C. Other Program Funding Summary (\$ in Millions)</u></b>											
<b><u>Line Item</u></b>	<b><u>FY 2009</u></b>	<b><u>FY 2010</u></b>	<b><u>FY 2011 Base</u></b>	<b><u>FY 2011 OCO</u></b>	<b><u>FY 2011 Total</u></b>	<b><u>FY 2012</u></b>	<b><u>FY 2013</u></b>	<b><u>FY 2014</u></b>	<b><u>FY 2015</u></b>	<b><u>Cost To Complete</u></b>	<b><u>Total Cost</u></b>
• Ord. #1: <i>ACS NSA MIP</i>	3.690	2.094	0.000	0.000	0.000	7.395	7.395	7.395	7.395	Continuing	Continuing
• Ord. #2: <i>CHALS NSA MIP</i>	3.912	1.777	0.000	0.000	0.000	4.182	4.179	4.179	4.179	Continuing	Continuing
• Ord. #3: <i>GRCS NSA MIP</i>	6.669	2.885	0.000	0.000	0.000	3.602	3.601	3.601	3.601	Continuing	Continuing
• Ord. #4: <i>Army PE 0307207A Project 024</i>	0.000	210.035	0.000	0.000	0.000	237.286	248.297	388.495	176.500	0	1,260.613
<b><u>D. Acquisition Strategy</u></b>											
The Department of Defense (DoD) has redefined the Aerial Common Sensor Program as the Enhanced Medium Altitude Reconnaissance and Surveillance System (EMARSS). The 2010 Appropriations conference report acknowledged that the Army is no longer pursuing ACS as a single multi-Intelligence platform. The EMARSS program will be funded through PE 0307207A - Aerial Common Sensor Project 024 and 655626 - Aerial Common Sensor Project AC5.											
<b><u>E. Performance Metrics</u></b>											
Performance metrics used in the preparation of this justification material may be found in the FY 2010 Army Performance Budget Justification Book, dated May 2010.											

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Army										DATE: February 2010	
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 7: Operational Systems Development				R-1 ITEM NOMENCLATURE PE 0203744A: Aircraft Modifications/Product Improvement Programs				PROJECT 028: Aerial Common Sensor (ACS) (MIP)			

**Product Development (\$ in Millions)**

				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
MR-TCDL Advanced Technology Program	SS	Northrop Grumman Space & Mission Systems Corp Redondo Beach CA	0.000	0.000		0.000		0.000		0.000	Continuing	Continuing	0
Advance Quickfix Settlement Costs	C	Boeing Sunnyvale, CA	0.000	0.000		0.000		0.000		0.000	Continuing	Continuing	0
GRCS ITADS	C	Nothing entered for Activity and Location. Location could not be determined.	0.000	0.000		0.000		0.000		0.000	Continuing	Continuing	0
<b>Subtotal</b>			0.000	0.000		0.000		0.000		0.000			0.000

**Remarks**

FY10 and out years funded with PE 0307207A - Aerial Common Sensor (ACS) Project 024

**Management Services (\$ in Millions)**

				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
PMO Staff/travel/O/H expenses	C	PM AC Sensors; Ft. Monmouth NJ	28.381	0.074		0.000		0.000		0.000	Continuing	Continuing	0

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<b>Exhibit R-3, RDT&amp;E Project Cost Analysis: PB 2011 Army</b>											<b>DATE:</b> February 2010		
<b>APPROPRIATION/BUDGET ACTIVITY</b> 2040: <i>Research, Development, Test &amp; Evaluation, Army</i> BA 7: <i>Operational Systems Development</i>				<b>R-1 ITEM NOMENCLATURE</b> PE 0203744A: <i>Aircraft Modifications/Product Improvement Programs</i>				<b>PROJECT</b> 028: <i>Aerial Common Sensor (ACS) (MIP)</i>					
<b>Management Services (\$ in Millions)</b>													
				<b>FY 2010</b>		<b>FY 2011 Base</b>		<b>FY 2011 OCO</b>		<b>FY 2011 Total</b>			
<b>Cost Category Item</b>	<b>Contract Method &amp; Type</b>	<b>Performing Activity &amp; Location</b>	<b>Total Prior Years Cost</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
Program SETA Support	C	CACI /NJ/DC Location could not be determined.	11.921	0.000		0.000		0.000		0.000	Continuing	Continuing	7.004
<b>Subtotal</b>			40.302	0.074		0.000		0.000		0.000			7.004
<b>Remarks</b>													
			<b>Total Prior Years Cost</b>	<b>FY 2010</b>		<b>FY 2011 Base</b>		<b>FY 2011 OCO</b>		<b>FY 2011 Total</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
<b>Project Cost Totals</b>			40.302	0.074		0.000		0.000		0.000			7.004
<b>Remarks</b>													

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<b>Exhibit R-4, RDT&amp;E Schedule Profile:</b> PB 2011 Army		<b>DATE:</b> February 2010
<b>APPROPRIATION/BUDGET ACTIVITY</b> 2040: <i>Research, Development, Test &amp; Evaluation, Army</i> BA 7: <i>Operational Systems Development</i>	<b>R-1 ITEM NOMENCLATURE</b> PE 0203744A: <i>Aircraft Modifications/Product Improvement Programs</i>	<b>PROJECT</b> 028: <i>Aerial Common Sensor (ACS) (MIP)</i>

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Exhibit R-4A, RDT&E Schedule Details: PB 2011 Army			DATE: February 2010	
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 7: Operational Systems Development	R-1 ITEM NOMENCLATURE PE 0203744A: Aircraft Modifications/Product Improvement Programs	PROJECT 028: Aerial Common Sensor (ACS) (MIP)		
Schedule Details				
	Start		End	
Event	Quarter	Year	Quarter	Year
Material Development Decision (MDD)	1	2010	1	2010
Contract Award IPR	2	2010	2	2010
Engineering Manufacturing & Development	2	2010	3	2011
SRR/SFR	3	2010	3	2010
System Design Review	1	2011	1	2011
CT/DT	1	2011	2	2011
DT/OT & LUT	2	2011	3	2011
MS C	3	2011	3	2011
LRIP	3	2011	2	2012
IOT&E	1	2012	1	2012
Full Rate Production	2	2012	2	2012
Production	2	2012	3	2015

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2011 Army								<b>DATE:</b> February 2010			
<b>APPROPRIATION/BUDGET ACTIVITY</b> 2040: <i>Research, Development, Test &amp; Evaluation, Army</i> BA 7: <i>Operational Systems Development</i>				<b>R-1 ITEM NOMENCLATURE</b> PE 0203744A: <i>Aircraft Modifications/Product Improvement Programs</i>				<b>PROJECT</b> 430: <i>IMPR CARGO HELICOPTER</i>			
<b>COST (\$ in Millions)</b>	<b>FY 2009 Actual</b>	<b>FY 2010 Estimate</b>	<b>FY 2011 Base Estimate</b>	<b>FY 2011 OCO Estimate</b>	<b>FY 2011 Total Estimate</b>	<b>FY 2012 Estimate</b>	<b>FY 2013 Estimate</b>	<b>FY 2014 Estimate</b>	<b>FY 2015 Estimate</b>	<b>Cost To Complete</b>	<b>Total Cost</b>
430: <i>IMPR CARGO HELICOPTER</i>	13.584	10.743	21.039	0.000	21.039	50.740	50.685	52.577	53.477	Continuing	Continuing
Quantity of RDT&E Articles											
<b>A. Mission Description and Budget Item Justification</b> <p>The CH-47 Chinook is a twin-turbine, tandem-rotor, heavy-lift transport helicopter with a useful load of up to 25,000 pounds. As the Army's only heavy lift helicopter, the CH-47 is an essential component of the Army Future Force. The CH-47F program fills the Army's Aviation Transformation Chinook requirement. Key product improvements integrate the CH-47F Common Avionics Architecture System (CAAS) digital cockpit which will provide future growth potential to meet the Net-Ready Key Performance Parameters (KPPs) and also includes a digital data bus that permits installation of enhanced communication and navigation equipment for improved situational awareness, mission performance, and survivability. The CH-47 program funds the developmental improvements to the T55-GA-714A engines which includes a redesigned N1 Drive Train and a new torque system and the Airframe Component Improvement Program that includes development of new Rotor Blades that will result in significant performance improvement for the Chinook such as gaining an additional 1500 lbs of lift, improving erosion protection, and reducing retreating blade stall.</p>											
<b>B. Accomplishments/Planned Program (\$ in Millions)</b>											
							<b>FY 2009</b>	<b>FY 2010</b>	<b>FY 2011 Base</b>	<b>FY 2011 OCO</b>	<b>FY 2011 Total</b>
Program #1							0.489	0.548	0.503	0.000	0.503
Continue in-house and Program Management Administration											
<i>FY 2009 Accomplishments:</i>											
FY 2009											
<i>FY 2010 Plans:</i>											
FY 2010											
<i>FY 2011 Base Plans:</i>											
FY 2011 Base											

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Army			DATE: February 2010			
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 7: Operational Systems Development	R-1 ITEM NOMENCLATURE PE 0203744A: Aircraft Modifications/Product Improvement Programs	PROJECT 430: IMPR CARGO HELICOPTER				
B. Accomplishments/Planned Program (\$ in Millions)						
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
FY 2011 OCO Plans: FY 2011 OCO						
Program #2  714 Engine Component Improvement Program  FY 2009 Accomplishments: FY 2009  FY 2010 Plans: FY 2010  FY 2011 Base Plans: FY 2011 Base  FY 2011 OCO Plans: FY 2011 OCO		3.955	6.292	6.800	0.000	6.800
Program #3  Airframe Component Improvement Program  FY 2009 Accomplishments: FY 2009  FY 2010 Plans: FY 2010		5.940	3.602	3.593	0.000	3.593

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Army				DATE: February 2010				
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B. Accomplishments/Planned Program (\$ in Millions)								
				FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
FY 2011 Base Plans: FY 2011 Base								
FY 2011 OCO Plans: FY 2011 OCO								
Program #4  Health and Usage Monitoring (HUMS)  FY 2009 Accomplishments: FY 2009  FY 2010 Plans: FY 2010  FY 2011 Base Plans: FY 2011 Base  FY 2011 OCO Plans: FY 2011 OCO				3.200	0.000	0.000	0.000	0.000
Program #5  Rotary Wing Helicopter Crash Worthy Seating  FY 2009 Accomplishments: FY 2009				0.000	0.000	10.143	0.000	10.143

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Army			DATE: February 2010		
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B. Accomplishments/Planned Program (\$ in Millions)					
	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
FY 2010 Plans: FY 2010					
FY 2011 Base Plans: FY 2011 Base					
FY 2011 OCO Plans: FY 2011 OCO					
Program #6  Small Business Innovative Research/Small Business Technology Transfer Programs (SBIR/STTR)	0.000	0.301	0.000	0.000	0.000
FY 2009 Accomplishments: FY 2009					
FY 2010 Plans: FY 2010					
FY 2011 Base Plans: FY 2011 Base					
FY 2011 OCO Plans: FY 2011 OCO					
Accomplishments/Planned Programs Subtotals	13.584	10.743	21.039	0.000	21.039

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Army									DATE: February 2010			
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 7: Operational Systems Development				R-1 ITEM NOMENCLATURE PE 0203744A: Aircraft Modifications/Product Improvement Programs				PROJECT 430: IMPR CARGO HELICOPTER				
C. Other Program Funding Summary (\$ in Millions)												
Line Item	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total	FY 2012	FY 2013	FY 2014	FY 2015	Cost To Complete	Total Cost	
• Ord. #1: APA, SSN AA0252, CH-47 CARGO HELICOPTER MODS (MYP) (Including Adv Proc and Initial Spares)	730.253	102.876	0.000	0.000	0.000	80.353	195.501	288.754	315.091	6,622.220	8,335.048	
• Ord. #2: APA, SSN AA05105000, CH-47 SLEP	0.000	345.939	0.000	0.000	0.000	427.322	588.551	631.834	754.968	2,073.835	4,822.449	
• Ord. #3: APA, SSN A05008, CH-47 CARGO HELICOPTER NEW BUILD (Including Adv Proc)	592.211	706.024	0.000	0.000	0.000	865.231	187.141	282.525	259.962	155.000	3,048.094	
D. Acquisition Strategy												
The CH-47F program replaces one for one, the aging CH-47D aircraft by FY2020, incorporates a new machined airframe, and includes a new Common Avionics Architecture System (CAAS) cockpit with digital communication/navigation capability allowing improved interoperability on the digital battlefield. The CH-47F program includes recapitalization of key dynamic components, bringing them to a near zero time.												
E. Performance Metrics												
Performance metrics used in the preparation of this justification material may be found in the FY 2010 Army Performance Budget Justification Book, dated May 2010.												

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Army										DATE: February 2010			
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 7: Operational Systems Development				R-1 ITEM NOMENCLATURE PE 0203744A: Aircraft Modifications/Product Improvement Programs				PROJECT 430: IMPR CARGO HELICOPTER					
Product Development (\$ in Millions)													
				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
EMD	C/CPIF	ATTC Ft Rucker, AL	117.221	0.000		0.000		0.000		0.000	Continuing	Continuing	117.098
TOCR	C/CPIF	RDEC Huntsville, AL	1.600	0.000		0.000		0.000		0.000	Continuing	Continuing	1.600
Low Maintenance Rotor Hub	C/CPIF	Boeing Philadelphia, PA	7.685	0.000		0.000		0.000		0.000	Continuing	Continuing	0
Technical Support	C/CPFF	ATTC Ft Rucker, AL	10.158	0.000		0.000		0.000		0.000	Continuing	Continuing	0
714 Engine Component Improvement Program	C/CPFF	Honeywell Alberque, NM	23.055	6.292		6.800		0.000		6.800	Continuing	Continuing	0
Airframe Component Improvement Program	C	Nothing entered for Activity and Location. Location could not be determined.	10.018	3.602		3.593		0.000		3.593	Continuing	Continuing	0
Health and Usage Monitoring (HUMS)	C	Nothing entered for Activity and Location. Location could not be determined.	39.600	0.000		0.000		0.000		0.000	Continuing	Continuing	0
Rotary Wing Helicopter Crash Worthy Seating	C	Nothing entered for Activity and Location. Location could not be determined.	0.000	0.000		10.143		0.000		10.143	Continuing	Continuing	0
Subtotal			209.337	9.894		20.536		0.000		20.536			118.698

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<b>Exhibit R-3, RDT&amp;E Project Cost Analysis: PB 2011 Army</b>											<b>DATE:</b> February 2010		
<b>APPROPRIATION/BUDGET ACTIVITY</b> 2040: <i>Research, Development, Test &amp; Evaluation, Army</i> BA 7: <i>Operational Systems Development</i>				<b>R-1 ITEM NOMENCLATURE</b> PE 0203744A: <i>Aircraft Modifications/Product Improvement Programs</i>				<b>PROJECT</b> 430: <i>IMPR CARGO HELICOPTER</i>					
<b>Product Development (\$ in Millions)</b>													
				<b>FY 2010</b>		<b>FY 2011 Base</b>		<b>FY 2011 OCO</b>		<b>FY 2011 Total</b>			
<b>Cost Category Item</b>	<b>Contract Method &amp; Type</b>	<b>Performing Activity &amp; Location</b>	<b>Total Prior Years Cost</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
<b>Remarks</b>													
 <b>Support (\$ in Millions)</b>													
				<b>FY 2010</b>		<b>FY 2011 Base</b>		<b>FY 2011 OCO</b>		<b>FY 2011 Total</b>			
<b>Cost Category Item</b>	<b>Contract Method &amp; Type</b>	<b>Performing Activity &amp; Location</b>	<b>Total Prior Years Cost</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
PMO/OGA	C	Various government Location could not be determined.	15.929	0.548		0.503		0.000		0.503	Continuing	Continuing	0
SBIR/STTR	C	Nothing entered for Activity and Location. Location could not be determined.	0.814	0.301		0.000		0.000		0.000	Continuing	Continuing	0
<b>Subtotal</b>			16.743	0.849		0.503		0.000		0.503			0.000
<b>Remarks</b>													

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<b>Exhibit R-3, RDT&amp;E Project Cost Analysis: PB 2011 Army</b>											<b>DATE:</b> February 2010		
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<b>Test and Evaluation (\$ in Millions)</b>													
				<b>FY 2010</b>		<b>FY 2011 Base</b>		<b>FY 2011 OCO</b>		<b>FY 2011 Total</b>			
<b>Cost Category Item</b>	<b>Contract Method &amp; Type</b>	<b>Performing Activity &amp; Location</b>	<b>Total Prior Years Cost</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
DT/OT	C	Various government Location could not be determined.	25.527	0.000		0.000		0.000		0.000	Continuing	Continuing	0
Live Fire Test & Eval	C	Contract/Govt Location could not be determined.	6.365	0.000		0.000		0.000		0.000	Continuing	Continuing	0
Live Fire Test & Eval - 2	C	Nothing entered for Activity and Location. Location could not be determined.	0.050	0.000		0.000		0.000		0.000	Continuing	Continuing	0
Test Analysis	C	Various Government Location could not be determined.	1.500	0.000		0.000		0.000		0.000	Continuing	Continuing	0
<b>Subtotal</b>			33.442	0.000		0.000		0.000		0.000			0.000
<b>Remarks</b>													

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<b>Exhibit R-3, RDT&amp;E Project Cost Analysis: PB 2011 Army</b>											<b>DATE:</b> February 2010		
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<b>Management Services (\$ in Millions)</b>													
				<b>FY 2010</b>		<b>FY 2011 Base</b>		<b>FY 2011 OCO</b>		<b>FY 2011 Total</b>			
<b>Cost Category Item</b>	<b>Contract Method &amp; Type</b>	<b>Performing Activity &amp; Location</b>	<b>Total Prior Years Cost</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
CAMBER/Westar	SS/FP	Huntsville AL	3.901	0.000		0.000		0.000		0.000	0	3.901	3.901
<b>Subtotal</b>			3.901	0.000		0.000		0.000		0.000	0.000	3.901	3.901
<b>Remarks</b>													
			<b>Total Prior Years Cost</b>	<b>FY 2010</b>		<b>FY 2011 Base</b>		<b>FY 2011 OCO</b>		<b>FY 2011 Total</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
<b>Project Cost Totals</b>			263.423	10.743		21.039		0.000		21.039			122.599
<b>Remarks</b>													

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2011 Army								<b>DATE:</b> February 2010			
<b>APPROPRIATION/BUDGET ACTIVITY</b> 2040: <i>Research, Development, Test &amp; Evaluation, Army</i> BA 7: <i>Operational Systems Development</i>				<b>R-1 ITEM NOMENCLATURE</b> PE 0203744A: <i>Aircraft Modifications/Product Improvement Programs</i>				<b>PROJECT</b> 504: <i>BLACK HAWK RECAPITALIZATION/MODERNIZATION</i>			
<b>COST (\$ in Millions)</b>	<b>FY 2009 Actual</b>	<b>FY 2010 Estimate</b>	<b>FY 2011 Base Estimate</b>	<b>FY 2011 OCO Estimate</b>	<b>FY 2011 Total Estimate</b>	<b>FY 2012 Estimate</b>	<b>FY 2013 Estimate</b>	<b>FY 2014 Estimate</b>	<b>FY 2015 Estimate</b>	<b>Cost To Complete</b>	<b>Total Cost</b>
504: <i>BLACK HAWK RECAPITALIZATION/MODERNIZATION</i>	34.196	38.953	20.640	0.000	20.640	22.231	22.192	22.783	22.853	Continuing	Continuing
Quantity of RDT&E Articles											
<b>A. Mission Description and Budget Item Justification</b> <p>The UH-60 BLACK HAWK serves as the Army's utility helicopter in the Future Force. It is used for air assault, general support, aeromedical evacuation (MEDEVAC), and command and control in active and reserve component theater, corps, division, and Table of Distribution and Allowances (TDA) units. The UH-60A entered service in fiscal year 1978 (FY78), and the newer model UH-60L in FY89. The Army's last procurement of UH-60L helicopters was FY06. The Army has established a recapitalization goal for its systems of maintaining the fleet's average age at the design half-life or less. The UH-60 was designed for a 20 year service life. The oldest UH-60As are now over 32 years old, and the average age of the UH-60A fleet is 21 years old. The increased operational tempo, coupled with the technological age of the basic airframe, components, and systems, is having an adverse impact on the operational readiness (OR) and operating and support (O&amp;S) costs of the over 1500 aircraft UH-60 fleet. In addition, the UH-60A/L helicopters lack the necessary digital avionics architecture to meet current and future Army and Joint Service interoperability communication requirements. The Army has determined that an upgrade program is required to address these issues. An Operational Requirements Document (ORD) for recapitalization of the BLACK HAWK fleet was approved by the Joint Requirements Oversight Council (JROC) in March, 2001. The ORD describes an evolutionary, block approach to transform the utility helicopter force to one that is more deployable, responsive, and less expensive to operate. A revised ORD was signed by the JROC on July 24, 2006, updating key performance parameters for survivability and force protection. The UH-60M provides a common platform for the modernized air ambulance MEDEVAC mission equipment package (MEP). RDTE funds are required to develop, integrate, test and qualify the UH-60M Upgrade configuration. FY05 funded the initial efforts to move the UH-60M program to an Upgrade configuration which includes the Fly By Wire (FBW), Full Authority Digital Engine Control (FADEC) and the Common Avionics Architecture System (CAAS), which is the common cockpit to be used by UH-60M, CH-47 and Special Operations. Incorporation of CAAS will minimize the future sustainment costs for these aircraft platforms. A successful UH-60M Upgrade IPR decision was obtained in January 2006. On May 18, 2007, the Office of the Secretary of Defense (OSD) Overarching Integrated Product Team (OIPT) report recommended approval for the UH-60M program to enter Full Rate Production (FRP) and approved the Army request for advanced procurement for seven UH-60M Upgrade aircraft and recommended a paper Defense Acquisition Board (DAB). On June 26, 2007, the Black Hawk Full Rate Production (FRP) Acquisition Decision Memorandum (ADM) was signed. The approved ADM authorizes entry into FRP for the Black Hawk Upgrade Program to include both the UH-60M and HH-60M baseline aircraft. The ADM also provided for FY08 advanced procurement for long lead items to support the initial cut-in aircraft for the UH/HH-60M Upgrade effort. Based on increasing demands for helicopters to support Army Force Generation Model (AFORGEN) requirements, the Configuration Steering Board (CSB) recommended to the Defense Acquisition Executive (DAE) to restructure the UH-60 Modernization Program. The recommendation included three parts: 1) producing UH-60M baseline aircraft only; 2) complete DT on FBW aircraft; and 3) migrate selected technologies from the upgrade development efforts to the baseline configuration. The recommendation has been submitted to the DAE.FY10 funds continue on-going development of the FADEC integration program, FBW, the common avionics architecture system, and efforts for the development and test of the</p>											

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Army				DATE: February 2010		
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 7: Operational Systems Development		R-1 ITEM NOMENCLATURE PE 0203744A: Aircraft Modifications/Product Improvement Programs		PROJECT 504: BLACK HAWK RECAPITALIZATION/MODERNIZATION		
UH-60M Upgrade aircraft.FY11 funds continue on-going development of the FADEC integration program, FBW, the common avionics architecture system, and the development and testing of the UH-60M Upgrade aircraft.						
B. Accomplishments/Planned Program (\$ in Millions)						
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Program #1  Continue airframe, avionics and power plant development based on finalized configuration as a result of airframe CDR. Conduct System Preliminary Design Review and Critical Design Review  FY 2009 Accomplishments: FY 2009  FY 2010 Plans: FY 2010  FY 2011 Base Plans: FY 2011 Base  FY 2011 OCO Plans: FY 2011 OCO		9.195	6.337	2.904	0.000	2.904
Program #2  Software Development - includes failure modes and effects criticality analysis; software design descriptions; qualification testing of mission critical computer resources; update software requirements specifications and multiplex interface control documents; and prepare software design descriptions  FY 2009 Accomplishments: FY 2009		5.600	9.978	7.982	0.000	7.982

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Army			DATE: February 2010		
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 7: Operational Systems Development	R-1 ITEM NOMENCLATURE PE 0203744A: Aircraft Modifications/Product Improvement Programs	PROJECT 504: BLACK HAWK RECAPITALIZATION/MODERNIZATION			
B. Accomplishments/Planned Program (\$ in Millions)					
	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
FY 2010 Plans: FY 2010  FY 2011 Base Plans: FY 2011 Base  FY 2011 OCO Plans: FY 2011 OCO					
Program #3  Continue Producibility Engineering and Planning (PEP) as well as manufacturing planning and control  FY 2009 Accomplishments: FY 2009  FY 2010 Plans: FY 2010  FY 2011 Base Plans: FY 2011 Base  FY 2011 OCO Plans: FY 2011 OCO	1.797	0.000	0.000	0.000	0.000
Program #4  Prototype build and delivery to support Development Testing (DT)	3.390	0.000	0.000	0.000	0.000

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Army			DATE: February 2010		
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 7: Operational Systems Development	R-1 ITEM NOMENCLATURE PE 0203744A: Aircraft Modifications/Product Improvement Programs	PROJECT 504: BLACK HAWK RECAPITALIZATION/MODERNIZATION			
B. Accomplishments/Planned Program (\$ in Millions)					
	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
FY 2009 Accomplishments: FY 2009					
FY 2010 Plans: FY 2010					
FY 2011 Base Plans: FY 2011 Base					
FY 2011 OCO Plans: FY 2011 OCO					
Program #5  Testing (Conduct flight testing, EME testing and ground testing)	7.899	14.650	9.525	0.000	9.525
FY 2009 Accomplishments: FY 2009					
FY 2010 Plans: FY 2010					
FY 2011 Base Plans: FY 2011 Base					
FY 2011 OCO Plans: FY 2011 OCO					
Program #6	1.135	0.000	0.000	0.000	0.000

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Army			DATE: February 2010			
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 7: Operational Systems Development	R-1 ITEM NOMENCLATURE PE 0203744A: Aircraft Modifications/Product Improvement Programs	PROJECT 504: BLACK HAWK RECAPITALIZATION/MODERNIZATION				
B. Accomplishments/Planned Program (\$ in Millions)						
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Preparation of training documentation for Logistics Demonstration Familiarization Course, Government Test Pilot Familiarization Course and Test Data Collection Training Course  FY 2009 Accomplishments: FY 2009  FY 2010 Plans: FY 2010  FY 2011 Base Plans: FY 2011 Base  FY 2011 OCO Plans: FY 2011 OCO						
Program #7  Conduct training course to support test  FY 2009 Accomplishments: FY 2009  FY 2010 Plans: FY 2010  FY 2011 Base Plans: FY 2011 Base  FY 2011 OCO Plans: FY 2011 OCO		1.029	0.000	0.000	0.000	0.000

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Army				DATE: February 2010		
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 7: Operational Systems Development		R-1 ITEM NOMENCLATURE PE 0203744A: Aircraft Modifications/Product Improvement Programs		PROJECT 504: BLACK HAWK RECAPITALIZATION/MODERNIZATION		
B. Accomplishments/Planned Program (\$ in Millions)						
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Program #8  Maintain Continuous Acquisition and Life Cycle Support (CALS)/Contractor Integrated Technical Information Service (CITIS) and deliver Interface Control Documents (ICD's)  FY 2009 Accomplishments: FY 2009  FY 2010 Plans: FY 2010  FY 2011 Base Plans: FY 2011 Base  FY 2011 OCO Plans: FY 2011 OCO		0.286	0.174	0.136	0.000	0.136
Program #9  Support Equipment  FY 2009 Accomplishments: FY 2009  FY 2010 Plans: FY 2010  FY 2011 Base Plans: FY 2011 Base		0.141	0.092	0.093	0.000	0.093

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Army				DATE: February 2010			
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 7: Operational Systems Development		R-1 ITEM NOMENCLATURE PE 0203744A: Aircraft Modifications/Product Improvement Programs		PROJECT 504: BLACK HAWK RECAPITALIZATION/MODERNIZATION			
B. Accomplishments/Planned Program (\$ in Millions)							
			FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
FY 2011 OCO Plans: FY 2011 OCO							
Program #10 Full Authority Digital Engine Control (FADEC) Integration  FY 2009 Accomplishments: FY 2009  FY 2010 Plans: FY 2010  FY 2011 Base Plans: FY 2011 Base  FY 2011 OCO Plans: FY 2011 OCO			1.974	1.100	0.000	0.000	0.000
Program #11 Operator Situational Awareness System - MEDEVAC  FY 2009 Accomplishments: FY 2009  FY 2010 Plans: FY 2010			1.750	0.000	0.000	0.000	0.000

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Army				DATE: February 2010				
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 7: Operational Systems Development		R-1 ITEM NOMENCLATURE PE 0203744A: Aircraft Modifications/Product Improvement Programs		PROJECT 504: BLACK HAWK RECAPITALIZATION/MODERNIZATION				
B. Accomplishments/Planned Program (\$ in Millions)								
				FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
FY 2011 Base Plans: FY 2011 Base								
FY 2011 OCO Plans: FY 2011 OCO								
Program #12 UH-60 Aviation Software Performance Assessment Test Bed				0.000	5.690	0.000	0.000	0.000
FY 2009 Accomplishments: FY 2009								
FY 2010 Plans: FY 2010								
FY 2011 Base Plans: FY 2011 Base								
FY 2011 OCO Plans: FY 2011 OCO								
Program #13 Small Business Innovation Research (SBIR) and Small Business Technology Transfer (STTR)				0.000	0.932	0.000	0.000	0.000
FY 2009 Accomplishments: FY 2009								

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2011 Army							<b>DATE:</b> February 2010				
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<b><u>B. Accomplishments/Planned Program (\$ in Millions)</u></b>											
						<b>FY 2009</b>	<b>FY 2010</b>	<b>FY 2011 Base</b>	<b>FY 2011 OCO</b>	<b>FY 2011 Total</b>	
<i>FY 2010 Plans:</i> FY 2010  <i>FY 2011 Base Plans:</i> FY 2011 Base  <i>FY 2011 OCO Plans:</i> FY 2011 OCO											
Accomplishments/Planned Programs Subtotals						34.196	38.953	20.640	0.000	20.640	
<b><u>C. Other Program Funding Summary (\$ in Millions)</u></b>											
<b><u>Line Item</u></b>	<b><u>FY 2009</u></b>	<b><u>FY 2010</u></b>	<b><u>FY 2011 Base</u></b>	<b><u>FY 2011 OCO</u></b>	<b><u>FY 2011 Total</u></b>	<b><u>FY 2012</u></b>	<b><u>FY 2013</u></b>	<b><u>FY 2014</u></b>	<b><u>FY 2015</u></b>	<b><u>Cost To Complete</u></b>	<b><u>Total Cost</u></b>
• Ord. #1: <i>A05002 BLACK HAWK (MYP)</i>	1,111.479	1,390.822	1,351.098	40.500	1,391.598	1,575.968	1,422.890	1,439.108	1,441.680	Continuing	Continuing
<b><u>D. Acquisition Strategy</u></b>											
The UH-60 BLACK HAWK will serve as the Army's utility helicopter in the Future Force. The Army revised the acquisition strategy for the UH-60M to procure new UH-60M helicopters in lieu of Recap/Upgrade. This program addresses current UH-60 fleet aging problems such as decreasing operational readiness (OR) rates and increasing Operations and Sustainment costs, including all top-ten cost drivers, and provides a common, modernized platform for the UH-60 utility and MEDEVAC fleet of the future. The program will be executed over four phases: Pre-System Development/Demonstration Phase (FY00-01), System Development/Demonstration Phase (Baseline FY01-07) (Upgrade FY05-11), Production/Readiness Phase (FY05-26), and Operations and Sustainment Phase (FY06-FY45). .											
<b><u>E. Performance Metrics</u></b>											
Performance metrics used in the preparation of this justification material may be found in the FY 2010 Army Performance Budget Justification Book, dated May 2010.											

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Army											DATE: February 2010			
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 7: Operational Systems Development					R-1 ITEM NOMENCLATURE PE 0203744A: Aircraft Modifications/Product Improvement Programs					PROJECT 504: BLACK HAWK RECAPITALIZATION/MODERNIZATION				
Product Development (\$ in Millions)														
				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total				
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract	
Design, Integration & Qualification Contract	SS/CPAF	Sikorsky Aircraft Co Stratford, CT	364.215	0.000		0.000		0.000		0.000	Continuing	Continuing	0	
UH-60M Upgrade Pre-Planned Product Improvement Contract	SS/CPAF	Sikorsky Aircraft Co Stratford, CT	247.033	23.543		13.364		0.000		13.364	Continuing	Continuing	0	
Development Support - Organic	C	UH PMO/matrix Location could not be determined.	22.042	0.324		0.329		0.000		0.329	Continuing	Continuing	0	
Development Support - Contractor	C/FP	Support Contractors Location could not be determined.	17.325	1.410		0.972		0.000		0.972	Continuing	Continuing	0	
IMD-HUMS Development Support - Organic	C	Aviation Applied Tech Directorate (AATD) Matrix Location could not be determined.	6.953	0.000		0.000		0.000		0.000	Continuing	Continuing	0	
IMD-HUMS Development Support - Contractor	C/FP	Goodrich Vergennes, VT	46.862	0.000		0.000		0.000		0.000	Continuing	Continuing	0	
MAST Development Support - Organic	C	Other Government Agency Support Location could not be determined.	1.429	0.000		0.000		0.000		0.000	Continuing	Continuing	0	
MAST Development Support - Contractor	C	Smith Industries Clear Water , FL	5.708	0.000		0.000		0.000		0.000	Continuing	Continuing	0	
	C		1.920	0.200		0.000		0.000		0.000	Continuing	Continuing	0	

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Product Development (\$ in Millions)													
				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Full Authority Digital Engine Control (FADEC) Development - Organic		Nothing entered for Activity and Location. Location could not be determined.											
Full Authority Digital Engine Control (FADEC) Development - Contractor	C	Nothing entered for Activity and Location. Location could not be determined.	14.991	0.900		0.000		0.000		0.000	Continuing	Continuing	0
Internal Reprogramming - Payback for FY03	C	Nothing entered for Activity and Location. Location could not be determined.	3.413	0.000		0.000		0.000		0.000	Continuing	Continuing	0
HALS	C	Nothing entered for Activity and Location. Location could not be determined.	12.675	0.000		0.000		0.000		0.000	Continuing	Continuing	0
Performance Support System - NG (Apache)	C	Other Government Agency Support Location could not be determined.	1.000	0.000		0.000		0.000		0.000	Continuing	Continuing	0
Transfer to Apache	C	Nothing entered for Activity and Location.	3.000	0.000		0.000		0.000		0.000	Continuing	Continuing	0

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Army										DATE: February 2010			
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 7: Operational Systems Development				R-1 ITEM NOMENCLATURE PE 0203744A: Aircraft Modifications/Product Improvement Programs				PROJECT 504: BLACK HAWK RECAPITALIZATION/MODERNIZATION					
Product Development (\$ in Millions)													
				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
		Location could not be determined.											
Improved Turbine Engine Program (ITEP) Engine Development and Qualification	C	TBD Location could not be determined.	2.000	0.000		0.000		0.000		0.000	Continuing	Continuing	0
Operator Situational Awareness System - MEDEVAC	C	Nothing entered for Activity and Location. Location could not be determined.	2.400	0.000		0.000		0.000		0.000	Continuing	Continuing	0
UH-60 Aviation Software Performance Assessment Test Bed	C	Nothing entered for Activity and Location. Location could not be determined.	0.000	5.690		0.000		0.000		0.000	Continuing	Continuing	0
Aircraft Component Remediation	C	Nothing entered for Activity and Location. Location could not be determined.	0.000	0.000		0.000		0.000		0.000	Continuing	Continuing	0
Subtotal			752.966	32.067		14.665		0.000		14.665			0.000
Remarks IMD-HUMS demonstration program was funded in FY02-05 and is separate from the UH-60M program.MAST demonstration program was funded in FY04 and FY05 and is separate from the UH-60M and the HUMS programs.													

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Army											DATE: February 2010			
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 7: Operational Systems Development				R-1 ITEM NOMENCLATURE PE 0203744A: Aircraft Modifications/Product Improvement Programs				PROJECT 504: BLACK HAWK RECAPITALIZATION/MODERNIZATION						
Support (\$ in Millions)														
				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total				
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract	
Cost Analysis Support	C	AMCOM Matrix Location could not be determined.	0.876	0.081		0.082		0.000		0.082	Continuing	Continuing	0	
Logistics Analysis Support - Organic	C	AMCOM Matrix Location could not be determined.	1.892	0.259		0.130		0.000		0.130	Continuing	Continuing	0	
Logistics Analysis Support - Support Contractor	C	Support Contractor Location could not be determined.	1.960	0.216		0.179		0.000		0.179	Continuing	Continuing	0	
Subtotal			4.728	0.556		0.391		0.000		0.391			0.000	
Remarks														
Test and Evaluation (\$ in Millions)														
				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total				
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract	
Test Planning, Test and Evaluation	C	Various Activities Location could not be determined.	33.663	4.967		4.700		0.000		4.700	Continuing	Continuing	0	
Test Planning, Test and Evaluation - 2	C	Various Activities Location could not be determined.	0.746	0.239		0.000		0.000		0.000	Continuing	Continuing	0	

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<b>Exhibit R-3, RDT&amp;E Project Cost Analysis: PB 2011 Army</b>											<b>DATE:</b> February 2010		
<b>APPROPRIATION/BUDGET ACTIVITY</b> 2040: <i>Research, Development, Test &amp; Evaluation, Army</i> BA 7: <i>Operational Systems Development</i>				<b>R-1 ITEM NOMENCLATURE</b> PE 0203744A: <i>Aircraft Modifications/Product Improvement Programs</i>				<b>PROJECT</b> 504: <i>BLACK HAWK RECAPITALIZATION/MODERNIZATION</i>					
<b>Test and Evaluation (\$ in Millions)</b>													
				<b>FY 2010</b>		<b>FY 2011 Base</b>		<b>FY 2011 OCO</b>		<b>FY 2011 Total</b>			
<b>Cost Category Item</b>	<b>Contract Method &amp; Type</b>	<b>Performing Activity &amp; Location</b>	<b>Total Prior Years Cost</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
<b>Subtotal</b>			34.409	5.206		4.700		0.000		4.700			0.000
<b>Remarks</b>													
<b>Management Services (\$ in Millions)</b>													
				<b>FY 2010</b>		<b>FY 2011 Base</b>		<b>FY 2011 OCO</b>		<b>FY 2011 Total</b>			
<b>Cost Category Item</b>	<b>Contract Method &amp; Type</b>	<b>Performing Activity &amp; Location</b>	<b>Total Prior Years Cost</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
PM Support - Organic	C	UH PMO/matrix Location could not be determined.	10.059	0.665		0.670		0.000		0.670	Continuing	Continuing	0
PM Support - Contract	C/FP	AMCOM Express Contractor Location could not be determined.	5.596	0.459		0.214		0.000		0.214	Continuing	Continuing	0
SIBR/STTR	C	Nothing entered for Activity and Location. Location could not be determined.	4.383	0.000		0.000		0.000		0.000	Continuing	Continuing	0
<b>Subtotal</b>			20.038	1.124		0.884		0.000		0.884			0.000
<b>Remarks</b>													

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<b>Exhibit R-3, RDT&amp;E Project Cost Analysis:</b> PB 2011 Army							<b>DATE:</b> February 2010					
<b>APPROPRIATION/BUDGET ACTIVITY</b> 2040: <i>Research, Development, Test &amp; Evaluation, Army</i> BA 7: <i>Operational Systems Development</i>				<b>R-1 ITEM NOMENCLATURE</b> PE 0203744A: <i>Aircraft Modifications/Product Improvement Programs</i>			<b>PROJECT</b> 504: <i>BLACK HAWK RECAPITALIZATION/MODERNIZATION</i>					
		<b>Total Prior Years Cost</b>	<b>FY 2010</b>		<b>FY 2011 Base</b>		<b>FY 2011 OCO</b>		<b>FY 2011 Total</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
<b>Project Cost Totals</b>		812.141	38.953		20.640		0.000		20.640			0.000
<b>Remarks</b>												

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**DATE:** February 2010

## PROJECT

504: BLACK HAWK RECAPITALIZATION/

## MODERNIZATION

UH-60M Upgrade LUT

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Exhibit R-4A, RDT&E Schedule Details: PB 2011 Army			DATE: February 2010	
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 7: Operational Systems Development	R-1 ITEM NOMENCLATURE PE 0203744A: Aircraft Modifications/Product Improvement Programs	PROJECT 504: BLACK HAWK RECAPITALIZATION/MODERNIZATION		
Schedule Details				
	Start		End	
Event	Quarter	Year	Quarter	Year
UH-60M Upgrade LUT	3	2009	3	2009

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2011 Army								<b>DATE:</b> February 2010			
<b>APPROPRIATION/BUDGET ACTIVITY</b> 2040: <i>Research, Development, Test &amp; Evaluation, Army</i> BA 7: <i>Operational Systems Development</i>				<b>R-1 ITEM NOMENCLATURE</b> PE 0203744A: <i>Aircraft Modifications/Product Improvement Programs</i>				<b>PROJECT</b> D12: <i>Longbow Apache Operational Systems Development</i>			
<b>COST (\$ in Millions)</b>	<b>FY 2009 Actual</b>	<b>FY 2010 Estimate</b>	<b>FY 2011 Base Estimate</b>	<b>FY 2011 OCO Estimate</b>	<b>FY 2011 Total Estimate</b>	<b>FY 2012 Estimate</b>	<b>FY 2013 Estimate</b>	<b>FY 2014 Estimate</b>	<b>FY 2015 Estimate</b>	<b>Cost To Complete</b>	<b>Total Cost</b>
D12: <i>Longbow Apache Operational Systems Development</i>	34.940	13.214	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing
Quantity of RDT&E Articles											
<b>A. Mission Description and Budget Item Justification</b> FY10 funding continues the Light Weight Missile Launcher (LWML) development, testing, and integration. First Unit Equipped is planned for 1st quarter FY12. The LWML will provide weight savings per launcher, commonality, producibility and improved electronics reliability to the Apache fleet. The LWML project was competitively awarded in FY08 as an incrementally funded FFP contract. In addition, the AAH PMO and the Night Vision and Electronic Sensors Directorate (NVESD) mutually agreed to enter into a Technology Transition Agreement (TTA) for the purpose of defining technology deliverables from the Electronic Image Intensifier (EI2) for Pilotage Technology Transition Initiative (TTI) to the Arrowhead Modernized-Target Acquisition Designation Sight/Pilot Night Vision Sensor (M-TADS/PNVS) program. A new camera will provide high quality, Aviator's Night Vision Imaging System (ANVIS)-equivalent (the current Army aviation night goggles) performance imagery that can be fused with thermal imagery for improved nighttime pilotage and situational awareness over a broader range of degraded visual conditions. FY09: Project D12, Longbow Apache Operational System Development, was funded for the accelerated fielding of the Composite Main Rotor Blade (CMRB), the development of four new Apache Maintenance Part Task Trainers (PTT), and the development of a Light Weight Missile Launcher (LWML), an upgrade to the current M299 launcher. An updated state-of-the-art CMRB is in development for the Block III Apache. The effort in this project provides funding for qualification and enables accelerated fielding for the Longbow Apache Attack Helicopter Block I/II fleet. The CMRB provides twice the time on wing and provides more lift which will have a significant impact to combat operations in OIF/OEF. The development of Apache Maintenance Part Task Trainers addresses the requirements of the US Army Aviation Logistics School for additional maintenance training devices to meet the increasing volume of initial entry students for Military Occupational Specialties 15R and 15Y. The new AH-64D Maintenance PTT are: Wing PTT, Integrated Pressurized Air System PTT, Gun PTT, and Multiplex PTT. FY 2010 total does not include any previously requested funding for current FY 2009 Overseas Contingency Operations (OCO) requirements, and no FY 2010 OCO funds have been previously requested in the RDTE Project of D12. FY 2009 funding totals do not include any previously requested funding for current FY 2009 Overseas Contingency Operations (OCO) requirements, and no FY 2009 OCO funds have been previously requested in the RDTE Project of D12.											
<b>B. Accomplishments/Planned Program (\$ in Millions)</b>											
						<b>FY 2009</b>	<b>FY 2010</b>	<b>FY 2011 Base</b>	<b>FY 2011 OCO</b>	<b>FY 2011 Total</b>	
Program #1						11.432	0.000	0.000	0.000	0.000	

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Army			DATE: February 2010			
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 7: Operational Systems Development	R-1 ITEM NOMENCLATURE PE 0203744A: Aircraft Modifications/Product Improvement Programs	PROJECT D12: <i>Longbow Apache Operational Systems Develop</i>				
B. Accomplishments/Planned Program (\$ in Millions)						
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Boeing Non-Recurring Engineering (NRE) Contract -- CMRB Acceleration Development  <i>FY 2009 Accomplishments:</i> FY 2009  <i>FY 2010 Plans:</i> FY 2010  <i>FY 2011 Base Plans:</i> FY 2011 Base  <i>FY 2011 OCO Plans:</i> FY 2011 OCO						
Program #2  SOFSA/L3 Inc. NRE Contract -- Apache Maintenance PTT  <i>FY 2009 Accomplishments:</i> FY 2009  <i>FY 2010 Plans:</i> FY 2010  <i>FY 2011 Base Plans:</i> FY 2011 Base  <i>FY 2011 OCO Plans:</i> FY 2011 OCO		13.950	0.000	0.000	0.000	0.000

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Army				DATE: February 2010		
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 7: Operational Systems Development		R-1 ITEM NOMENCLATURE PE 0203744A: Aircraft Modifications/Product Improvement Programs		PROJECT D12: LONGBOW APACHE OPERATIONAL SYSTEMS DEVELOP		
B. Accomplishments/Planned Program (\$ in Millions)						
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Program #3  Light Weight Missile Launcher (LWML) NRE Contract [Note: FY08 funds were moved with a 1414 action to the LWML Program and PM JAMS will report on the funding.]  FY 2009 Accomplishments: FY 2009  FY 2010 Plans: FY 2010  FY 2011 Base Plans: FY 2011 Base  FY 2011 OCO Plans: FY 2011 OCO		9.558	10.018	0.000	0.000	0.000
Program #4  Kiowa Warrior Vehicle Health & Usage Management System (add will be moved to PE 0604220)  FY 2009 Accomplishments: FY 2009  FY 2010 Plans: FY 2010  FY 2011 Base Plans: FY 2011 Base		0.000	0.000	0.000	0.000	0.000

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Army			DATE: February 2010			
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 7: Operational Systems Development	R-1 ITEM NOMENCLATURE PE 0203744A: Aircraft Modifications/Product Improvement Programs	PROJECT D12: <i>Longbow Apache Operational Systems Develop</i>				
B. Accomplishments/Planned Program (\$ in Millions)						
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
FY 2011 OCO Plans: FY 2011 OCO						
Program #5 Electronic Image Intensifier Technology Transition Initiative (EI2 TTI)  FY 2009 Accomplishments: FY 2009  FY 2010 Plans: FY 2010  FY 2011 Base Plans: FY 2011 Base  FY 2011 OCO Plans: FY 2011 OCO		0.000	2.826	0.000	0.000	0.000
Program #6 Small Business Innovative Research/Small Business Technology Transfer Programs  FY 2009 Accomplishments: FY 2009  FY 2010 Plans: FY 2010		0.000	0.370	0.000	0.000	0.000

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2011 Army				<b>DATE:</b> February 2010							
<b>APPROPRIATION/BUDGET ACTIVITY</b> 2040: <i>Research, Development, Test &amp; Evaluation, Army</i> BA 7: <i>Operational Systems Development</i>		<b>R-1 ITEM NOMENCLATURE</b> PE 0203744A: <i>Aircraft Modifications/Product Improvement Programs</i>		<b>PROJECT</b> D12: <i>Longbow Apache Operational Systems Develop</i>							
<b>B. Accomplishments/Planned Program (\$ in Millions)</b>											
				<b>FY 2009</b>	<b>FY 2010</b>	<b>FY 2011 Base</b>	<b>FY 2011 OCO</b>	<b>FY 2011 Total</b>			
<i>FY 2011 Base Plans:</i> FY 2011 Base											
<i>FY 2011 OCO Plans:</i> FY 2011 OCO											
Accomplishments/Planned Programs Subtotals				34.940	13.214	0.000	0.000	0.000			
<b>C. Other Program Funding Summary (\$ in Millions)</b>											
<b>Line Item</b>	<b>FY 2009</b>	<b>FY 2010</b>	<b>FY 2011 Base</b>	<b>FY 2011 OCO</b>	<b>FY 2011 Total</b>	<b>FY 2012</b>	<b>FY 2013</b>	<b>FY 2014</b>	<b>FY 2015</b>	<b>Cost To Complete</b>	<b>Total Cost</b>
• Ord. #1: <i>APA, SSN: AA6606</i>	1,816.922	589.050	393.769	199.200	592.969	314.719	194.549	72.039	75.056	590.123	4,245.427
• Ord. #2: <i>APA, SSN A05111</i>	0.000	218.626	493.831	0.000	493.831	723.691	1,204.748	1,650.747	1,233.025	5,358.900	10,883.568
• Ord. #3: <i>RDTE, 0203744A, D17</i>	192.169	150.013	93.320	0.000	93.320	81.640	51.216	40.332	27.143	Continuing	Continuing
<b>D. Acquisition Strategy</b>											
<p>There is no funding in this project for FY11.FY10, EI2 TTI -- NVESD is performing developmental flight testing with NVESD aircraft. Operational testing will be in the Apache aircraft. NVESD will manage the AAH PMO'S flight testing. FY10, LWML -- These funds are to complete contractor design, test, logistics development, and Government airworthiness qualification testing. Prior year funds have been used to initiate and sustain the contract for those activities. Missile R&amp;D funds were originally utilized for specification development, Request for Proposal generation, and contractor source selection. The project has traditional review and continuation points with Preliminary and Critical Design Reviews, a Production Readiness Review, and In-Process Review for a production decision. First Unit Equipped will be 1st quarter FY12.</p>											
<b>E. Performance Metrics</b>											
Performance metrics used in the preparation of this justification material may be found in the FY 2010 Army Performance Budget Justification Book, dated May 2010.											

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Army											DATE: February 2010			
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 7: Operational Systems Development					R-1 ITEM NOMENCLATURE PE 0203744A: Aircraft Modifications/Product Improvement Programs					PROJECT D12: LONGBOW APACHE OPERATIONAL SYSTEMS DEVELOP				
Product Development (\$ in Millions)														
				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total				
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract	
Boeing NRE -- CRMB	C/CPFF	Boeing Company Mesa, AZ	0.641	0.000		0.000		0.000		0.000	Continuing	Continuing	12.073	
SOFSA/L3 Inc. NRE -- TADSS	C/CPFF	SOFSA/L3 Inc. Lexington, KY	0.000	0.000		0.000		0.000		0.000	Continuing	Continuing	13.950	
Lockheed Martin -- LWML	C/FFP	LM Missiles & Fire Control Orlando, FL	0.000	3.907		0.000		0.000		0.000	Continuing	Continuing	13.465	
Kiowa Warrior (add will be moved)	C	Nothing entered for Activity and Location. Location could not be determined.	0.000	0.000		0.000		0.000		0.000	Continuing	Continuing	0	
Subtotal			0.641	3.907		0.000		0.000		0.000			39.488	
Remarks														
Support (\$ in Millions)														
				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total				
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract	
Small Business Innovative Research (SBIR) / Small Business Technology Transfer (STTR) Programs	C	Nothing entered for Activity and Location.	0.000	0.370		0.000		0.000		0.000	Continuing	Continuing	0	

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<b>Exhibit R-3, RDT&amp;E Project Cost Analysis: PB 2011 Army</b>											<b>DATE:</b> February 2010																																																																								
<b>APPROPRIATION/BUDGET ACTIVITY</b> 2040: <i>Research, Development, Test &amp; Evaluation, Army</i> BA 7: <i>Operational Systems Development</i>				<b>R-1 ITEM NOMENCLATURE</b> PE 0203744A: <i>Aircraft Modifications/Product Improvement Programs</i>				<b>PROJECT</b> D12: <i>Longbow Apache Operational Systems Develop</i>																																																																											
<p><b>Support (\$ in Millions)</b></p> <table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th colspan="4"></th> <th colspan="2">FY 2010</th> <th colspan="2">FY 2011 Base</th> <th colspan="2">FY 2011 OCO</th> <th>FY 2011 Total</th> <th colspan="3"></th> </tr> <tr> <th>Cost Category Item</th> <th>Contract Method &amp; Type</th> <th>Performing Activity &amp; Location</th> <th>Total Prior Years Cost</th> <th>Cost</th> <th>Award Date</th> <th>Cost</th> <th>Award Date</th> <th>Cost</th> <th>Award Date</th> <th>Cost</th> <th>Cost To Complete</th> <th>Total Cost</th> <th>Target Value of Contract</th> </tr> </thead> <tbody> <tr> <td></td> <td></td> <td>Location could not be determined.</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td align="right" colspan="3"><b>Subtotal</b></td> <td>0.000</td> <td>0.370</td> <td></td> <td>0.000</td> <td></td> <td>0.000</td> <td></td> <td>0.000</td> <td></td> <td></td> <td>0.000</td> </tr> </tbody> </table> <p><u>Remarks</u></p>																		FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total				Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract			Location could not be determined.												<b>Subtotal</b>			0.000	0.370		0.000		0.000		0.000			0.000														
				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total																																																																									
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract																																																																						
		Location could not be determined.																																																																																	
<b>Subtotal</b>			0.000	0.370		0.000		0.000		0.000			0.000																																																																						
<p><b>Test and Evaluation (\$ in Millions)</b></p> <table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th colspan="4"></th> <th colspan="2">FY 2010</th> <th colspan="2">FY 2011 Base</th> <th colspan="2">FY 2011 OCO</th> <th>FY 2011 Total</th> <th colspan="3"></th> </tr> <tr> <th>Cost Category Item</th> <th>Contract Method &amp; Type</th> <th>Performing Activity &amp; Location</th> <th>Total Prior Years Cost</th> <th>Cost</th> <th>Award Date</th> <th>Cost</th> <th>Award Date</th> <th>Cost</th> <th>Award Date</th> <th>Cost</th> <th>Cost To Complete</th> <th>Total Cost</th> <th>Target Value of Contract</th> </tr> </thead> <tbody> <tr> <td>Light Weight Missile Launcher (LWML)</td> <td>C</td> <td>(see Major Performers) Location could not be determined.</td> <td>0.000</td> <td>6.111</td> <td></td> <td>0.000</td> <td></td> <td>0.000</td> <td></td> <td>0.000</td> <td>Continuing</td> <td>Continuing</td> <td>6.111</td> </tr> <tr> <td>Elec Image Intensifier Tech Transition (EI2 TTI)</td> <td>C</td> <td>NVESD Ft. Belvoir, VA</td> <td>0.000</td> <td>2.826</td> <td></td> <td>0.000</td> <td></td> <td>0.000</td> <td></td> <td>0.000</td> <td>Continuing</td> <td>Continuing</td> <td>2.826</td> </tr> <tr> <td align="right" colspan="3"><b>Subtotal</b></td> <td>0.000</td> <td>8.937</td> <td></td> <td>0.000</td> <td></td> <td>0.000</td> <td></td> <td>0.000</td> <td></td> <td></td> <td>8.937</td> </tr> </tbody> </table> <p><u>Remarks</u></p>																		FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total				Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract	Light Weight Missile Launcher (LWML)	C	(see Major Performers) Location could not be determined.	0.000	6.111		0.000		0.000		0.000	Continuing	Continuing	6.111	Elec Image Intensifier Tech Transition (EI2 TTI)	C	NVESD Ft. Belvoir, VA	0.000	2.826		0.000		0.000		0.000	Continuing	Continuing	2.826	<b>Subtotal</b>			0.000	8.937		0.000		0.000		0.000			8.937
				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total																																																																									
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract																																																																						
Light Weight Missile Launcher (LWML)	C	(see Major Performers) Location could not be determined.	0.000	6.111		0.000		0.000		0.000	Continuing	Continuing	6.111																																																																						
Elec Image Intensifier Tech Transition (EI2 TTI)	C	NVESD Ft. Belvoir, VA	0.000	2.826		0.000		0.000		0.000	Continuing	Continuing	2.826																																																																						
<b>Subtotal</b>			0.000	8.937		0.000		0.000		0.000			8.937																																																																						

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**DATE:** February 2010

## PROJECT

D12: *Longbow Apache Operational Systems Develop*

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Exhibit R-4A, RDT&E Schedule Details: PB 2011 Army			DATE: February 2010	
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 7: Operational Systems Development	R-1 ITEM NOMENCLATURE PE 0203744A: Aircraft Modifications/Product Improvement Programs	PROJECT D12: <i>Longbow Apache Operational Systems Develop</i>		
Schedule Details				
	Start		End	
Event	Quarter	Year	Quarter	Year
Airworthiness Certification -- CMRB	4	2009	4	2009
First Delivery -- CMRB Block I/II Fleet	4	2010	4	2010
First Delivery IPAS PTT & Wing PTT	4	2009	4	2009
First Delivery Gun PTT	1	2010	1	2010
First Delivery Multiplex PTT	4	2010	4	2010
LWML PDR	1	2009	1	2009
LWML Integration	2	2009	1	2010
Electronic Image Intensifier Technology Transition Initiative (EI2 TTI)	4	2009	3	2010

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2011 Army								<b>DATE:</b> February 2010			
<b>APPROPRIATION/BUDGET ACTIVITY</b> 2040: <i>Research, Development, Test &amp; Evaluation, Army</i> BA 7: <i>Operational Systems Development</i>				<b>R-1 ITEM NOMENCLATURE</b> PE 0203744A: <i>Aircraft Modifications/Product Improvement Programs</i>				<b>PROJECT</b> D17: <i>APACHE BLOCK III</i>			
<b>COST (\$ in Millions)</b>	<b>FY 2009 Actual</b>	<b>FY 2010 Estimate</b>	<b>FY 2011 Base Estimate</b>	<b>FY 2011 OCO Estimate</b>	<b>FY 2011 Total Estimate</b>	<b>FY 2012 Estimate</b>	<b>FY 2013 Estimate</b>	<b>FY 2014 Estimate</b>	<b>FY 2015 Estimate</b>	<b>Cost To Complete</b>	<b>Total Cost</b>
D17: <i>APACHE BLOCK III</i>	192.169	149.029	93.320	0.000	93.320	81.640	51.216	40.332	27.143	Continuing	Continuing
Quantity of RDT&E Articles											
<b>A. Mission Description and Budget Item Justification</b> Project D17, Apache Block III (AB3) funding is for the non-recurring engineering (NRE), development, and testing work associated with the planned remanufacture of 642 Apache aircraft into Block III-configured aircraft (deliveries to begin in FY12). AB3 is a result of the continuously evolving process to keep the Apache fleet viable on the battlefield. AB3 is the long-term sustainment effort for the fleet while meeting current and future operational capability requirements. The AB3 program is the remanufacture of the aging Apache fleet integrating proven technologies into a mature weapon system platform. AB3 will add significant combat capability while addressing obsolescence issues to ensure the aircraft remains a realistic combat multiplier beyond 2025. AB3 will address current system shortfalls by integrating: Unmanned Aircraft System (UAS) Level III-IV Control Capability, Improved Situational Awareness, an Upgraded Communications Suite, Improved Drive and Propulsion Systems, Improved Targeting Capability, Increased Computer Processing Capability and Speed, Improved Navigation Systems, and Improved Diagnostics and Maintainability. FY 2011 funding totals do not include any previously requested funding for current FY 2011 Overseas Contingency Operations (OCO) requirements, and no FY 2011 OCO funds have been previously requested in the RDTE Project D17.FY 2010 funding totals did not include any previously requested funding for current FY 2010 Overseas Contingency Operations (OCO) requirements, and no FY 2010 OCO funds have been previously requested in the RDTE Project D17.FY 2009 funding totals did not include any previously requested funding for current FY 2009 Overseas Contingency Operations (OCO) requirements, and no FY 2009 OCO funds have been previously requested in the RDTE Project D17.											
<b>B. Accomplishments/Planned Program (\$ in Millions)</b>											
						<b>FY 2009</b>	<b>FY 2010</b>	<b>FY 2011 Base</b>	<b>FY 2011 OCO</b>	<b>FY 2011 Total</b>	
Program #1						145.312	107.474	78.200	0.000	78.200	
Boeing NRE Contracts											
FY 2009 Accomplishments:											
FY 2009											

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Army			DATE: February 2010		
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 7: Operational Systems Development	R-1 ITEM NOMENCLATURE PE 0203744A: Aircraft Modifications/Product Improvement Programs	PROJECT D17: APACHE BLOCK III			
B. Accomplishments/Planned Program (\$ in Millions)					
	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
FY 2010 Plans: FY 2010					
FY 2011 Base Plans: FY 2011 Base					
FY 2011 OCO Plans: FY 2011 OCO					
Program #2  Longbow Limited Liability NRE Contracts	26.000	13.000	5.000	0.000	5.000
FY 2009 Accomplishments: FY 2009					
FY 2010 Plans: FY 2010					
FY 2011 Base Plans: FY 2011 Base					
FY 2011 OCO Plans: FY 2011 OCO					
Program #3  Block III NRE Program Support Activities	7.828	12.185	3.320	0.000	3.320

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Army			DATE: February 2010		
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 7: Operational Systems Development	R-1 ITEM NOMENCLATURE PE 0203744A: Aircraft Modifications/Product Improvement Programs	PROJECT D17: APACHE BLOCK III			
B. Accomplishments/Planned Program (\$ in Millions)					
	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
FY 2009 Accomplishments: FY 2009					
FY 2010 Plans: FY 2010					
FY 2011 Base Plans: FY 2011 Base					
FY 2011 OCO Plans: FY 2011 OCO					
Program #4  Operational Assessments  FY 2009 Accomplishments: FY 2009  FY 2010 Plans: FY 2010  FY 2011 Base Plans: FY 2011 Base  FY 2011 OCO Plans: FY 2011 OCO	6.430	7.174	6.800	0.000	6.800
Program #5	6.599	4.996	0.000	0.000	0.000

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Army				DATE: February 2010		
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 7: Operational Systems Development		R-1 ITEM NOMENCLATURE PE 0203744A: Aircraft Modifications/Product Improvement Programs		PROJECT D17: APACHE BLOCK III		
B. Accomplishments/Planned Program (\$ in Millions)						
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Management Services  FY 2009 Accomplishments: FY 2009  FY 2010 Plans: FY 2010  FY 2011 Base Plans: FY 2011 Base  FY 2011 OCO Plans: FY 2011 OCO						
Program #6  Small Business Innovative Research/Small Business Technology Transfer Programs  FY 2009 Accomplishments: FY 2009  FY 2010 Plans: FY 2010  FY 2011 Base Plans: FY 2011 Base  FY 2011 OCO Plans: FY 2011 OCO		0.000	4.200	0.000	0.000	0.000

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2011 Army							<b>DATE:</b> February 2010				
<b>APPROPRIATION/BUDGET ACTIVITY</b> 2040: <i>Research, Development, Test &amp; Evaluation, Army</i> BA 7: <i>Operational Systems Development</i>			<b>R-1 ITEM NOMENCLATURE</b> PE 0203744A: <i>Aircraft Modifications/Product Improvement Programs</i>			<b>PROJECT</b> D17: <i>APACHE BLOCK III</i>					
<b><u>B. Accomplishments/Planned Program (\$ in Millions)</u></b>											
						<b>FY 2009</b>	<b>FY 2010</b>	<b>FY 2011 Base</b>	<b>FY 2011 OCO</b>	<b>FY 2011 Total</b>	
Accomplishments/Planned Programs Subtotals						192.169	149.029	93.320	0.000	93.320	
<b><u>C. Other Program Funding Summary (\$ in Millions)</u></b>											
<b><u>Line Item</u></b>	<b><u>FY 2009</u></b>	<b><u>FY 2010</u></b>	<b><u>FY 2011 Base</u></b>	<b><u>FY 2011 OCO</u></b>	<b><u>FY 2011 Total</u></b>	<b><u>FY 2012</u></b>	<b><u>FY 2013</u></b>	<b><u>FY 2014</u></b>	<b><u>FY 2015</u></b>	<b><u>Cost To Complete</u></b>	<b><u>Total Cost</u></b>
• Ord. #1: <i>APA, SSN AA6605</i>	1,816.922	589.050	363.769	199.200	562.969	314.719	194.549	72.039	75.056	590.123	4,215.427
• Ord. #2: <i>APA, SSN A05111</i>	0.000	218.626	493.831	0.000	493.831	723.691	1,204.748	1,650.747	1,233.025	5,358.900	10,883.568
• Ord. #3: <i>RDTE, PE273744D12</i>	25.382	13.214	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0	38.596
<b><u>D. Acquisition Strategy</u></b>											
<p>The NRE will encompass subsystem integration and will utilize existing test aircraft, incorporate the technical insertions, and initiate appropriate qualification and operational flight-testing. The Low Rate Initial Production (LRIP) effort will include a total quantity of 51 aircraft, which will take 39 months for delivery. These 51 LRIP aircraft are to be used for operational testing, First Unit Equipped (FUE), and training base fielding. In FY10, a contract for Apache Block III Lot 1 (8 aircraft), initiating LRIP, will be awarded with options for Lot 2a (16 aircraft) &amp; Lot 2b (19 aircraft) and Lot 2c (8 aircraft). In FY13, a contract for Apache Block III Lot 3 (56 aircraft), initiating Full Rate Production, will be awarded with options for Lot 4 (58 aircraft), Lot 5 (62 aircraft, and continuing through to a total of 691 aircraft. Contractor Support is anticipated to support Apache Block III Lot 6 deliveries. Training device concurrency will be maintained with each technical insertion. FY09 advanced material procurement supports the LRIP deliveries in FY 12. All SDD efforts will be awarded as Cost Reimbursable. The LRIP and production efforts will be awarded as Firm Fixed Price (FFP) and include the Advanced Procurement requirements. As the acquisition strategy and plan unfolds, multi-year authority may be requested for the out years.</p>											
<b><u>E. Performance Metrics</u></b>											
Performance metrics used in the preparation of this justification material may be found in the FY 2010 Army Performance Budget Justification Book, dated May 2010.											

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Army										DATE: February 2010	
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 7: Operational Systems Development				R-1 ITEM NOMENCLATURE PE 0203744A: Aircraft Modifications/Product Improvement Programs				PROJECT D17: APACHE BLOCK III			

**Product Development (\$ in Millions)**

				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Boeing Contracts	C	Mesa AZ	332.177	107.474		78.200		0.000		78.200	Continuing	Continuing	708.747
Longbow Limited Liability (LBL) Contracts	C	Orlando FL	96.000	13.000		5.000		0.000		5.000	Continuing	Continuing	119.696
Lockheed Martin Contracts	C	Orlando FL	0.000	0.000		0.000		0.000		0.000	Continuing	Continuing	0
<b>Subtotal</b>			428.177	120.474		83.200		0.000		83.200			828.443

**Remarks**

**Support (\$ in Millions)**

				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Block III NRE Support	C/Various	Various Activities Location could not be determined.	14.122	12.185		3.320		0.000		3.320	Continuing	Continuing	72.180
SBIR/STTR	C	Nothing entered for Activity and Location. Location could not be determined.	0.000	4.200		0.000		0.000		0.000	Continuing	Continuing	0
<b>Subtotal</b>			14.122	16.385		3.320		0.000		3.320			72.180

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<b>Exhibit R-3, RDT&amp;E Project Cost Analysis: PB 2011 Army</b>											<b>DATE:</b> February 2010		
<b>APPROPRIATION/BUDGET ACTIVITY</b> 2040: <i>Research, Development, Test &amp; Evaluation, Army</i> BA 7: <i>Operational Systems Development</i>				<b>R-1 ITEM NOMENCLATURE</b> PE 0203744A: <i>Aircraft Modifications/Product Improvement Programs</i>				<b>PROJECT</b> D17: <i>APACHE BLOCK III</i>					
<b>Support (\$ in Millions)</b>													
				<b>FY 2010</b>		<b>FY 2011 Base</b>		<b>FY 2011 OCO</b>		<b>FY 2011 Total</b>			
<b>Cost Category Item</b>	<b>Contract Method &amp; Type</b>	<b>Performing Activity &amp; Location</b>	<b>Total Prior Years Cost</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
<b>Remarks</b>													
<b>Test and Evaluation (\$ in Millions)</b>													
				<b>FY 2010</b>		<b>FY 2011 Base</b>		<b>FY 2011 OCO</b>		<b>FY 2011 Total</b>			
<b>Cost Category Item</b>	<b>Contract Method &amp; Type</b>	<b>Performing Activity &amp; Location</b>	<b>Total Prior Years Cost</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
Operational Assessments, Test Integration Working Group (TWIG), TEMP, etc.	C/Various	Various Activities Location could not be determined.	3.766	7.174		6.800		0.000		6.800	Continuing	Continuing	33.757
<b>Subtotal</b>			3.766	7.174		6.800		0.000		6.800			33.757
<b>Remarks</b>													
<b>Management Services (\$ in Millions)</b>													
				<b>FY 2010</b>		<b>FY 2011 Base</b>		<b>FY 2011 OCO</b>		<b>FY 2011 Total</b>			
<b>Cost Category Item</b>	<b>Contract Method &amp; Type</b>	<b>Performing Activity &amp; Location</b>	<b>Total Prior Years Cost</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
Management Svcs (In-House, Travel, etc.)	C/Various	PMO AAH Matrix Support, AMCOM Express	19.277	4.996		0.000		0.000		0.000	Continuing	Continuing	24.574

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<b>Exhibit R-3, RDT&amp;E Project Cost Analysis: PB 2011 Army</b>											<b>DATE:</b> February 2010																																												
<b>APPROPRIATION/BUDGET ACTIVITY</b> 2040: <i>Research, Development, Test &amp; Evaluation, Army</i> BA 7: <i>Operational Systems Development</i>				<b>R-1 ITEM NOMENCLATURE</b> PE 0203744A: <i>Aircraft Modifications/Product Improvement Programs</i>				<b>PROJECT</b> D17: <i>APACHE BLOCK III</i>																																															
<b>Management Services (\$ in Millions)</b> <table border="1" style="width:100%; border-collapse: collapse; margin-top: 10px;"> <tr> <th colspan="4"></th> <th colspan="2">FY 2010</th> <th colspan="2">FY 2011 Base</th> <th colspan="2">FY 2011 OCO</th> <th>FY 2011 Total</th> <th colspan="3"></th> </tr> <tr> <th>Cost Category Item</th> <th>Contract Method &amp; Type</th> <th>Performing Activity &amp; Location</th> <th>Total Prior Years Cost</th> <th>Cost</th> <th>Award Date</th> <th>Cost</th> <th>Award Date</th> <th>Cost</th> <th>Award Date</th> <th>Cost</th> <th>Cost To Complete</th> <th>Total Cost</th> <th>Target Value of Contract</th> </tr> <tr> <td align="right" colspan="3"><b>Subtotal</b></td> <td align="right">19.277</td> <td align="right">4.996</td> <td></td> <td align="right">0.000</td> <td></td> <td align="right">0.000</td> <td></td> <td align="right">0.000</td> <td></td> <td></td> <td align="right">24.574</td> </tr> </table>																		FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total				Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract	<b>Subtotal</b>			19.277	4.996		0.000		0.000		0.000			24.574
				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total																																													
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract																																										
<b>Subtotal</b>			19.277	4.996		0.000		0.000		0.000			24.574																																										
<b>Remarks</b>																																																							
<table border="1" style="width:100%; border-collapse: collapse; margin-top: 10px;"> <tr> <th colspan="3"></th> <th>Total Prior Years Cost</th> <th colspan="2">FY 2010</th> <th colspan="2">FY 2011 Base</th> <th colspan="2">FY 2011 OCO</th> <th>FY 2011 Total</th> <th>Cost To Complete</th> <th>Total Cost</th> <th>Target Value of Contract</th> </tr> <tr> <td align="right" colspan="3"><b>Project Cost Totals</b></td> <td align="right">465.342</td> <td align="right">149.029</td> <td></td> <td align="right">93.320</td> <td></td> <td align="right">0.000</td> <td></td> <td align="right">93.320</td> <td></td> <td></td> <td align="right">958.954</td> </tr> </table>																	Total Prior Years Cost	FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total	Cost To Complete	Total Cost	Target Value of Contract	<b>Project Cost Totals</b>			465.342	149.029		93.320		0.000		93.320			958.954														
			Total Prior Years Cost	FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total	Cost To Complete	Total Cost	Target Value of Contract																																										
<b>Project Cost Totals</b>			465.342	149.029		93.320		0.000		93.320			958.954																																										
<b>Remarks</b>																																																							

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Exhibit R-4A, RDT&E Schedule Details: PB 2011 Army			DATE: February 2010	
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 7: Operational Systems Development	R-1 ITEM NOMENCLATURE PE 0203744A: Aircraft Modifications/Product Improvement Programs	PROJECT D17: APACHE BLOCK III		
Schedule Details				
	Start		End	
Event	Quarter	Year	Quarter	Year
Force Develop Test & Evaluation (FDTE)	4	2009	4	2009
Limited User Test (LUT) I	4	2009	4	2009
Milestone C	2	2010	2	2010

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2011 Army								<b>DATE:</b> February 2010			
<b>APPROPRIATION/BUDGET ACTIVITY</b> 2040: <i>Research, Development, Test &amp; Evaluation, Army</i> BA 7: <i>Operational Systems Development</i>				<b>R-1 ITEM NOMENCLATURE</b> PE 0203744A: <i>Aircraft Modifications/Product Improvement Programs</i>				<b>PROJECT</b> D18: <i>UTILITY FW CARGO AIRCRAFT</i>			
<b>COST (\$ in Millions)</b>	<b>FY 2009 Actual</b>	<b>FY 2010 Estimate</b>	<b>FY 2011 Base Estimate</b>	<b>FY 2011 OCO Estimate</b>	<b>FY 2011 Total Estimate</b>	<b>FY 2012 Estimate</b>	<b>FY 2013 Estimate</b>	<b>FY 2014 Estimate</b>	<b>FY 2015 Estimate</b>	<b>Cost To Complete</b>	<b>Total Cost</b>
D18: <i>UTILITY FW CARGO AIRCRAFT</i>	2.923	0.979	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing
Quantity of RDT&E Articles											
<b>A. Mission Description and Budget Item Justification</b> This Project supports Test and Evaluation of the Joint Cargo Aircraft (JCA). The RDT&E funds are to support statutorily-mandated Live Fire Test and Evaluation (LFT&E) including survivability/susceptibility assessment and Initial Operational Test and Evaluation (IOT&E). The LFT&E will involve system, subsystem- and component-level live fire testing. Additionally, survivability/susceptibility characterization assessments of nuclear, biological, chemical, and electromagnetic capabilities will be performed. The FY 2009 funds supported Production Qualification Testing and the statutorily mandated LFT&E.											
<b>B. Accomplishments/Planned Program (\$ in Millions)</b>											
							<b>FY 2009</b>	<b>FY 2010</b>	<b>FY 2011 Base</b>	<b>FY 2011 OCO</b>	<b>FY 2011 Total</b>
Program #1							1.486	0.000	0.000	0.000	0.000
Production Qualification Test (PQT)											
<i>FY 2009 Accomplishments:</i>											
FY 2009											
<i>FY 2010 Plans:</i>											
FY 2010											
<i>FY 2011 Base Plans:</i>											
FY 2011 Base											
<i>FY 2011 OCO Plans:</i>											
FY 2011 OCO											

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Army			DATE: February 2010		
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 7: Operational Systems Development	R-1 ITEM NOMENCLATURE PE 0203744A: Aircraft Modifications/Product Improvement Programs	PROJECT D18: UTILITY FW CARGO AIRCRAFT			
B. Accomplishments/Planned Program (\$ in Millions)					
	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Program #2	1.437	0.000	0.000	0.000	0.000
Live Fire Test & Evaluation (LFT&E) Testing					
FY 2009 Accomplishments:					
FY 2009					
FY 2010 Plans:					
FY 2010					
FY 2011 Base Plans:					
FY 2011 Base					
FY 2011 OCO Plans:					
FY 2011 OCO					
Program #3	0.000	0.952	0.000	0.000	0.000
JCA PQT and LFT&E non-Army requirements					
FY 2009 Accomplishments:					
FY 2009					
FY 2010 Plans:					
FY 2010					
FY 2011 Base Plans:					
FY 2011 Base					
FY 2011 OCO Plans:					
FY 2011 OCO					

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Army									DATE: February 2010			
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 7: Operational Systems Development				R-1 ITEM NOMENCLATURE PE 0203744A: Aircraft Modifications/Product Improvement Programs				PROJECT D18: UTILITY FW CARGO AIRCRAFT				
B. Accomplishments/Planned Program (\$ in Millions)												
								FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Program #4								0.000	0.027	0.000	0.000	0.000
Small Business Innovative Research/Small Business Technology Transfer Programs												
FY 2009 Accomplishments:												
FY 2009												
FY 2010 Plans:												
FY 2010												
FY 2011 Base Plans:												
FY 2011 Base												
FY 2011 OCO Plans:												
FY 2011 OCO												
Accomplishments/Planned Programs Subtotals								2.923	0.979	0.000	0.000	0.000
C. Other Program Funding Summary (\$ in Millions)												
Line Item	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total	FY 2012	FY 2013	FY 2014	FY 2015	Cost To Complete	Total Cost	
• Ord. #1: A11000 JOINT CARGO AIRCRAFT	261.681	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0	261.681	
• Ord. #2: USAF PE0401138F/Project 5259 Joint Cargo Aircraft	16.271	9.353	26.471	0.000	26.471	19.220	6.764	0.000	0.000	0	78.079	
	0.000	319.050	351.315	0.000	351.315	576.450	19.209	22.220	29.691	0	1,317.935	

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Army							DATE: February 2010				
APPROPRIATION/BUDGET ACTIVITY 2040: <i>Research, Development, Test &amp; Evaluation, Army</i> BA 7: <i>Operational Systems Development</i>			R-1 ITEM NOMENCLATURE PE 0203744A: <i>Aircraft Modifications/Product Improvement Programs</i>			PROJECT D18: <i>UTILITY FW CARGO AIRCRAFT</i>					
C. Other Program Funding Summary (\$ in Millions)											
Line Item	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total	FY 2012	FY 2013	FY 2014	FY 2015	Cost To Complete	Total Cost
• Ord. #3: <i>USAF BA 02/Item No. 10b/</i> <i>Joint Cargo Aircraft</i>											
D. Acquisition Strategy											
The Joint Cargo Aircraft's acquisition strategy is based on leveraging the commercial market. The contract was awarded in June 2007, to procure a previously developed and fielded, low-risk, commercially available aircraft and Mission Equipment Package (MEP). A protest immediately followed, which resulted in a 100 day stop work order. The program was restarted in October 2007. These aircraft possess open architecture systems that will support technology insertions as improvements become available.The JCA program was established to correct operational shortfalls with respect to time sensitive mission critical requirements.											
E. Performance Metrics											
Performance metrics used in the preparation of this justification material may be found in the FY 2010 Army Performance Budget Justification Book, dated May 2010.											

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